

**PART - C**  
**OC - Ordinances applicable to Colleges**

**I N D E X**

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<a href="#">OC-35</a>	Ordinance relating to the Degree of LL.B.
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<a href="#">OC-51</a>	Ordinance relating to the BTM (Bachelor of Travel and Tourism Management) Programme.
<a href="#">OC-52</a>	Ordinance relating to the Degree of Master of Science in Hydrography.
<a href="#">OC-53</a>	Ordinance relating to the Super-speciality disciplines of Surgery Degree-Magister Chirurgiae (M.Ch.). (Applicable from the academic year 2008-09)
<a href="#">OC-54</a>	Ordinance relating to the Four-Year Integrated Degree of Bachelor of Arts and Bachelor of Education Program (Under Section 24(1) of the Goa University Act 1984)
<a href="#">OC-55</a>	Ordinance relating to Post Graduate Diploma Programmes in the Faculty of Medicine (Pre-clinical, Para-clinical and Clinical) (under Section 24(1) of Goa University Act, 1984) (effective from the Academic year 2013-2014).
<a href="#">OC-56</a>	Ordinance relating to the Degrees of Allied Health Sciences under Faculty of Medicine (under Section 24(1) of Goa University Act, 1984) (effective from the Academic year 2013-2014).
<a href="#">OC-57</a>	Ordinance relating to B. Sc. International Hospitality Management Programme of Goa University (effective from the academic year 2014-2015).
<a href="#">OC-58</a>	Ordinance relating to award of the Degree of Master of Arts (Wellness Counselling) (effective from the academic year 2014-2015).
<a href="#">OC-59</a>	Ordinance relating to award of Post-Graduate Master of Science (Nursing) Degree of Goa University. (effective from 25 <sup>th</sup> September, 2014).
<a href="#">OC-60</a>	Ordinance relating to Bachelor of Performing Arts (Theatre) – B.P.A.(T).
<a href="#">OC-61</a>	Ordinance relating to the Bachelor of Education (B.Ed.) Programme of Goa University.
<a href="#">OC-62</a>	Ordinance related to the Bachelor of Physical Education (B.P.Ed.) Programme (w.e.f. Academic Year 2015-16).
<a href="#">OC-63</a>	Ordinance related to two years B.Ed. Special Education (B.Ed.Spl.Ed.) Programme (w.e.f. 2015-2016)..
<a href="#">OC-64</a>	Ordinance relating to the Four-Year Integrated Degree of Bachelor of Science in Agriculture (w.e.f. Academic Year 2015-16).
<a href="#">OC-64A</a>	Ordinance relating to the Four-Year Integrated Degree Programme of Bachelor of Science (Hons) in Agriculture B.Sc. (Hons) Agriculture (w.e.f. Academic Year 2019-20)
<a href="#">OC-65</a>	Ordinance relating to the Post-Graduate Programme in Ayurveda – Pre-clinical, Para-clinical and Clinical.
<a href="#">OC-66</a>	Ordinance relating to the three year Choice Based Credit System Programmes of Bachelor of Arts, Bachelor of Arts (Honours), Bachelor of Commerce, Bachelor of Commerce (Honours), Bachelor of Science and Bachelor of Science (Honours) Degrees (under section 24(1) of Goa University Act, 1984) (effective from the academic year 2017 - 18).
<a href="#">OC-67</a>	Ordinance OC-67 relating to the Three Year Choice Based Credit System (CBCS) Programme of Bachelor of Computer Applications (BCA) (effective from academic year 2019-2020 onwards).
<a href="#">OC-68</a>	Ordinance relating to the Programmes of Post Basic Diploma in Nursing offered at the affiliated colleges of Goa University.

<a href="#">OC-69</a>	Ordinance relating to the Degree of Master of Philosophy (M.Phil.) Programme under the Faculty of Medicine offered at affiliated colleges .
<a href="#">OC-70</a>	Ordinance OC-70 relating to the Four Year Credit Based Degree Programme in Pharmacy (B.Pharm) Programme in affiliated colleges of Goa University (Applicable for candidates seeking admission for B.Pharm Programme from the academic year 2018-19 onwards.)
<a href="#">OC-71</a>	Ordinance OC-71 relating Bachelor of Performing Arts (B.P.A.) Degree Programme.
<a href="#">OC-72</a>	Ordinance OC-72 relating Master of Performing Arts (M.P.A.) Hindustani Classical Music (in relevant specialization) Degree Programme.
<a href="#">OC-73</a>	Ordinance OC-73 relating Bridge Course in Hindustani Classical Music (in the relevant discipline) (effective from Academic Year 2019-20)
<a href="#">OC-74</a>	Ordinance OC-74 relating to B.Sc. Fashion & Apparel Design, and B.Sc. Interior Design Programme of Goa University (effective from the academic year 2019-2020).
<a href="#">OC-75</a>	Ordinance relating to the examination in the Faculty of Medicine the Degree of Bachelor of Medicine & Bachelor of Surgery (M.B.B.S.) (Under Section 24(1) of the Goa University Act, 1984). (Effective from academic year 2019-20)

**PART C**  
**Ordinances applicable to Colleges**

**OC-1 Ordinance relating to the one year post-graduate Diploma in Computer Applications (DCA)**

**OC-1.1 The admission and eligibility criterion to be followed for the DCA course:**

(i) A candidate for being eligible for admission to the one year DCA course must have passed the examination for the Bachelor's degree of any faculty from any recognized University.

(ii) The candidate must have undergone to the satisfaction of the Head of the Department of Computer Science of the College, an entrance test followed by an interview conducted by the Department.

(iii) All eligible applicants whose complete application reach the Principal on or before the prescribed date shall ordinarily be allowed to appear for the written entrance test and the interview.

(iv) The list of candidates who have been duly selected for the admission to the DCA course shall be displayed on the notice board of the college within one week from the date of written test and interview.

(v) The candidate who has been duly selected for admission shall be given a period of ten days to pay the prescribed fees in the college. Failure to pay the fees by the due date shall result into the cancellation of the admission claim.

**OC-1.2 Course Duration, Conduct of Examination and Examination Fee etc.**

(i) The course of study for DCA course shall be a full time course extending over 2 semesters, called as Semester-I and Semester-II. Each semester shall consist of minimum ninety instructional days spanning over six months.

(ii) The Semester examinations for the two Semesters, Semester-I and Semester-II shall be entirely conducted by the University.

(iii) Candidates shall be examined in the subjects in the syllabus approved by the University.

(iv) The semester-I shall consist of five theory papers of 100 marks each and one laboratory of 100 marks. The semester II shall consist of three theory papers of 100 marks each, one laboratory of 100 marks and one project of 200 marks.

(v) For the Semester-I, the five theory courses, viz. DCA001, DCA002, DCA003, DCA004 and DCA005 shall have 50 percent marks for the final examination. The laboratory course DCA PL-I

shall have 75 percent weightage for in-semester work and 25 percent for the final examination.

(vi) For the Semester-II, the three theory courses viz. DCA101, DCA102, and DCA103 shall have 50 percent marks for in-semester evaluation and 50 percent marks for the final examination. The laboratory course DCA PL-II shall have 75 percent weightage for in-semester work and 25 percent for the final examination. The assessment of the project course DCA PJ-I shall be done on the following basis:

25 percent: The preliminary presentation

25 percent: Initiative, interest, efforts and regularity.

50 percent: Project report and the oral examination conducted by the Board of Examiners consisting of the guide an external examiner and internal examiner.

(vii) The distribution of weightage for the in-semester assessment for theory courses DCA001, DCA002, DCA003, DCA004, DCA005, DCA101, DCA102 and DCA103 shall be:

10 percent: Tutorials, Home assignments, quizzes, viva-voce etc.

20 percent: Class test - I

20 per cent: Class test - IT

(viii) (a) The in-semester score for the laboratory course DCA PL-I shall be determined from the laboratory assignments from the courses DCA001, DCA003. DCA004 and DCA005 with the following break-up:

25 percent: Course DCA001

25 percent: Course DCA003

25 percent: Course DCA004

25 percent: Course DCA005

(b) The in-semester score for the laboratory course DCA PL-II shall be determined from the laboratory assignments from the courses DCA101, DCA102 and DCA103 with the following break-up:

40 percent: Course DCA101

20 percent Course DCA102

40 percent: Course DCA103

(ix) A candidate shall not be allowed to appear for the final examination of a semester unless he has minimum 80 per cent of attendance in that semester.

(x) To calculate the final grade of a student, the composite score shall be calculated by using the marks gained by the student in different semester examinations as below:

Semester - I	Out of 600 marks
Semester - IT	Out of 600 marks
Total	Out of 1200 marks

(xi) Determination of the award of a class in the examination for the DCA shall be on the score calculated as in (x) above.

(xii) The one year Diploma in Computer Applications shall be conferred upon a candidate after he has fulfilled the following requirements:

- (a) Should have passed in all the courses of all the semesters of the examinations to be conducted by the University in accordance with the Ordinance OC-1.3 regarding standard of passing (given separately).
- (b) Should have fulfilled all the department requirements.
- (c) Should have satisfactorily fulfilled the project requirements.
- (d) Should have paid all the University dues.
- (e) Should have no case of indiscipline pending against him.

The examination shall be held for each semester twice a year.

(xiii) The determination of class for the DCA shall be as given below:

From 40 percent up to 50 per cent	Pass class
From 50 percent up to 60 percent	Second class
From 60 percent up to 70 percent	First class
From 70 percent and above	First class with distinction

(xiv) The rules for gracing for DCA shall be as per the general rules followed by the University for gracing.

(xv) The statement of marks for the in-semester scores for a semester shall be sent to the Controller of Examinations, Goa University before the final theory examinations for the semester begins.

(xvi) For the end-semester examinations, the examination fee shall be Rs. 300/- to be sent to the University.

(xvii) The fees for issue of statement of marks shall be Rs. 25/- to be sent to the University.

(xviii) The application form fees for the end-semester examination shall be Rs. 5/- to be sent to the University.

### **OC-1.3 Standard for passing the Examination in DCA**

(i) To pass the examination in a course, a candidate must obtain a minimum of 40 percent of the total marks assigned to that subject. Otherwise the candidate shall be declared to have failed in that course.

(ii) To pass the examination in a particular semester, a candidate must have passed in the examination of each course in that semester in accordance with the provision of OC-1.3(i) above regarding standard of passing.

(iii) In order to be allowed to keep terms for the second semester, a candidate must have passed in the laboratory course of the first semester. Otherwise the candidate shall be declared to have failed the first semester examination and shall not be allowed to keep terms for the second semester. A candidate who is allowed to keep term in the second semester shall be allowed to appear for those papers in which he has failed, again, along with the papers of the second semester. However, the marks from the in-semester evaluation shall be carried forward and the candidate shall have to appear for the final examination only.

(iv) A candidate who has failed the semester examination can claim exemption for appearing in a course or courses, provided he has obtained at least 50% marks in a course or courses. The marks from in-semester evaluation shall be carried forward.



- OC-1A (EFFECTIVE FROM 2006-2007) Ordinance relating to the one year Post-Graduate Diploma in Computer Applications (PGDCA) (To be made effective from 2006-07) (Under Section 24 (1) of the Goa University Act,1984)**
- OC-1A.1 Course Equivalence**
- This is one year, two semesters, full-time Post-Graduate Diploma in Computer Application (PGDCA) designed on the lines of DOEACC "A" Level programme.
- OC-1A.2 Eligibility and selection**
- OC-1A.2.1** Graduation from any recognized University.
- OC-1A.2.2** Admission shall be on merit. To determine the merit College/Department shall conduct written test and/or interview.
- OC-1A.3 Post-Graduate Departmental Council**
- Each College/University offering PGDCA programme will constitute a Post-Graduate Departmental Council within College/University. All faculty members of the department will be the members and Head of the Department will be the ex-officio chairman of the Departmental Council. The Departmental Council will meet at least 4 times in a semester and take decisions on all academic matters pertaining to running of PGDCA programme.
- OC-1A.4 Instructional Scheme**
- Instructional scheme for the PGDCA programme is based on a system of integrated units called courses. Each course shall mean one paper. Semester-I shall have 5 theory papers and 2 lab papers. Semester II shall have 4 theory papers, 1 lab paper and a semester long project.
- OC-1A.4.1 Course Credit:** Each course will be of 100 marks and will have credits depending upon number of contact hours per week. The project will have no credits associated with it.
- OC-1A.4.2 Cumulative Credits:** The sum total of all the credits of all the courses taken in a semester.
- OC-1A.4.3 Contact Hours:** The total number of Lectures hours, Tutorials hours and Practical hours. Minimum of 45 contact hours are recommended for a 4 credit course, with 4 contact hours per week. One credit is equivalent to 15 contact hours in a semester.

- OC-1A.4.4 Instructor-in-Charge:** Each course may have one or more instructors teaching the course. One of these is to be appointed as Instructor-in-charge.
- OC-1A.4.5 Course Co-ordinator:** In case of courses taught by Visiting Faculty, one faculty member from the department/College shall be associated with the course as course-co-ordinator.
- OC-1A.4.6 Course File:** For each course taught, a file shall be maintained by the Instructor-in-charge comprising of course plan, reading/teaching material used in class, assignments, question papers, answer papers, student feedback, student attendance record along with final evaluation and grading.
- OC-1A.4.7 Academic Audit Committee:** The task of the academic audit is to ascertain that all in-semester and end-semester evaluation is done in transparent and fair manner. The committee shall comprise of two members appointed by the Vice-Chancellor, one from the University Department and one expert from Industry. It shall meet once every year end and shall examine the course file. On the basis of aberrations noticed if any, Academic Audit Committee shall take appropriate action to resolve the matter.
- OC-1A.5 Scheme of Evaluation**
- OC-1A.5.1** There shall be both an in-semester element and an end-semester element in the evaluation of the performance of candidates. The in-semester evaluations will be 60% and end-semester evaluation will be of 40%
- OC-1A.5.2** For a theory course, in semester evaluation is a continuous assessment worth 60 marks. At least 40 marks of the in-semester evaluation will be graded through one or more class test. The remaining could be evaluated through quizzes, assignments etc.
- OC-1A.5.3** For a theory course, the end-semester evaluation consists of an 'end-semester' examination of 40 marks of 2 hour duration conducted by the college/department. A candidate is eligible to appear for the end-semester examination if she/he has a minimum of 75% attendance in the theory course.
- OC-1A.5.4** For a laboratory course, the assessment will be continuous with 60 marks for the in-semester evaluation consisting of lab experiments, assignments etc. and 40 marks being reserved for the end-semester examination which includes a viva-voce and an online examination jointly conducted by an internal and external examiner. An external examiner is to be appointed from the panel of examiners approved according to the University ordinance OB-4. A candidate is eligible to appear for the end-semester examination if he has a minimum of 75% attendance in the laboratory course.
- OC-1A.5.5** Final grades for the course would be awarded by the Instructor-in-charge/course co-ordinator taking into account the total performance.
- OC-1A.5.6** Project viva would be jointly conducted by an internal and an external examiner as per the guidelines of the project evaluation. An external examiner is to be appointed from the panel of examiners approved according to the University ordinance OB-4. Detailed guideline for project submission and evaluation is to be

published in the prospectus and copy of the same is made available in the department for reference.

**OC-1A.5.7** There shall be no reevaluation. The students can make an appeal to the Chairman Departmental Council in case of any discrepancies in evaluation. The Chairman shall refer the matter to the academic audit committee.

**OC- 1A.6 Grading Scheme**

**OC-1A.6.1** For each course taken by a student, a letter grade is assigned based on the performance in all assessments. These grades are defined as:

AA, AB, BB, BC, CC, CD, DD, EE, II and FF

Each grade not only indicates a qualitative assessment of the student's performance but also carries an equivalent number called the grade point.

The grade points corresponding to different letter grades are defined below:

<b>Letter Grade</b>	<b>Grade point</b>	<b>Letter Grade</b>	<b>Grade point</b>
AA	10	CD	5
AB	9	DD	4
BB	8	EE	0
BC	7	II	0
CC	6	FF	0

**OC-1A.6.2** A student passes the courses if he/she gets any grades in the range AA to DD.

**OC-1A.6.3** The letter grade EE and the letter grade II makes the student eligible to take a supplementary examination in that course.

**OC-1A.6.4** The letter grade II is given to a student on account of absence from the end-semester examination for valid reason.

**OC-1A.6.5** The letter grade EE is given to a student on account of poor performance in the end semester examination.

**OC-1A.6.6** The letter grade EE and II are not awarded in supplementary examination

**OC-1A.6.7** There is no provision of supplementary examination in lab course

**OC-1A.6.8** A student who fails in the supplementary examination is awarded FF grade and has to repeat the entire course. The student who fails to appear for the supplementary examination or remains absent is awarded FF and has to repeat the entire course

**OC-1A.6.9** A student shall be considered to have passed a course at first attempt, provided he/she passes with a letter grade of DD or better, at the regular examination.

**OC-1A.6.10** In addition to the above, a student getting a letter grade of II at the regular examination and subsequently passing the course at the supplementary examination with letter grade of DD or better, will be considered to have passed the course at first attempt. However, a candidate getting a letter grade of EE at the regular examination shall be deemed to get letter grade DD in the supplementary examination, if successful.

**OC-1A.6.11** All other cases would be treated as second attempts.

**OC-1A.6.12** The final year Project shall carry only qualitative evaluation such as Excellent, Good, Satisfactory, Pass and Fail. A student getting a Fail grade shall have to repeat the project.

**OC-1A.6.13** Supplementary Examination shall be held at the beginning of every semester.

**OC-1A.6.14** A student is allowed to repeat a year or a semester in order to improve the performance. In such a situation his previous performance in that year or a semester shall be considered null and void.

### **OC-1A.7 Performance Indices**

**OC-1A.7.1** Semester Performance Index (SPI):

The performance of a student in a semester is indicated by a number called SPI. The SPI is the weighted average of the grade points obtained in all the courses during the semester. For example, with courses in a semester, having credits C1, C2, C3, C4 and C5 and the grade points in the semester being g1, g2, g3, g4 and g5 respectively then the SPI is equal to:

$$\text{SPI} = \frac{\sum_{i=1}^5 C_i g_i}{\sum_{i=1}^5 C_i}$$

The SPI is calculated to two decimal places

### **OC-1A.7.2 Cumulative Performance Index (CPI)**

The overall performance of a student for the entire programme is obtained by calculating a number called CPI. The CPI is the weighted average of the grade points obtained in all the courses for the programme. The CPI is also calculated to two decimal places.

### **OC-1A.8 Award of class**

**OC-1A.8.1** Each semester grade report for the student shall carry his/her SPI. The final semester mark-sheet will indicate the CPI and the project performance. The final class for the PGDCA would be awarded as per the following scheme:

- Distinction: CPI equal to or greater than 8.5 and a minimum "Good" performance in the project
- First class: CPI equal to or greater than 6.5 but less than 8.5 and a minimum performance of "Satisfactory" in the project

- Second Class: CPI equal to or greater than 5.0 but less than 6.5 and a minimum performance of "Pass" in the Project
- Pass Class: CPI equal to or greater than 4.0 but less than 5.0 and a minimum performance of "Pass" in the project.

**OC-1A.8.2** There is no provision for gracing in the individual paper. However, for candidates representing University in the National / State level event, a maximum of 7 grade points could be awarded before calculating CPI and Class.

**OC-1A.8.3** Percentage equivalent of CPI is approximately given by the formula  

$$\text{Percentage} = 10 * \text{CPI} - 5$$

Table below defines the conversion scale

CPI	Percentage
6.0	55
6.5	60
7.0	65
7.5	70
8.5	80

**OC-2 Ordinance relating to improvement of class at the Third Year B.A., B.Sc., and B.Com. Examination conducted by Goa University.** (Under Section 24(1) of the Goa University Act, 1984).

**OC-2.1** Candidates who have passed B.A. degree examination of this University with the class mentioned in Column I and who desire to improve their class as shown in Column II below shall be permitted at their option to appear again for the Third Final Year of the three year B.A. degree examination with the same subjects without being required to keep any terms.

Column I

- Pass Class
- Second Class
- Second Class

Column II

- Second Class **OR** First Class
- First Class
- 50% **OR** 55%

**OC-2.2** If candidates who re-appear for the Third Year B.A. degree examination under the provisions of this Ordinance fail to improve their class, their performance at such reappearance shall be ignored.

**OC-2.3** Candidates who have passed the B.Sc. degree examination of this University with the class mentioned in column I and who desire to improve their class as in column II below, shall be permitted at their option to appear again for the Third Final Year of the Three Year B.Sc. degree examination with the same subject/s without being required to keep any terms.

Column I

- First Class
- Second Class
- Second Class

Column II

- Second Class **OR** First Class
- First Class
- 50% **OR** 55%

**OC-2.4** If candidates who re-appear for the Three Year B.Sc. degree examination under the provisions of this Ordinance fail to improve their class, their performance at such re-appearance shall be ignored.

**OC-2.5** Candidates who have passed the B.Com. degree examination of this University with the class mentioned in Column I and who desire to improve their class as shown in column II below shall be permitted at their option to appear again for the Third Final year of the Three Year B.Com. degree examinations with the same subject/s without being required to keep any terms:

<u>Column I</u>	<u>Column II</u>
a) First Class	a) Second Class <b>OR</b> First Class
b) Second Class	b) First Class
c) Second Class	c) 50% <b>OR</b> 55%

**OC-2.6** If a candidate who re-appear for the three year B.Com. degree examination under the provisions of this ordinance fail to improve their class, their performance at such reappearance shall be ignored.

**OC-3 Regarding prescribing flat rates of reimbursement for chemicals, breakages and other consumables at the T.Y. B.Sc., T.Y. B.A., T.Y. B.C.A. and T.Y. B.Com. Practical Examinations (approved from 29<sup>th</sup> March 2001).**

**OC-3.1** (Effective from 29<sup>th</sup> March, 2001) Rate per candidate to be reimbursed (on account of chemicals, breakages and other consumables) to the colleges for conducting practical examinations in various subjects at the Third Year B.Sc. and Third Year B.A. examinations will be as follows:-

Sr.No.	Subjects	Flat rate per student	Sr.No.	Subjects	Flat rate per student
1.	Chemistry (practicals) 3 Units 6 Units	Rs. 30.00 Rs. 45.00	7.	Physics (practicals) 3 Units 6 Units	Rs.10.00 Rs. 15.00
2.	Botany (practicals) 3 Units 6 Units	Rs. 20.00	8.	Earth Science (practicals) 3 Units 6 Units	Rs.10.00 Rs. 15.00
3.	Zoology (practicals) 3 Units 6 Units	Rs.30.00 Rs. 50.00	9.	Geography (practicals) 3 Units 6 Units	Rs. 15.00 Rs. 25.00
4.	Microbiology/Biotechnology (practicals) 3 Units 6 Units	Rs. 60.00 Rs. 80.00	10.	Psychology (Practicals)	Rs. 20.00
5.	Life Sciences (Practicals) 3 Units 6 Units	Rs. 45.00 Rs. 75.00	11.	Statistics & Mathematics	Rs. 10.00
6.	Bio-chemistry (Practicals)		12.	Computer Science/Computer	Rs. 25.00

	3 Units	Rs. 40.00		Application/Electronic Equipment Maintenance	
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Notwithstanding anything mentioned above, a minimum re-imburement of an amount equal to the total for one batch of students calculated with the flat rate per student for the concerned subject shall be admissible.

**OC-4 Ordinance prescribing appointment of Expert Assistants, Laboratory Assistants, Laboratory Attendants, Store Keepers and Field Collectors etc. for the conduct of Third Year B.Sc. Examination in various subjects** (Under Section 24(1) of the Goa University Act, 1984) approved from 29<sup>th</sup> March 2001.

(The above ordinance holds good for FY, SY, TY, of B.A., B.Sc., B. Com and B.C.A. examinations.)

A Batch is to consist of 15 Students in all the subjects except Chemistry, Computer, Science, Electronics, Computer Systems, Psychology & Physics. The batch for Chemistry shall consist of 30 students, that for Computer Science and Electronics of 10 students each, for Computer Systems of 20 and in Physics and Psychology it shall be of 12 students.

#### **Physics**

Days for preparation : 3

Days for cleaning : 12 Expert Assistants

1 Laboratory Assistants  
1 Laboratory Technician  
2 Laboratory Attendants

Days for cleaning: 1

1 Expert Assistant  
1 Laboratory Technician  
1 Laboratory Assistant  
2 Laboratory Attendants

Staff required on Examination Day

2 Expert Assistants  
1 Laboratory Assistant  
1 Laboratory Technician  
3 Laboratory Attendants

#### **Chemistry**

Days for preparation: 3 & 1 day between succeeding batches.

3 Expert Assistants (for first 3 days only)  
2 Laboratory Assistants (for all days)  
4 Laboratory Attendants (for all days)  
1 Store Keeper (for all days)

Days for cleaning: 2

2 Expert Assistants

2 Laboratory Assistants

1 Store Keeper

4 Laboratory Attendants

Staff required on Examination Day

4 Expert Assistants  
2 Laboratory Assistants  
1 Storekeeper  
5 Laboratory Attendants

Payments for intervening days, between succeeding batches will be made on the basis of full rates laid down for the purpose, even when such days are not specifically provided for in the programme.

#### **Botany**

Days for preparation: 2

2 Expert Assistants  
1 Store Keeper (for all days)  
1 Laboratory Assistant  
1 Field Collector  
2 Laboratory Attendants

Days for Cleaning: 1

1 Expert Assistant  
1 Laboratory Assistant  
1 Field Collector  
2 Laboratory Assistants

Staff required for Examination Days

2 Expert Assistants  
1 Laboratory Assistant  
1 Field Collector  
2 Laboratory Attendants

### **Zoology**

Days for preparation : 2  
2 Expert Assistants  
1 Laboratory Assistants  
2 Laboratory Attendants  
1 Field Collector

### **Microbiology / Biotechnology**

Days for preparation : 5  
3 Expert Assistants  
1 Laboratory Assistant  
3 Laboratory Attendants

Days for cleaning : 3

1 Expert Assistant  
1 Laboratory Assistant  
3 Laboratory Attendants

Staff required for examination days

3 Expert Assistants  
1 Laboratory Assistant  
3 Laboratory Attendants

### **Earth Science**

Days of preparation : 1  
2 Expert Assistants  
1 Laboratory Assistants  
2 Laboratory Attendant

Days of cleaning: 1

1 Expert Assistant  
1 Laboratory Assistant  
1 Laboratory Attendant

Staff required for examination days

2 Expert Assistants  
1 Laboratory Assistant  
2 Laboratory Attendant

### **Life Sciences**

Days for preparation : 2  
3 Expert Assistants

Days for cleaning :

1 Expert Assistant  
1 Laboratory Assistant

2 Laboratory Attendants

Staff required for examination days

2 Expert Assistants  
1 Laboratory Assistant  
1 Field Collector  
2 Laboratory Attendants

### **Biochemistry**

Days for preparation : 2  
2 Expert Assistants  
1 Laboratory Assistant  
2 Laboratory Attendants

Days for cleaning : 1

1 Expert Assistant  
1 Laboratory Assistant  
2 Laboratory Attendants

Staff required for examination days

2 Expert Assistants  
1 Laboratory Assistant  
2 Laboratory Attendants

### **Statistics & Mathematics**

Days for preparation : 1  
1 Laboratory Assistant  
1 Laboratory Attendant

Days for cleaning: 1

1 Laboratory Assistant  
1 Laboratory Attendant

Staff required for examination days

1 Expert Assistant  
1 Laboratory Assistant  
1 Laboratory Attendant

### **Psychology**

Days for preparation : 1  
1 Expert Assistant  
1 Laboratory Assistant



2 Laboratory Attendants  
1 Laboratory Assistant OR 1 Field Collector

Days for cleaning : 1  
1 Expert Assistant  
2 Laboratory Attendants

Staff required for examination days  
3 Expert Assistant (One each from Botany, Zoology, & Microbiology)  
2 Laboratory Assistant (Both from Botany & Zoology)  
1 Field Collector  
2 Laboratory Attendants

**Geography**

Days for preparation : 1  
2 Expert Assistants  
1 Laboratory Assistant  
2 Laboratory Attendant

1 Laboratory Attendant

Days for cleaning : 1  
1 Laboratory Assistant  
1 Laboratory Attendant

Staff required for examination days  
1 Expert Assistant  
1 Laboratory Assistant  
1 Laboratory Attendant

**Electronics / Electronic Equipment Maintenance (Voc)**

Days of Preparation: 2  
1 Expert Assistant  
1 Laboratory Assistant  
1 Laboratory Technician  
1 Laboratory Attendant  
Days for cleaning : 1

	1 Laboratory Assistant
	2 Laboratory Attendants
Days for cleaning : 1	
1 Expert Assistant	Staff required for Examination Days
1 Laboratory Assistant 1 Laboratory Attendant	2 Expert Assistants (1 for HW and 1 for SW)
	1 Laboratory Assistant / Programmer
	1 Laboratory Attendant
Staff required for Examination Days	
2 Expert Assistants	<b>Industrial Chemistry (Voc)</b>
1 Laboratory Assistant	
2 Laboratory Attendant	Days for preparation:
	3 & 1 day between succeeding batches.
<b>Computer Science</b>	3 Expert Assistants (for first 3 days only)
	2 Laboratory Assistants (for all days)
Days for preparation :1	4 Laboratory Attendants (for all days)
1 Expert Assistant	1 Store Keeper (for all days)
1 Laboratory Assistant / Programmer	
1 Laboratory Attendant	
Staff required for Examination Days	
1 Expert Assistant	
1 Laboratory Assistant / Programmer	
1 Laboratory Attendant	
<b>Computer Systems</b> (At T.Y.B.Com. & B.A.) & Computer Application (Voc.)	
Days for preparation : 1	
1 Expert Assistant	
1 Laboratory Assistant / Programmer	

1 Laboratory Attendant	
Staff required for Examination Days	
1 Expert Assistant	
1 Laboratory Assistant / Programmer	
1 Laboratory Attendant	
<b>Computer Systems ( At T.Y.B.C.A)</b>	
Days for Preparation : 1	
2 Expert Assistants (1 for HW & 1 for SW)	
1 Laboratory Assistant / Programmer	
1 Laboratory Attendant	
Staff required for Examination Days	
2 Expert Assistants ( 1 for HW and 1 for SW)	
1 Laboratory Assistant / Programmer	
1 Laboratory Attendant	

In case of all subjects mentioned above, wherever there is no Internal Examiner, a Laboratory Supervisor shall be appointed on the days of Examinations.

**OC-5 Ordinance relating to guidelines for allocation of marks in the Practical Examination.** (Under Section 24(1) of the Goa University Act, 1984).

**OC-5.1** This is applicable to only the under-graduate subjects having practical examinations. It is applicable to the present academic scheme as well as the restructured scheme.

**OC-5.2** The allotment of marks are as follows:

- (a) 15 % Journals
- (b) 60 % Experiment
- (c) 25 % Oral

(a) 15% marks are reserved for the journal submitted by the student at the time of examination. The Committee has increased the marks to improve the standard of submission of practicals through journals. The Examiner conducting the practical examination should look into three aspects of journals. They are: (i) regularity in attending the practicals; (ii) presentation and style; (iii) completeness.

The teacher conducting the practical in the college should initial the rough reading taken by the student, while performing the experiment. Further, each experiment properly present in the journal should be signed by the concerned teacher within a fortnight.

(b) 60% marks are reserved for experiment. While awarding these marks the examiner should assess: (i) Procedures and techniques; (ii) The presentation; (iii) Readings and the result; (iv) Planning of the experiment.

(c) 25% marks are reserved for oral examination. The oral examination should include the following facets: (i) to find if the student has understood all the experiments included in the journal; (ii) to find if the student has understanding of the concerned subject as a whole; (iii) to find if the student

has properly studied the experiment given in the examination.

**OC-5.3** Passing in practical examination should be treated as an independent Head of Passing.

**OC-5.4** In-order to improve the involvement of a student in practical class, it is suggested that attendance at the practicals be made 90% essential. One teacher be assigned maximum number of 15 students in a practical class. In every practical the concerned teacher should ask oral questions to every student. As far as possible every student should be provided an opportunity to work independently in a laboratory.

**OC-5.5** The following should be the duration of practicals per week for various classes and various subjects.

**No. of hours of practicals**

Class	Chemistry	Earth Sciences	Botany & Zoology	Physics	Microbiology
F.Y.B.Sc.	6	6	6	4 ½	4 ½
S.Y.B.Sc.					
2 Units	7	7	9	4 ½	4 ½
3 Units	10 ½	10 ½	13 ½	6 ¾	6 ¾
T.Y.B.Sc.					
3 Units				6	6
6 Units	12	12	12	12	12
T.Y.B.Sc. Applied Component					
	3	3	3	4	4

Number in the table represent hours. A period is of 45 minutes.

**OC-5.6** In respect of Chemistry preparation of solution as far as possible should be made by students themselves. This practice will add to their experience.

**OC-5.7** In addition to the requisite number of lectures and practicals, students offering Botany, Earth Sciences as a subject of study at the First Year B.Sc., Second Year B.Sc. and Third Year B.Sc. courses be required to undertake field excursions to places of subject interest under the guidance of a teacher. The teacher student ratio should be 1:20. The number of excursions should be year-wise as shown below: -

<u>Course</u>	<u>Number of excursions</u>
1. First Year B.Sc.	1
2. Second Year B.Sc.	2
3. Third Year B.Sc.	3

The total duration of these excursions should not be less than 8 hours and that should be considered equivalent to one hour of practical per week per teacher.

The student be required to maintain a field record to be submitted for inspection at the time of the practical examination. This record shall be considered for evaluation together with the journal.

**OC-5.8** A meeting of examiners in practicals should be held before the practical examinations to

give instructions and orientation regarding the conduct of practicals. Further a second meeting of examiners (preferably only from Goa) be held after the practical examination to discuss the result. A report from the Chairman of the Practical Examinations be formed on the following lines:

(a) Facilities available for practicals in the centre of practical examination.

(b) Short-coming experienced in the conduct of examination.

**OC-6 Ordinance relating to out of turn practical examination at Third Year B.Sc.** (Under Section 24(1) of the Goa University Act, 1984).

**OC-6.1** No candidate shall be admitted out of turn once the practical batches and time-tables are framed and circulated to the colleges except on Medical Bonafide grounds, and on an application from the concerned candidate. The Principal of the college to which the candidate belongs shall recommend such an application. The Principal of the college where the candidate wishes to be examined may admit such a student to appear out of turn in his college after payment of fees of Rs. 30/- per subject and report such cases to the Controller of Examinations with remittance of the fees so collected within 3 days of the completion of the examination.

**OC-7 Ordinance relating to A.T.K.T. for the Students of the First, Second and Third Year B. Pharm. Examination** (Under Section 24(1) Of the Goa University Act, 1984).

**OC-7.1** The candidate who has failed in First or Second or Third Year B. Pharmacy examination will be allowed to keep terms for the higher class if he does not fail in more than one head. Further he/she should secure at least 50% of the total marks obtainable in Theory and Practical taken together in the said examination.

**OC-7.2** A candidate passing in all the subjects but has failed because of lack of aggregate 50% marks of the total marks obtainable in theory and practical taken together, shall be allowed to keep terms for the higher Class. The candidates in this category shall have to appear in the subject/s or head/s to secure aggregate 50% marks of the Theory and Practical marks taken together, which is as per the standard of passing of First Year or Second Year or Third Year B. Pharmacy course.

**OC-7.3** The results of the higher class of the candidate who is allowed to keep terms under OC-7.1 and OC-7.2 above, shall not be declared under any circumstances unless he has passed the examination of lower class in which he has failed and allowed to keep terms for higher class.

**OC-8 Ordinance relating to the scheme of examinations for the Three Year integrated course of B.A., B.Sc. and B.Com.** (Under Section 24(1) of the Goa University Act, 1984).

**OC-8.1** The provision hereunder shall have effect notwithstanding anything contained in Ordinances, Regulations and Reports of Committees, Circulars issued by various authorities till date. Further the provisions hereunder shall override corresponding earlier provisions.

**OC-8.2** The examination for First Year and Second Year of the three year integrated course leading to a Bachelor Degree of Arts or of Commerce or of Science shall be conducted by the affiliated Colleges on behalf of the University as laid down by these Ordinances. The examination for the Third Year of the three year integrated degree course leading to the degree of Bachelor of Arts or Commerce or of Science shall be conducted by the University.

**OC-8.3** The academic year shall consist of two terms.

**OC-8.4** There shall be an examination at the end of each term at F.Y. and S.Y. of B.A., B.Sc. and B.Com. They shall be called First Terminal Examination and Second Terminal Examination. The First

Terminal Examination shall cover the syllabus prescribed for the First Term and the Second Terminal Examination shall cover the syllabus prescribed for the Second Term by the Board of Studies and approved by the Academic Council. It shall be compulsory for all students to appear at both the terminal examinations irrespective of the marks secured by them. There shall be an examination at the Third Year of B.A., or B.Com., or B.Sc., to be held at the end of the academic year covering the course of studies prescribed for the academic year.

**OC-8.5** A student at F.Y. & S.Y. of B.A., B.Com. or B.Sc. shall be examined in the following manner:

(a) For the Science subjects having practical offered at F.Y. & S.Y. B. Sc.:

(i) There shall be two theory papers in each subject of duration of two hours each carrying 75 marks each at the end of each term. Average of the marks scored per paper in the two terminal examinations shall be considered for passing at the end of the year.

(ii) There shall be practical examinations to be conducted at the end of the academic year and shall consist of experiment/s of such duration as prescribed by the relevant Boards of Studies. The total marks (50) assigned to and the scheme of marking in respect of practical shall be as prescribed by the respective Board of Studies. The marks allotted for practicals out of 50 shall be shown in the statement of marks per subject.

(b) For the Science subjects having no practical offered at F.Y./S.Y.B.Sc., there shall be two theory papers in each subject of duration of two hours each at the end of each term and carrying 100 marks each. Average of marks scored per paper in the two terminal examinations shall be considered for the passing at the end of the year.

(c) For the subjects offered at F.Y. and S.Y. of B.A. and B.Com., there shall be one theory paper of duration of 2 hours and carrying 100 marks per subject per term. Average of the marks scored in two terminal examinations per paper shall be considered for the passing at the end of each year.

**OC-8.6** (a) A detailed programme of the schedule of examinations, evaluation, declaration of result etc. shall be prepared by the University at the beginning of each academic year and the same shall be communicated to all the affiliated colleges and the Board of Studies in the concerned subjects.

(b) The question papers for F.Y./S.Y. terminal/supplementary examinations shall be set by examiners appointed by the University from the panel proposed by the concerned Board of Studies.

(c) The answer-books shall be assessed by the instructor/teacher of the particular subject/paper.

(d) The Board of Paper Setters in each subject/paper shall submit the scheme of marking and the key to answer at the time of paper setting. The key to answers shall be communicated to the examiners immediately after the conduct of the concerned examination.

(e) The Chairman and panel of paper setters shall jointly finalize the question papers and shall personally hand over the sealed set of question papers to the Controller of Examinations in the prescribed manner.

**OC-8.7**(a) The question paper for the First and Second Terminal Examination of F.Y. & S.Y. of B.A./B.Sc./B.Com. examinations shall be of 2 hours duration and the pattern shall be as follows (except for the subjects where the respective Board of Studies have provided their own pattern):

(i) Question No. 1 shall be an objective type question based on the syllabus of the respective term.

(ii) Question No. 2 to 5 shall be essay type questions (with internal choice) based on the syllabus of the respective term.

(iii) A candidate for the examination is expected to attempt all questions (one objective and four essay type questions).

(iv) The allocation of marks for each question shall be determined by the Board of Studies/Board of Examiners of the concerned subject.

(v) Pattern of question papers in subjects at F.Y. & S.Y. of B.Sc. examination: There shall be five questions of 15 marks each. Question No. 1 is compulsory and comprises of objective/short answer type questions covering the entire syllabus.

Questions 2 to 5 shall be based on the entire syllabus and shall have only one internal option each.

(vi) Pattern of question papers in subjects at Accounting and Financial Management - I & II, Financial Accounting, Auditing and Taxation- I & II and Costing – I & II at FY, SY B.Com., shall be as prescribed by the Board of Studies concerned.

(b) Each theory question paper at the TY. B.A., B.Sc., B.Com. examination shall be set in the manner given hereunder:

(i) The theory paper shall consist of 6 questions out of which one is objective type.

(ii) All questions shall be compulsory except in cases where the respective Board of Studies has prescribed its own pattern.

(iii) The first question shall include short bits like definitions, illustrative examples, objective and multiple choice questions etc. covering the entire syllabus.

(iv) The entire syllabus of a paper shall be divided into 5 suitable parts and one question on each such division be set so as to cover the entire syllabus. Some or all of these five questions may be given internal choice.

### **OC-8.8 Supplementary examinations**

(A) (1) Supplementary Examinations for F.Y., S.Y., of B.A./B.Sc./B.Com. shall be conducted before the commencement of the academic year. There should be at least one month period between the date of declaration of results of the Second Terminal Examinations and the Supplementary Examinations.

The following categories of students shall be eligible to appear for the Supplementary - Examinations.

(a) a student who has appeared at both the First Terminal and the Second Terminal Examinations but failed on the average provided such a failure is in the papers carrying not more than 300 marks. (A candidate may also appear for improvement of percentage in subjects wherein he has obtained minimum marks for passing).

(b) a student who did not appear in some or all the papers either at the First Terminal or at the Second Terminal Examination on medical grounds or for representing the college/University/State/Nation in cultural or sports, NCC/NSS activities.

(c) a student who did not appear for both the first term and second term Examination in all the subjects, or in some subjects, only under very special circumstances, provided that the Principal is satisfied.

(d) a student who has obtained 30% in individual subjects but has failed to obtain an aggregate of 40% to be declared passed.

(2) the results of candidates who appear for supplementary examinations in view of improving percentage in individual subjects, shall not be altered if he fails to improve the percentage.

(B) The supplementary examinations shall be conducted as per time-table issued by the University and the result of the examinations be declared preferably before the commencement of the academic year and in no circumstances after the last day of admissions, so as to enable a student to enroll for the higher class after passing.

(C)(1) The theory question paper at the supplementary examinations shall be as follows:

(i) Supplementary (First Term) examinations shall cover syllabus prescribed for the First Term.

(ii) Supplementary (Second Term) examinations shall cover syllabus prescribed for the Second Term.

(iii) Supplementary (Entire) examination shall cover syllabus prescribed for both First Term and Second Term.

(2) Each theory paper at the Supplementary Examinations (I Terminal and II Terminal) shall be of 2 hours duration and of: (i) 100 marks for subject having no practical; and (ii) 75 marks for Science subjects having practicals.

(3) Each practical shall carry marks as prescribed by the respective Board of Studies.

(D) The Question paper for supplementary (first and second terminal examination shall be of two hours duration and the pattern shall be as follows:

(i) Question No. 1 shall be an objective type question based on the syllabus of the respective term;

(ii) Question No. 2 to 5 shall be essay type questions (with internal choice) based on the syllabus of the respective term; and

(iii) A candidate for the examinations is expected to attempt all questions (one objective and four essay type questions).

(E) The question paper for Supplementary (Entire) examinations shall be of 3 hours duration and the pattern shall be as follows:

(i) Question No. 1 shall be an objective type question based on entire syllabus of First Term and Second Term;

(ii) Question No. 2 to 7 shall be essay type questions (with internal choice), three each from syllabus of First Terminal and Second Terminal; and

(iii) A candidate is expected to attempt any five questions from Question Nos. 2 to 7.

(F) The allocation of marks shall be determined by the Board of Examiners/Paper Setters.

**OC-8.9 (Effective from 28<sup>th</sup> May, 2007) Amendment to the Ordinance relating to Supplementary Examinations.**

**OC-8.9** (a) A student who desires to appear at the supplementary examinations because he could not obtain necessary average marks at the first term and at the second term examinations taken together or because he remained absent for both the terminal examinations and has been permitted by the Principal, shall have to answer the Supplementary (Entire) examination, and the better of the average marks obtained in each paper / subject in the I and II Terminal Examination or the supplementary examination shall be considered for declaring results.

(b) (i) A student who was absent at the First Term Examination or at the Second Term Examination in a subject shall appear for the supplementary examinations of the concerned term and the marks obtained shall be combined with the marks in the corresponding paper in the regular Term Examination to calculate the average marks in that paper.

(ii) The supplementary examination shall be conducted as per time-table issued by the University and the result of the examinations be declared preferably before the commencement of the academic year and in no circumstances after the last day of admissions, so as to enable a student to enroll for the higher class after passing.

(c) A candidate who fails to secure the desired percentage of marks/aggregate at the earlier examinations (including Supplementary examinations) shall have to appear for First and Second Terminal Examinations during the subsequent years. However, the results of candidate shall not be altered if he fails to improve the percentage.

**OC-8.10** Standard of Passing at F.Y. S.Y. of B.A., B.Sc., and B.Com.

(A) The class shall be awarded as stipulated in OC 8.17 for F.Y. and S.Y., of B.A., B.Sc., and B.Com., degree examinations.

(B) To pass the examination, a candidate must obtain a minimum of 30% marks in each paper/head of passing and 40% in the aggregate. For subjects having practical each theory paper shall be considered as separate head of passing and all the practicals in that subject shall be considered as a separate head of passing.

(C) The marks obtained by a student at the First Term Examinations shall be made known to him ordinarily as per the examination/evaluation schedule issued by the University.

**(D) A statement of marks shall be issued to the student at the end of the academic year after the declaration of the Second Terminal Examination results.**

**(E) Statement of marks issued after the Supplementary Examinations shall mention the words "Supplementary Examination", Month, Year.**

**OC-8.11 Exemption at F.Y. and S.Y. of B.A., B.Sc. and B.Com. examinations:** An unsuccessful candidate who obtains minimum percentage of marks prescribed for passing in a subject (Theory, Practical) may at his option be exempted from appearing in that subject at his subsequent appearance and shall be declared to have passed the whole examination on his passing in the remaining subjects. (Theory and practicals included).

**OC-8.12** There shall be no revaluation of answer-books of the candidates at the F.Y. and S.Y. Terminal or Supplementary examinations. Personal verification of marks shall be conducted by the candidate in the presence of Principal/Vice-Principal and the concerned examiner, provided he applies (with a prescribed fee of Rs. 150.00) for the same within one week of the declaration of result. The following shall be procedure for personal verification of marks:



(a) On a notified day and time (which should not be later than 10 days after the receipt of application from the candidate) the candidate shall be shown the answer-book in the chamber of Principal/Vice-Principal and the Examiner concerned.

(b) If the candidate is not satisfied with the results on personal verification of the answer-books, he may apply to college Grievance Committee within a week.

(c) The Grievance Committee shall take appropriate action as per OC-8.19 and inform the candidate accordingly.

### **OC-8.13 Schedule of Result:**

(A) Each College shall submit to University a consolidated result of terminal Examinations as well as supplementary examinations within ten days from the date the results are communicated to the students. The results are to be submitted to the University irrespective of application for personal verification. The results of personal verification must be submitted on completion of the same to the University.

(B) A final consolidated statement of marks of F.Y. and S.Y. of each candidate appearing for the T.Y. B.A./B.Sc./B.Com. examinations shall be submitted by the colleges along with the examination application forms of students.

(C) The marks secured by the candidates in F.Y. and S.Y. examinations shall be indicated in the Final Transcript/Statement of Marks of the Integrated B.A./B.Sc./B.Com. degree Course issued by the University.

### **OC-8.14 Feed-back Evaluation:**

(A)(i) For the purpose of feed-back evaluation, ten percent of the assessed answer-books in each paper of the subject shall be submitted to the University based on the random numbers generated by the Head, Computer Centre. These random numbers are to be generated by the Head, Computer Centre after receiving the report of the results of F.Y./S.Y. examinations from the respective colleges.

(ii) In the case of answer-books pending for personal verification, a photocopy of such answer-books be sent to the University for feedback evaluation.

(iii) However, in case the 10% is less than 15 answer-books, the college shall send a minimum of 15 answer books or all the answer books in the concerned subject, whichever is less.

(B) Ten percent of the papers in each course (Arts/Science/Commerce) randomly chosen shall be sent for feedback evaluation.

(C) Feed-back evaluation shall consist of:

(i) Appointing a feedback evaluator from a panel prepared by the concerned Board of Studies.

(ii) The panel of feedback evaluators shall consist of the names of teachers drawn from the colleges and universities other than the Goa University and its affiliated colleges.

(iii) The feed-back evaluators after evaluating the answer-books shall submit a written opinion on the following:

- (a) Whether the question paper reflects the entire syllabus of the concerned paper.
- (b) Whether the question attempted by the students are equally spread amongst the questions in the question paper.
- (c) Whether the original examiner had underscored/over scored and to what extent while evaluating the answer books in each set/college.
- (d) The report of feedback evaluator shall be sent to the following as soon as it is received: (1) The examiner concerned; (2) The Chairman of Board of Examiners; (3) The Chairman of Board of Studies; and (4) The Principal of the College.

**OC-8.15** The Third Year B.A., B.Com., B.Sc. examinations, shall be conducted by University twice a year, one first half of the year in April/May and the other the second half in October/November. The scheme of the examination shall be as follows:

(A) For Science subjects having practical:

(i) There shall be examination in four theory papers except Computer Science in case of those who have offered only one subject at T.Y.B.Sc. and two theory papers in each subject. In case of those who offered two subjects at T.Y.B.Sc., each paper being of duration 3 hours and carrying 100 marks.

(ii) There shall be four practical of duration 3 to 6 hours each in case of those who have offered one subject at T.Y. B.Sc. and two practical in each subject of duration 3 to 6 hours in case of those who have offered two subjects at T.Y.B.Sc. The exact duration of practical shall be as prescribed by the concerned Board of Studies and approved by the Academic Council for the respective subjects. The total marks assigned to practical shall be 200.

(iii) For Computer Science, there shall be examination in six papers, each paper consisting of a theory part carrying 75 marks and practical part carrying 25 marks. The nature of the practical examination shall be as prepared by Board of Studies in that subject and approved by Academic Council.

(iv) A project submitted by a student at T.Y. B.A., B.Com. & B.Sc. shall be evaluated by double assessment. Each project report shall be assessed by one internal examiner (the guiding teacher) and one external examiner (appointed by Goa University). A group of students carrying out a project collectively shall submit 2 copies of the project for evaluation.

(v) The report should ordinarily consist of 30-40 typed or neatly hand written 100 to 200 pages in a register.

(vi) The examination of the project paper shall carry 100 marks. There shall be a viva-voce examination of each student submitting a project report, which shall be conducted by the external examiner. The internal examiner is permitted to remain present at the time of viva-voce examination.

(vii) The allocation of marks shall be as follows:

Internal Assessment:	
Project Report	20
Fieldwork/Library/ Practical Work	15
Attendance at the discussion meeting	15
maintenance record	

**Total** **50**

External Assessment:	
Project Report	25
Viva-Voce	25
<b>Total</b>	<b>50</b>

(viii) (a) In case a student fails in the project paper, he may be permitted to resubmit the same project with modifications under the same guiding teacher. In case, the guiding teacher has retired or is not available, the candidate may be permitted to submit the project under any other guiding teacher appointed by the Principal.

(b) A student may be permitted to submit a fresh project under the guidance of a teacher, provided he seeks admission in the concerned college for a period of minimum one term and pays the prescribed fees thereof.

(c) The evaluation of project paper shall be as laid down by the Ordinance OC-8.14.

(d) In case of students who fail in theory papers and are re-appearing for T.Y.B.A./B.Com./B.Sc. examinations, marks obtained for project work shall be carried forward for declaration of results and such students shall be eligible for the award of class.

(e) In case of students who appear for T.Y.B.A./B.Com./B.Sc. examinations under improvement of class scheme or to improve percentage (under OC-2), marks obtained for project work shall be carried forward for the declaration of results and such student shall be eligible for the award of class.

(B)(i) For Science students having no practical there shall be examination in six theory papers each of 3 hours duration and carrying 100 marks, in case of those have offered two subjects there shall be three theory papers each of 3 hours duration carrying 100 marks in each subject.

(ii) For subjects at T.Y.B.A. there shall be examinations in six theory papers either in one subject or in two subjects carrying 100 marks each of duration of three hours each.

(iii) For subjects at T.Y.B.Com. there shall be examination in seven theory papers each of 3 hours duration and carrying 100 marks each.

(iv) Pattern of Question Papers in Accounting and Financial Management Paper III to V, Cost and Management Accounts Papers III to V, Financial Accounting, Auditing and Taxation Papers III to V shall be as follows:

a) Question No. 1 in each paper shall comprise of objective/short answer type questions covering the entire syllabus. The question should be compulsory question without any internal options and should carry 20 marks.

b) Questions 2 to 8 shall be of 16 marks each covering the entire syllabus. They should be based on theory and problems as the case may be. Candidates appearing at the examination should be required to attempt any Five of these Seven questions.

(v) Pattern of question papers in subjects at T.Y.B.A. and B.Com. examination (except for those subjects for which the respective Boards of Studies have prescribed a different pattern of question paper).

a) Question No. 1 shall comprise of Objective/Short answer type questions covering the entire syllabus. It shall be a compulsory question without any internal options and shall carry 20 marks.

b) Question No. 2 to 6 should be of 16 marks each and based on the entire syllabus laying equal stress on all topics. Each question shall have one internal option.

vi) Pattern of question papers in subjects at T.Y.B.Sc. examinations: For T.Y.B.Sc. examination there shall be six questions in each paper. Question No. 1 is compulsory and carries 20 marks. It comprises of objective/short answer type questions covering the entire syllabus. Question No. 2 to 6 should be of 16 marks each and based on the entire syllabus and each question shall have only one internal option.

**OC-8.16** (a) To pass the examination at T.Y.B.A./B.Sc/B.Com. a candidate must obtain a minimum of 30% marks in each paper/head of passing and 40% in the aggregate. For subjects having practical, each theory paper in that subject shall be considered as separate head of passing except in Computer Science, where each paper comprising of theory and practical shall be considered as separate head of passing.

(b) A candidate may apply for revaluation as per OA-5.15.

**OC-8.17** Class shall be awarded in F.Y., S.Y. and T.Y. of B.A., B.Com. and B.Sc. examinations on the following basis:

40% and above but less than 50%	Pass Class
50% and above but less than 60%	Second Class
60% and above but less than 70%	First Class
70% and above	Distinction

**OC-8.18 College Examination Committee, College Unfair Means Committee and College Grievance Committee**

The following committees shall be constituted by the Principal of the college for the terms mentioned against each of them and shall work subject to control and supervision of the Principal.

- 1) College Examination Committee - 1 year
- 2) College Unfair Mean Committee - 1 year
- 3) College Grievance Committee - 1 year

(A)(1) The college Examination Committee shall consist of:  
i) One Head of Department who shall be the Chairman  
ii) Two or Four Senior teachers (in addition to the Chairman)

(2) This Committee shall be generally in-charge of all matters pertaining to F.Y. and S.Y.B.A., B.Com., and B.Sc. examinations in the College.

(3) The Committee shall prepare the examination time-table, arrange to get the question paper sets printed or cyclostyled and answer books assessed. The Committee shall arrange to get the results prepared, settled, announced and individual statement of marks prepared and issued to the

candidates.

(B)(1) The College Unfair Means Inquiry Committee (CUMIC) shall be constituted with the following members.

- i) Vice-Principal or a senior teacher as Chairman.
- ii) Two more teachers who shall be the member of the College Examination Committee.

(2) This committee shall investigate into the cases of unfair means and malpractices reported in a manner prescribed by OC-8.19 and shall recommend to the Principal a course of action as prescribed in OC-8.19.

(C)(1) The College Grievance Committee shall be constituted as under:

- i) Vice-Principal/Senior Member of teaching staff as Chairman, provided that he is not the Chairman of CUMIC.
- ii) Two teachers who are members of CUMIC and the College Examination Committee.
- iii) In case the Grievance concerns any member of the committee, the Principal shall reconstitute the committee, excluding the concerned member.

(2) This committee shall investigate into written complaints from the students referred to them by the Principal in the conduct of examinations and recommend a course of action to the Principal as prescribed in OC-8.20.

**OC-8.19 Procedure for investigating cases of unfair means:**

The following procedure shall be followed for investigating the cases of candidates alleged to have used unfair means at the First Year and/or Second Year B.A., B.Com., and B.Sc. examinations.

(1) The candidate be served with a show cause notice and made aware of the charges/allegations reported against him so as to enable him to prepare his defence at the time of his appearance before the Unfair Means Inquiry Committee and informing him thereby of the proposed action to be taken in his case, with a request to bring reply to the show cause notice as to why the action proposed under it should not be taken against him.

(a) The reply received by the Committee from the candidate when he appears before it be considered by the Committee and the final recommendation in the matter be taken and reported to the Principal for his approval.

(b) The punishment finally awarded can be equal to or less than what is mentioned in the show cause notice, but not more than what is mentioned therein.

(c) The College Unfair Means Inquiry Committee is a recommendatory body. The Principal has to exercise his power under Statute SB-13(iv) of the University and issue final order.

(d) The broad category of malpractice and the quantum of punishment for each category thereof shall be as follows:

Nature of Malpractice	Quantum of punishment.
Cancellation of the present examination. (This will apply to all categories) plus debarring from:	

i) Possession of copying material	i) One additional Examination.
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ii) Actual copying,	ii) Two additional Examinations.
iii) (a) Smuggling out and in of University/College answer books.	iii) a) Three additional examinations.
b) Smuggling of answer-books and Forging the signature of Junior Supervisor.	(b) and (c) Four additional examinations.
c) Smuggling in of full answer books based fully on question paper itself.	
(iv) Impersonation	iv) Five additional examinations or for five years whichever is less.

Besides these guidelines, each case be examined in detail and punishment awarded on the merit of each case.

### **OC-8.20 Procedure for investigation of Grievances by the College Grievances Committee**

1) The Committee shall consider the written complaint by a student on the conduct of examination provided that (i) the complaint is submitted by the student within 15 days after the declaration of results; (ii) the complain is accompanied with a fee of Rs. 100/- (refundable if the complaint is found genuine); and (iii) the matter is referred to the Committee by the Principal. The Committee shall invite a reply to the allegations, if any, made by the student from the concerned party.

2) After considering the reply of the concerned party, the committee shall recommend a course of action in writing to the Principal.

3) (effective from 14th July, 2005) The Principal may inform the student, the findings of the Committee and shall take appropriate action including reassessment of the said answer book. However, if the marks are reduced after revaluation of the said answer book the original marks shall be retained and the student to be communicated that there is no change in his/her result.

4. Imposition of fine of Rs. 50.00 on the student may be done if the allegations are found to be a deliberate attempt at casting aspersions on the teacher.

**OC-8.21** The affiliated Colleges in Arts, Science and Commerce shall follow instructions for guidance of the Senior Supervisors and Block Supervisors as stipulated in OA-5.14 and OA-5.15 of the Goa University.

**OC-8.22** In the event of a conflict between provision or interpretations thereof, the Standing Committee constituted under this Ordinance shall be final authority to interpret and decide the matters. The constitution of the Committee shall be Vice-Chancellor, Registrar, Controller of Examinations and two members of the Standing Committee of the Academic Council.

**OC-9 Ordinance relating to the Bridge Course in Chemistry for students who have passed Std. XII Science without Chemistry and desiring to opt for Chemistry as one of the subjects for F.Y. B.Sc. course.** (Under Section 24(1) of the Goa University Act, 1984).

**OC-9.1** The students who have passed Std. XII Science without Chemistry and Vocational subjects like Electronic Technology, Maintenance & Repairs of Electrical Domestic Appliances, Programme Assistant and Auto Engineering shall be eligible to join First Year course of B.Sc. with Chemistry if they have attended the Bridge Course in Chemistry as approved by the Academic Council before

joining First Year B.Sc.

**OC-9.2** Such a student may pass this Bridge course in Chemistry before joining the First Year B.Sc. otherwise he should pass at the end of the 1<sup>st</sup> term.

**OC-9.3** If such a student fails in the Bridge course at the end of the 1<sup>st</sup> term he may be permitted to appear for examination at the end of the 2<sup>nd</sup> term, but his/her promotion to the next higher class shall be kept in abeyance till he passes this Bridge Course.

**OC-9.4** The student who have not passed in these three attempts, the Bridge Course in Chemistry i.e. on the completion of the Bridge Course in or the end of the first term or the end of the second term will not be permitted to continue the First Year B.Sc. course with Chemistry in the following year.

Note: The syllabus for bridge course in Chemistry for candidates who have passed Std. XII Science without Chemistry and desiring to opt for Chemistry as one of the subjects for the degree course is given in Schedule OSC-1.

**OC-10 (Effective from 2<sup>nd</sup> August, 2005) Ordinance relating to the award of Bachelor of Engineering Degree by Goa University (New Course) (Under Section 24 (1) of the Goa University Act. 1984)**

Scope: The provision of ordinance from OC-10 to OC-10.43.3 Engineering degree courses revised in year 2000-01 conducted in Engineering colleges affiliated to Goa University.

**OC-10.1 (Effective from 2<sup>nd</sup> August, 2005) Nomenclature of the Degree:** The Nomenclature of the degree awarded by Goa University in Engineering shall be Bachelor of Engineering degree.

**OC-10.2 (Effective from 2<sup>nd</sup> August, 2005) Minimum duration of the degree :**The B.E. degree in Engineering shall be of four academic years duration. In each academic year, there shall be two semesters. The course of study is designed for each term/ semester with the provision of University examination at the end of the semester.

**OC-10.3 (Effective from 2<sup>nd</sup> August, 2005) Classification of Academic Year and semesters:** The distribution of semesters shall be as follows:

First Year Engineering: 1&II semesters taken together

Second Year Engineering: III & IV semesters taken together

Third Year Engineering: V & VI semesters taken together

Fourth Year Engineering: VII & VIII semesters taken together

The above mentioned Union of semesters into years is for the purpose of award of class only. However, the admission to each semester shall be based on eligibility criteria stipulated for that semester.

**OC-10.4 (Effective from 2<sup>nd</sup> August, 2005) Eligibility for award of degree:** A candidate admitted in First Year Engineering of four year degree course in Engineering shall have to pass all the eight semester examinations to be eligible for the award of the degree.

**OC-10.5 (Effective from 2<sup>nd</sup> August, 2005)** A candidate being eligible for admission directly to the second year of the four year degree course in Engineering shall be exempted from appearing at I & II semester examinations and shall be eligible for the award of

the degree in Engineering after passing examinations from III semester to VIII semesters.

**OC-10.6 (Effective from 2<sup>nd</sup> August, 2005)** The University awards B.E. degree in the following disciplines:

- a) Degree of Bachelor of Engineering in Civil Engineering
- b) Degree of Bachelor of Engineering in Mechanical Engineering
- c) Degree of Bachelor of Engineering in Electrical and Electronics Engineering
- d) Degree of Bachelor of Engineering in Electronics & Telecommunication Engineering
- e) Degree of Bachelor of Engineering in Computer Engineering
- f) Degree of Bachelor of Engineering in Information Technology
- g) Degree of Bachelor of Engineering in any other branch of Engineering introduced by the University in future.

**OC-10.7 (Effective from 2<sup>nd</sup> August, 2005) Duration of course work and term:**

The duration of the course work in each semester shall be 90 teaching days. The teaching days here shall mean actual classroom/ laboratory/ contact teaching days, and shall not include days of examinations/ tours/ sports. The course work may contain classes in theory, practicals, assignments, tutorials, project work and internal assessment.

**OC-10.8 (Effective from 2<sup>nd</sup> August, 2005) Fulfilling the requirement of a semester:**

A candidate is considered to have successfully fulfilled the requirement of a semester, provided he/she has minimum attendance of 75% of the total classes engaged in each subject in theory and practical for that semester.

Marks for the internal assessment (25 or 50 as applicable) are to be based on the best two out of three tests in each subject in a semester, plus marks for attendance (from 20% of maximum internal assessment marks).

**Example:** If maximum internal marks for a paper is 25, attendance marks, to be given out of 5; 5 marks for 95% or more, 4 for 90% or more; 3 for 85% or more; 2 for 80% or more and 1 for 75% or more attendance.

**OC-10.9 (Effective from 2<sup>nd</sup> August, 2005)** A candidate who fails to fulfill the requirement of a semester as prescribed under OC-10.8, shall not be eligible to appear for the examination of that semester and will have to repeat the semester.

**OC-10.10 (Effective from 2<sup>nd</sup> August, 2005):** The Academic Schedule for each Academic year for the degree courses in Engineering shall be decided by the University from time to time.

**Ordinance relating to eligibility of admission to each semester and eligibility to appear for examination of each Semester of Bachelor Degree of Engineering Program.**

**OC-10.11 (Effective from 2<sup>nd</sup> August, 2005) Semester-I :**

**Admission :** A candidate admitted to Semester-I of the B.E. degree program as per prevailing admission criteria is eligible to keep term for Semester -I .

**OC-10.12 (Effective from 2<sup>nd</sup> August, 2005) Semester II**

**Admission:** A candidate who has fulfilled the requirement of Semester-I is eligible for admission to Semester -II irrespective of Semester -I examination results.



**OC-10.13 (Effective from 2<sup>nd</sup> August, 2005) Semester I:**  
**Examination:** A candidate who has successfully fulfilled the requirement of Semester - I is eligible to appear at the Semester –I examination.

**OC-10.14 (Effective from 2<sup>nd</sup> August, 2005) Semester II:**  
**Examination:** A candidate who has successfully fulfilled the requirement of Semester – II is eligible to appear at the Semester –II examination.

**OC-10.15 (Effective from 2<sup>nd</sup> August, 2005)** In respect of the students who appear for two consecutive semesters, the result of the higher semester can be declared irrespective of the performance in the lower semester. However, the remark "Result Reserved for Lower Examination (RRLE)" shall be shown in the remark column of even semester if there is a backlog in the preceding odd semester.

**OC-10.16 (Effective from 2<sup>nd</sup> August, 2005) Semester III Admission**

- i) In addition to the candidates who have passed Semester I and II, only those candidates, who have fulfilled the requirement of the preceding semester and have not more than six papers as backlog from the preceding two Semesters, shall be considered eligible for admission to Semester III.
- ii) A candidate with Diploma in Engineering qualification admitted to Semester III of Second Year (Direct Admission) to the B.E. degree programme as per prevailing admission criteria is eligible to keep term for Semester III.

The candidates who have passed the Diploma Examination within the prescribed minimum period of time +2 additional term/semester conducted by Goa Board of Technical Education in or an equivalent examination conducted by a recognized Board of Technical Education in India/abroad are eligible to join the Second Year Course in Engineering i.e. Semester III, directly without having to attend the First Year Engineering course of instruction.

However, while preparing merit list 2% of marks will be deducted for each additional term/semester taken to complete the Diploma.

**OC-10.17 (Effective from 2<sup>nd</sup> August, 2005) Semester IV**  
**Admission:** In addition to the candidates who have passed Semester I to III, only those candidates, who have fulfilled the requirement of preceding semester and have not more than six papers as backlog from the three preceding Semesters shall be considered eligible for admission to Semester IV.

**OC-10.18 (Effective from 2<sup>nd</sup> August, 2005) Semester III**  
**Examination:** A candidate who has successfully fulfilled the requirement of Semester - III is eligible to appear at the Semester –III examination.

**OC-10.19 (Effective from 2<sup>nd</sup> August, 2005) Semester IV**  
**Examination:** A candidate who has successfully fulfilled the requirement of Semester - IV is eligible to appear at the Semester –IV examination.

**OC-10.20 (Effective from 2<sup>nd</sup> August, 2005)** In respect of the students who appear for examination in papers from more than one semester, the result of the higher

semester can be declared irrespective of the performance in the lower semester. However, the remark "Result Reserved for Lower Examination RRLE shall be shown in the remark column, of Even Semester result if there is a back log in any preceding semester.

- OC-10.21 (Effective from 2<sup>nd</sup> August, 2005) Semester V**  
**Admission:** In addition to the candidates who have passed Semester I to IV, only those candidates, who have fulfilled the requirement of the preceding semester and have not more than six papers as backlog from the three immediate preceding Semesters shall be considered eligible for admission to Semester V.
- OC-10.22 (Effective from 2<sup>nd</sup> August, 2005) Semester VI**  
**Admission:** In addition to the candidates who have passed Semester I to V, only those candidates, who have fulfilled the requirements of the preceding semesters and having not more than six papers as backlog from the three immediate preceding Semesters shall be considered eligible for admission to Semester VI.
- OC-10.23 (Effective from 2<sup>nd</sup> August, 2005) Semester V**  
**Examination :** A candidate who has successfully fulfilled the requirement of Semester - V is eligible to appear at the Semester –V examination.
- OC-10.24 (Effective from 2<sup>nd</sup> August, 2005) Semester VI**  
**Examination:** A candidate who has satisfactorily fulfilled the requirement of Semester-VI is eligible to appear at the Semester –VI examination.
- OC-10.25 (Effective from 2<sup>nd</sup> August, 2005)** In respect of the students who appear for examination in papers from more than one semester, the result of the higher semester can be declared irrespective of the performance in the lower semester. However, the remark "Result Reserved for Lower Examination RRLE shall be shown in the remark column, of Even Semester result if there is a back log in any preceding semester.
- OC-10.26 (Effective from 2<sup>nd</sup> August, 2005) Semester VII**  
**Admission:** In addition to the candidates who have passed Semester I to VI, only those candidates, who have fulfilled the requirement of the preceding semester and have not more than six papers as backlog from the three immediate preceding Semesters shall be considered eligible for admission to Semester VII.
- OC-10.27 (Effective from 2<sup>nd</sup> August, 2005) Semester VIII**  
**Admission:** In addition to the candidates who have passed Semester I to VII only those candidates, who have fulfilled the requirement of the preceding semester and have not more than six papers as backlog from the three immediate preceding Semesters shall be considered eligible for admission to Semester VIII.
- OC-10.28 (Effective from 2<sup>nd</sup> August, 2005) Semester VII**  
**Examination:** A candidate who has satisfactorily fulfilled the requirement of Semester –VII is eligible to appear at the Semester –VII examination.
- OC-10.29 (Effective from 2<sup>nd</sup> August, 2005) Semester VIII**  
**Examination :** A candidate who has satisfactorily fulfilled the requirement of Semester VIII is eligible to appear at the Semester VIII examination.

**OC-10.30 (Effective from 2<sup>nd</sup> August, 2005)** In respect of the students who appear for examination in papers from more than one semester, the result of the higher semester can be declared irrespective of the performance in the lower semester. However, the remark "Result Reserved for Lower Examination RRLE shall be shown in the remark column, of Even Semester result if there is a back log in any preceding semester.

**OC-10.31 (Effective from 2<sup>nd</sup> August, 2005) Ordinance of Standard for Passing examination:**

To pass an examination, a candidate must obtain a minimum of 40% of maximum marks in each head of passing separately in each subject as envisaged in the scheme of examination stipulated for the course, except in the subhead under sessional marks.

**OC-10.31.1 (Effective from 2<sup>nd</sup> August, 2005) -Deleted-**

**OC-10.32.1 (Effective from 2<sup>nd</sup> August, 2005) Eligibility for Award of Class**

A Class for passing examination shall be awarded at the end of each academic year examination, provided the candidate does not have any backlog.

First Year: Based on marks in Semester I and Semester II examinations

Second Year: Based on marks in Semester III and Semester IV examinations

Third Year: Based on marks in Semester V and Semester VI examination

**Class for B.E. Degree:**

Cent per cent weightage shall be given to marks scored in Semester VII and VIII and fifty percent weightage for marks scored in Semester V and VI in deciding upon award of class at B.E. examination. Semester VII and VIII should be cleared independently each in one sitting for the award of class.

**OC-10.32.2 (Effective from 2<sup>nd</sup> August, 2005)** A class for passing an examination shall be awarded only if the candidate passes all theory papers stipulated for that year, passing papers of each semester examination in one sitting, On availing the first regular chance to pass all the papers of a semester in one sitting if the candidate is not satisfied with his performance, he/she can avail a second and final chance to pass all the papers of the semester in one sitting without claiming exemption in any paper of the previous chance. However the marks secured in internal assessment, oral and practical in subjects projects and industrial training shall necessarily be carried over without affecting the eligibility for class.

**OC-10.33 (Effective from 2<sup>nd</sup> August, 2005) Criteria for Award of Class :**

A candidate who obtains 70 % and above of the aggregate marks shall be deemed to have passed the examination in First Class with Distinction.

**OC-10.33.1 (Effective from 2<sup>nd</sup> August, 2005)** Those of the successful candidates who obtain 60 % and above but below 70 % of the aggregate marks shall be deemed to have passed the examination in First Class.

**OC-10.33.2 (Effective from 2<sup>nd</sup> August, 2005)** Those of the successful candidates who obtain 50 % and above but below 60 % of the aggregate marks shall be deemed to have passed the examination in Second Class.

- OC-10.33.3 (Effective from 2<sup>nd</sup> August, 2005)** Those of the successful candidates who obtain less than 50 % of the aggregate marks shall be deemed to have passed the examination in 'Pass' Class. Other successful candidates will be awarded only a 'Pass' remark.
- OC-10.34 (Effective from 2<sup>nd</sup> August, 2005)** A candidate appearing for a part of an examination shall not be eligible for class in that year to which the examination belongs. However, the candidate appearing for a part of an examination shall have to appear in all papers of that examination which the candidate is yet to pass. The total number of papers (fresh & repeat) during any session, should not exceed 12 (twelve)
- OC-10.35 (Effective from 2<sup>nd</sup> August, 2005)** Whenever a candidate registers to reappear in any paper of an examination, the paper/s shall be counted as a backlog/s. The marks scored in that paper in the previous examination shall be deemed null and void. However, the marks secured in internal assessment, oral and practical in subjects, projects and industrial training shall necessarily be carried over.
- OC-10.36 (Effective from 2<sup>nd</sup> August, 2005) -Deleted-**  
**OC-10.36.1 (Effective from 2<sup>nd</sup> August, 2005) -Deleted-**  
**OC-10.36.2 (Effective from 2<sup>nd</sup> August, 2005) -Deleted-**
- OC-10.37 (Effective from 2<sup>nd</sup> August, 2005)** A candidate who has secured the highest percentage of marks at the Bachelor of Engineering degree and is eligible for award of class shall be awarded rank Certificate by the University.
- OC-10.38 (Effective from 2<sup>nd</sup> August, 2005) Conduct of Examination**
- OC-10.38.1 (Effective from 2<sup>nd</sup> August, 2005)** All the theory/ practical/ oral examinations for different subjects as envisaged in the scheme of examination for different branches for first year (Semester I and Semester II) and second year (Semester III and Semester IV) shall be conducted by the affiliated colleges on behalf of the University. The examiners for these examinations can be internal to college. In the event of non-availability of eligible examiners in a college, the Principal of the college has to get the list of examiners approved by OB-4 committee and can substitute examiners. The clause of only internal examiners for Semester I to Semester IV examinations shall not be applicable to a newly affiliated college for the first three years of affiliation. The examiners for such colleges for Semester I to IV examinations shall be appointed by OB-4 committee.
- OC-10.38.2 (Effective from 2<sup>nd</sup> August, 2005)** For the theory examinations for Semester V to Semester VIII, there shall be two examiners for paper setting and evaluation, out of which one shall be from Goa University affiliated colleges and other from outside Goa University. For the paper setting, both the internal and external paper setter shall be involved for each paper. Fifty percent of the subjects in a semester shall be assessed by internal examiner and other fifty by the external. Fifty percent of subjects shall include electives for evaluation by the internal examiners.
- OC-10.38.3 (Effective from 2<sup>nd</sup> August, 2005)** For all the practical/ oral examinations for Semester V to Semester VIII, there shall be two examiners from different affiliated colleges. In the event of two examiners not being available from different colleges, the examiners from institution/ industry may be appointed.

However, for the project examination, one examiner from an affiliated college and one from any other institution/ industry may be appointed.

**OC-10.39 (Effective from 2<sup>nd</sup> August, 2005)** The existing ordinances regarding award of grace marks and revaluation of answer books for other faculties shall be applicable to B.E. Courses. Any changes brought about in these ordinances in future, shall also be applicable to B.E. Courses.

**OC-10.40 (Effective from 2<sup>nd</sup> August, 2005)** Requirement of non-teaching staff for conducting oral/practical examination:  
There shall be a batch of 15 students for oral/ practical examination of Third year and Final year and that of 20 students for First and Second year examinations. For conducting a practical examination for a batch, there shall be one technical assistant, one laboratory assistant and one laboratory attendant to assist the examiners.  
For conducting oral examination for a batch, there shall be one laboratory assistant and one laboratory attendant to assist the examiners.

**OC-10.41 (Effective from 2<sup>nd</sup> August, 2005) Improvement of Results**

A candidate shall be permitted to improve upon his result in the B.E. degree course, subject to the following conditions:

- i) The candidate has to pass the B.E. degree examination.
- ii) The candidate shall have one more opportunity to appear for B.E. (VII & VIII together) examination, in one and the same sitting.
- iii) The provision regarding the carrying forward of marks as given in Ordinance OC-10.35 shall be applicable.
- iv) v) There shall be only one attempt for the purpose of improvement in performance for VII and VIII semesters.
- vi) The candidate shall appear for improvement examination within one year of the declaration of B.E. results.
- vii) In case a candidate fails to improve upon the performance, the marks obtained in earlier examinations shall be retained. Improvement in performance means improving upon the class, and in case there is no change in class, it means improvement of percentage of marks.

**OC-10.42 (Effective from 2<sup>nd</sup> August, 2005) Maximum number of attempts and total duration of course:** A candidate must pass Semester I & II examination within a period of three years from the date of admission subject to a maximum of four attempts for each semester. The entire B.E. program shall be completed within a period of eight years from the date of admission. A candidate who fails to meet the above criteria shall forfeit his admission to the Bachelor degree of Engineering program and will not be allowed to re-appear for any examination

**OC-10.43 (Effective from 2<sup>nd</sup> August, 2005)** A candidate who desires to have revaluation of his paper/papers shall be required to apply for revaluation of his paper/papers within ten days from the date of receipt of the individual statement of marks of the candidate of the concerned examinations by the office of the concerned institution and that the revaluation shall not include verification of marks.

- OC-10.43.1 (Effective from 2<sup>nd</sup> August, 2005)** After the revaluation if the difference in the original marks and the marks scored on revaluation is not more/less than 20% of maximum marks then the highest of these two shall be considered as the marks scored by the candidate.
- OC-10.43.2 (Effective from 2<sup>nd</sup> August, 2005)** If the difference in the original marks and the marks obtained after revaluation is more/less than 20% of maximum marks then the paper will be sent for second revaluation. The average of the best two out of the three scores taken together shall be considered as the marks scored by the candidate.
- OC-10.43.3 (Effective from 2<sup>nd</sup> August, 2005)** In case the final revaluation marks calculated on the basis of OC-10.43.2 above are less than the original marks, the original marks shall be retained.

Note: The regulations regarding degree course in Civil, Mechanical, Electrical, Electronics and Telecommunications, Computer Engineering are given in **Schedule OSC-2.1 to OSC-2.32**.

- OC- 10A Ordinance relating to the Bachelor of Engineering Degree by Goa University (Revised in 2007-08) (Under Section 24 (1) of the Goa University Act. 1984)**  
Scope: The provision of Ordinance from **OC-10A** to **OC-10A.41** shall be applicable to Bachelor of Engineering degree courses revised in year 2007-08 conducted in Engineering colleges affiliated to Goa University.
- OC- 10A.1 Nomenclature of the Degree:** The Nomenclature of the degree awarded by Goa University in Engineering shall be Bachelor of Engineering (B.E.).
- OC- 10A.2 Minimum duration of the degree:** The B.E degree shall be of four academic years duration. In each academic year, there shall be two semesters. The course of study is designed for each term/semester with the provision of University examination at the end of the semester.
- OC- 10A.3 Classification of Academic Year and semesters:** The distribution of semesters shall be as follows:  
First Year Engineering: I & II semesters taken together  
Second Year Engineering: III & IV semesters taken together  
Third Year Engineering: V & VI semesters taken together  
Fourth Year Engineering: VII & VIII semesters taken together  
The above mentioned Union of semesters into years is for the purpose of award of class only. However, the admission to each semester shall be based on eligibility criteria stipulated for that semester.
- OC- 10A.4 Eligibility for award of degree:** A Candidate admitted in First Year Engineering of four year degree course in engineering shall have to pass all the eight semester examinations to be eligible for the award of the degree.
- OC- 10A.5** A Candidate being eligible for admission directly to the second year of the four year degree course in Engineering shall be exempted from appearing at I & II semester examinations and shall be eligible for the award of B.E. degree after passing examinations from III semester to VIII semester.

- OC- 10A.6** The University awards B.E degree in the following disciplines:
- a) Degree of Bachelor of Engineering (B. E.) in Civil Engineering
  - b) Degree of Bachelor of Engineering (B. E.) in Mechanical Engineering
  - c) Degree of Bachelor of Engineering (B. E.) in Electrical and Electronics Engineering
  - d) Degree of Bachelor of Engineering (B.E.) in Electronics & Telecommunication Engineering
  - e) Degree of Bachelor of Engineering (B.E.) in Computer Engineering
  - f) Degree of Bachelor of Engineering (B. E.) in Information Technology
  - g) Degree of Bachelor of Engineering (B. E.) in any other branch of Engineering introduced by the University in future.

**OC- 10A.7** **Duration of Course work and term:** The duration of the course work in each semester shall be 90 teaching days. The teaching days here shall mean actual classroom/laboratory/contact teaching days, and shall not include days of examinations/tours/sports. The course work may contain classes in theory, practicals, assignments, tutorials, project work and internal assessment.

**OC- 10A.8** **Fulfilling the requirement of a semester:** A candidate is considered to have successfully fulfilled the requirement of a semester, provided he/she has minimum attendance of 75% of the total classes engaged in each subject in theory and practical for that semester.  
Marks for internal assessment (sessional) shall be based on the average of the marks scored in two written tests during a semester.

A candidate who fails to fulfill the above requirements shall not be eligible to appear for the examination of that semester and will have to repeat the semester.

**OC- 10A.9** **Term:** The Academic Schedule for each Academic year for the degree courses in Engineering shall be decided by the University from time to time.

**Ordinance relating to eligibility of admission to each semester and eligibility to appear for examination of each Semester of Bachelor of Engineering Degree Program.**

**OC-10A.10 Eligibility for admission (First Semester) (Effective from the academic year 2014-2015)**

Admission: A candidate eligible for admission to the first semester of the Bachelor of Engineering (B. E.) Degree Courses of Goa University shall have passed the Higher Secondary School Certificate (Std.XII) Examination conducted by Goa Board of Secondary and Higher Secondary Education, or an examination conducted by the Central Board of Secondary Education, or any other examination, which in scope and standard, is deemed to be equivalent to the Higher Secondary School Certificate examination of Goa Board and must have obtained, the minimum percentage of marks in the specified subjects as prescribed below:

The candidate should have passed the Higher Secondary School Certificate (Std.XII) examination of the Goa Board of Secondary and Higher Secondary Education or its equivalent examination with English, Physics and Mathematics as compulsory subjects with one of the following subjects Chemistry/Bio-Technology/Computer Science / Biology and secured not less than 45% marks in the aggregate of subjects of Physics and Mathematics with one of the following subjects Chemistry/Bio-Technology/Computer Science/ Biology, and 40% marks in case of applicants belonging to SC, ST, and OBC.

A candidate seeking admission to the BE degree course must have appeared and obtained a valid score at the Goa Common Entrance Test GCET conducted by Government of Goa or such other test and conditions approved by the Government of Goa for the year of admission.

**OC- 10A.11 Semester -I**

**Admission:** A Candidate admitted to Semester– I of the B.E degree program as per prevailing admission criteria is eligible to keep terms for semester – I.

**OC- 10A.12 Semester –II**

**Admission:** A Candidate who has fulfilled the requirement of semester– I shall be eligible for admission to semester – II irrespective of semester –I examination results.

**OC- 10A.13 Semester -I**

**Examination:** A Candidate who has successfully fulfilled the requirement of semester – I shall be eligible to appear at the semester-I examination.

**OC- 10A.14 Semester -II**

**Examination:** A Candidate who has successfully fulfilled the requirement of semester – II shall be eligible to appear at the semester-II examination.

**OC- 10A.15** In respect of the students who appear for two consecutive semesters, the result of the higher semester shall be declared irrespective of the performance in the lower semester. However, the remark "**Result Reserved for Lower Examination (RRLE)**" shall be shown in the remark column of even semester if there is a backlog in the preceding odd semester.

**OC- 10A.16 (Effective from 15<sup>th</sup> June, 2012) Eligibility for admission to Second Year Engineering.**



A candidate to be eligible for admission to Engineering Degree Programmes at Second Year/Third Semester Level must have:

(i) Passed the Diploma in Engineering in the relevant branch with minimum of **45%** (40% in case of SC/ST/OBC) aggregate marks at the Diploma course examination conducted by the Goa Board of Technical Education or an equivalent examination, conducted by a recognised Board of Technical Education in India or abroad.

OR

(a) Passed Bachelor of Science Degree with Mathematics as a subject at Std. XIIth and with minimum of **45%** (**40%** in case of SC/ST/OBC) marks in the aggregate (Final Year) from Goa University.

(b) B.Sc Degree holders are required to pass in the subjects of Engineering Graphics/Drawing and Engineering Mechanics of First Year of Engineering Programme along with Second Year subjects.

(ii) Appeared and obtained a valid score at the Goa Common Entrance Test (G2CET) conducted by the Government of Goa for the year of admission.

**OC- 10A.17 Semester -IV**

**Admission:** In addition to the candidates who have passed Semester I to III, only those candidates, who have fulfilled the requirement of preceding semester and have no more than six papers as backlog from the three immediately preceding Semesters shall be considered eligible for admission to Semester - IV.

**OC- 10A.18 Semester -III**

**Examination:** A candidate who has successfully fulfilled the requirement of Semester III shall be eligible to appear at the Semester -III examination.

**OC- 10A.19 Semester -IV**

**Examination:** A candidate who has successfully fulfilled the requirement of Semester -IV shall be eligible to appear at the Semester -IV examination.

**OC- 10A.20** In respect of the students who appear for examination in papers from more than one semester, the result of the higher semester shall be declared irrespective of the performance in the lower semester. However, the remark "Result Reserved for Lower Examination" (RRLE) shall be shown in the remark column, of Even Semester result if there is a backlog in any preceding semester.

**OC- 10A.21 Semester -V**

**Admission:** In addition to the candidates who have passed Semester I to IV, only those candidates who have fulfilled the requirement of the preceding semester and have not more than six papers as backlog from the three immediately preceding Semesters shall be considered eligible for admission to Semester -V.

**OC- 10A.22 Semester -VI**

**Admission:** In addition to the candidates who have passed Semester I to V, only those candidates who have fulfilled the requirements of the preceding semesters and have not more than six papers as backlog from the three immediately preceding Semesters shall be considered eligible for admission to Semester -VI.

**OC- 10A.23 Semester -V**

**Examination:** A candidate who has successfully fulfilled the requirement of Semester -V shall be eligible to appear at the Semester -V examination.

**OC- 10A.24 Semester -VI**

**Examination:** A candidate who has satisfactorily fulfilled the requirement of Semester -VI shall be eligible to appear at the Semester -VI examination.

**OC- 10A.25** In respect of the students who appear for examination in papers from more than one semester, the result of the higher semester shall be declared irrespective of the performance in the lower semester. However, the remark "Result Reserved for Lower Examination" (RRLE) shall be shown in the remark column, of Even Semester result if there is a backlog in any preceding semester.

**OC- 10A.26 Semester -VII**

**Admission:** In addition to the candidates who have passed Semester I to VI, only those candidates, who have fulfilled the requirement of the preceding semester and have not more than six papers as backlog from the three immediately preceding Semesters shall be considered eligible for admission to Semester -VII.

**OC- 10A.27 Semester -VIII**

**Admission:** In addition to the candidates who have passed Semester I to VII, only those candidates, who have fulfilled the requirement of the preceding semester and have not more than six papers as backlog from the three immediately preceding semesters shall be considered eligible for admission to Semester -VIII.

**OC- 10A.28 Semester -VII**

**Examination:** A candidate who has satisfactorily fulfilled the requirement of Semester -VII shall be eligible to appear at the Semester -VII examination.

**OC- 10A.29 Semester -VIII**

**Examination:** A candidate who has satisfactorily fulfilled the requirement of Semester -VIII shall be eligible to appear at the Semester -VIII examination.

**OC- 10A.30** In respect of the students who appear for examination in papers from more than one semester, the result of the higher semester shall be declared irrespective of the performance in the lower semesters. However, the remark "Result Reserved for Lower Examination" (RRLE) shall be shown in the remark column, of Even Semester result if there is a backlog in any preceding semester.

**OC- 10A.31 Standard for Passing Examination:**

To pass an examination, a candidate must obtain a minimum of 40 % of maximum marks in each head of passing separately in each subject as envisaged in the scheme of examination stipulated for the course, except in the subhead under sessional marks. A candidate shall also obtain 40% in the combined head of passing which includes theory and sessional marks. However, when the sessional head is not combined with theory head, it will be deemed as a separate head of passing.

**OC-10A.32.1 Eligibility for Award of Class:**

A Class for passing examination shall be awarded at the end of each academic year examination, provided the candidate does not have any backlog.

First year: Based on marks in Semester I and Semester II examinations.

Second year: Based on marks in Semester III and Semester IV examinations.

Third year: Based on marks in Semester V and Semester VI examinations.

**Class for B.E. Degree:**

Cent percent weightage shall be given to marks scored in Semester VII and VIII and fifty percent weightage for marks scored in semester V and VI in deciding the award of class at B.E. examination. Semester VII and VIII should be cleared independently each in one sitting for being eligible for the award of class.

**OC- 10A.32.2** A class for passing an examination shall be awarded only if the candidate passes all theory papers stipulated for that year, passing papers of each semester examination in one sitting. On availing the first regular chance to pass all the papers of a semester in one sitting if the candidate is not satisfied with his performance, he/she can avail a second and final chance to pass all the papers of the semester in one sitting without claiming exemption in any of the papers of the previous appearance.

Whenever a candidate registers to reappear for an examination, the marks scored in the previous examination shall be deemed null and void. However, the marks secured in sessionals /internal assessment, oral and practical in subjects, projects and industrial training shall necessarily be carried over without affecting the eligibility for class.

**OC- 10A.33 Criteria for Award of Class:**

A candidate who obtains 70 % and above of the aggregate marks shall be deemed to have passed the examination in First Class with Distinction.

**OC- 10A.33.1** Those of the successful candidates who obtain 60 % and above, but below 70% of the aggregate marks shall be deemed to have passed the examination in First Class.

**OC- 10A.33.2** Those of the successful candidates who obtain 50 % and above, but below 60% of the aggregate marks shall be deemed to have passed the examination in Second Class.

**OC- 10A.33.3** Those of the successful candidates who obtain less than 50% of the aggregate marks shall be deemed to have passed the examination in Pass Class. Other successful candidates will be awarded only a 'Pass' Remark.

**OC- 10A.34** A candidate appearing for a part of an examination shall not be eligible for the award of class in that year to which the examination belongs.

A candidate appearing for a part of an examination shall necessarily be exempted from reappearing in the subjects in which he has passed. However, the candidate shall have to appear in all papers of that examination which he/she is yet to pass.

**OC- 10A.35** Whenever a candidate registers to reappear in any paper of an examination in which he has failed, marks scored in that paper in the previous examination shall be deemed null and void. However, the marks secured in sessionals /internal assessment, oral and practical in subjects, projects and industrial training shall necessarily be carried over.

**OC- 10A.36 Repeating to a semester:**

An unsuccessful candidate in a given semester can repeat the entire semester by keeping terms of that semester again. However, in such cases, the performance of the candidate in the previous attempt shall be deemed as null and void.

**OC- 10A.37** A candidate who has secured the highest percentage of marks at the B.E. Degree and is eligible for the award of class shall be awarded rank certificate by the University,

**OC- 10A.38 Conduct of Examination:**

**OC- 10A.38.1** All the theory/ practical/ oral examinations for different subjects as envisaged in the scheme of examination for different branches for first year (Semester I and Semester II) and second year (Semester III and Semester IV) shall be conducted by the affiliated colleges on behalf of the University. The examiners for these examinations can be internal to the college. In the event of non availability of eligible examiners in a college, the Principal of the college shall get the list of examiners approved by OB-4 committee and shall substitute examiners. The clause of only internal examiners for semester I to semester IV examinations shall not be applicable to a newly affiliated college for the first three years of affiliation. The examiners for such colleges for semester I to IV examination shall be appointed by OB-4 committee.

**OC- 10A.38.2** For the theory examinations for Semester V to Semester VIII, there shall be two examiners for paper setting and evaluation, internal and external. For the paper setting, both the internal and external examiners shall be involved in the setting of each paper.  
Fifty percent of the subjects in a semester shall be assessed by internal examiners and other fifty percent by the external. Fifty percent of subjects shall include electives for evaluation by the internal examiners.

**OC- 10A.38.3** For all the practical/ oral examinations for Semester V to Semester VIII, there shall be two examiners from different affiliated colleges. In the event of two examiners from different colleges being not available, the examiners from institution / industry shall be appointed.

However, for the project examination, one examiner from affiliated college and one from any other institution / industry shall be appointed.

**OC- 10A.39** The existing ordinances regarding award of grace marks and revaluation of answer books for other faculties shall be applicable to B.E. courses. Any changes brought about in these ordinances in future, shall also be applicable to B.E. courses.

**OC- 10A.40 Requirement of non-teaching staff for conducting oral/ practical examination:**

There shall be a batch of 15 students for oral/ practical examination of Third year and Final Year and that of 20 students for First and Second Year examinations.

For conducting a practical examination for a batch, there shall be one technical assistant, one laboratory assistant and one laboratory attendant to assist the examiners.

For conducting oral examination for a batch, there shall be one laboratory assistant and one laboratory attendant to assist the examiners.

**OC- 10A.41 Improvement of Results:**

A candidate shall be permitted to improve upon his result in the B.E. degree course subject to the following conditions:

- i) The candidate shall have passed the B.E. degree examination.
- ii) The candidate shall have one additional opportunity to appear for B.E. (VII and VIII together) examination, in one and the same sitting.
- iii) The provision regarding the carrying forward of marks as given in Ordinance OC-XX.35 shall be applicable.
- iv) There shall be only one attempt for the purpose of improvement in performance for VII and VIII semesters.
- v) The candidate shall appear for improvement examination within one year of the declaration of B.E. results.
- vi) In case a candidate fails to improve upon the performance, the marks obtained in earlier examinations shall be retained. Improvement in performance means improving upon the class, and in case there is no change in class, it means improvement of percentage of marks.

**OC- 10A Ordinance relating to the Bachelor of Engineering Degree by Goa University (Revised in 2016-17)** (Under Section 24 (1) of the Goa University Act. 1984)

Scope: The provision of ordinance from **OC-10A** to **OC-10A.41** shall be applicable to Bachelor of Engineering Degree courses revised in year 2016-17 conducted in Engineering colleges affiliated to Goa University.

**OC- 10A.1 Nomenclature of the Degree:** The Nomenclature of the degree awarded by Goa University in Engineering shall be Bachelor of Engineering (B.E.).

**OC- 10A.2 Minimum duration of the degree:** The B.E degree shall be of four academic years duration. In each academic year, there shall be two semesters. The course of study is designed for each term/semester with the provision of University examination at the end of the semester.

**OC- 10A.3 Classification of Academic Year and semesters:** The distribution of semesters shall be as follows:  
 First Year Engineering: I & II semesters taken together  
 Second Year Engineering: III & IV semesters taken together  
 Third Year Engineering: V & VI semesters taken together  
 Fourth Year Engineering: VII & VIII semesters taken together  
 The above mentioned Union of semesters into years is for the purpose of award of class only. However, the admission to each semester shall be based on eligibility criteria stipulated for that semester.

**OC- 10A.4 Eligibility for award of degree:** A Candidate admitted in First Year Engineering of four year degree course in engineering shall have to pass all the eight semester examinations to be eligible for the award of the degree.

**OC- 10A.5** A Candidate being eligible for admission directly to the second year of the four year degree course in Engineering shall be exempted from appearing at I & II semester examinations and shall be eligible for the award of B.E. degree after passing examinations from III semester to VIII semester.

- OC- 10A.6** The University awards B.E Degree in the following disciplines:
- Degree of Bachelor of Engineering (B. E.) in Civil Engineering.
  - Degree of Bachelor of Engineering (B. E.) in Mechanical Engineering.
  - Degree of Bachelor of Engineering (B. E.) in Electrical and Electronics Engineering.
  - Degree of Bachelor of Engineering (B.E.) in Electronics & Telecommunication Engineering
  - Degree of Bachelor of Engineering (B.E.) in Computer Engineering
  - Degree of Bachelor of Engineering (B. E.) in Information Technology
  - Degree of Bachelor of Engineering (B. E.) in Mining Engineering
  - Degree of Bachelor of Engineering (B.E.) in Electronics & Communication Engineering
  - Degree of Bachelor of Engineering (B. E.) in any other branch of Engineering introduced by the University in future.

**OC- 10A.7** **Duration of Course work and term:** The duration of the course work in each semester shall be 90 teaching days. The teaching days here shall mean actual classroom/laboratory/contact teaching days, and shall not include days of examinations/tours/sports. The course work may contain classes in theory, practicals, assignments, tutorials, project work and internal assessment.

**OC- 10A.8** **Fulfilling the requirement of a semester:** A candidate is considered to have successfully fulfilled the requirement of a semester, provided he/she has minimum attendance of 75% of the total classes engaged in each subject in theory, tutorial and practical for that semester.  
Marks for internal assessment (sessional) shall be based on the average of the marks scored in two written tests during a semester.

A candidate is considered to have successfully fulfilled the requirement of a semester, provided he/ she submits to the department.

- (a) a certified journal reporting the experiments conducted in the practicals during the semester as per scheme of instruction.

AND

- (b) the jobs, as per scheme of instruction, in the subjects as specified in the syllabus:  
(i) Workshop Practice – I (Semester – I),  
(ii) Workshop Practice – II (Semester – II)

AND

- (c) A Project report, as per scheme of instructions (Semester - VIII)

A candidate who fails to fulfil the above requirements shall not be eligible to appear for the examination of that semester and will have to repeat the semester.

**OC- 10A.9** **Term:** The Academic Schedule for each Academic year for the degree courses in Engineering shall be decided by the University from time to time.

**Ordinance relating to eligibility of admission to each semester and eligibility to appear for examination of each Semester of Bachelor of Engineering Degree Program.**

**OC- 10A.10 Eligibility for admission (First Semester)** Admission: A candidate eligible for admission to the first semester of the Bachelor of Engineering (B. E.) Degree Courses of Goa University shall have passed the Higher Secondary School Certificate (Std. XII) Examination conducted by Goa Board of Secondary and Higher Secondary Education, or an examination conducted by the Central Board of Secondary Education, or any other examination, which in scope and standard, is deemed to be equivalent to the Higher Secondary School Certificate examination of Goa Board and must have obtained, the minimum percentage of marks in the specified subjects as prescribed below:

The candidate should have passed the Higher Secondary School Certificate (Std.XII) examination of the Goa Board of Secondary and Higher Secondary Education or its equivalent examination with English, Physics and Mathematics as compulsory subjects with one of the following subjects Chemistry/ Bio-Technology/ Computer Science / Biology and secured not less than 45% marks in the aggregate of subjects of Physics and Mathematics with one of the following subjects Chemistry/Bio-Technology/Computer Science/ Biology, and 40% marks in case of applicants belonging to SC, ST, and OBC.

A candidate seeking admission to the BE Degree course must have appeared and obtained a valid score at the Goa Common Entrance Test GCET conducted by Government of Goa or such other tests and conditions approved by the Government of Goa from time to time.

**OC- 10A.11 Semester -I**

**Admission:** A Candidate admitted to Semester– I of the B.E degree program as per prevailing admission criteria is eligible to keep terms for semester – I.

**OC- 10A.12 Semester –II**

**Admission:** A Candidate who has fulfilled the requirement of semester– I shall be eligible for admission to semester – II irrespective of semester –I examination results.

**OC- 10A.13 Semester -I**

**Examination:** A Candidate who has successfully fulfilled the requirement of semester – I shall be eligible to appear at the semester-I examination.

**OC- 10A.14 Semester -II**

**Examination:** A Candidate who has successfully fulfilled the requirement of semester – II shall be eligible to appear at the semester-II examination.

**OC- 10A.15 First Year:**

In respect of the students who appear for two consecutive semesters, the result of the higher semester shall be declared irrespective of the performance in the lower semester. However, the remark "Result Reserved for Lower Examination(RRLE)"shall be shown in the remark column of even semester if there is a backlog in the preceding odd semester.

**OC- 10A.16 Eligibility for admission to Second Year Engineering.**

A candidate to be eligible for admission to Engineering Degree Programmes at Second Year/Third Semester Level must have:

- (i) Passed the Diploma in Engineering in the relevant branch with minimum of 45% (40% in case of SC/ST/OBC) aggregate marks at the Diploma course examination conducted by the Goa Board of Technical Education or an equivalent examination, conducted by a recognised Board of Technical Education in India or abroad.
- OR
- (a) Passed Bachelor of Science Degree with Mathematics as a subject at Std. XIIth and with minimum of 45% (40% in case of SC/ST/OBC) marks in the aggregate (Final Year) from Goa University.
  - (b) B.Sc Degree holders are required to pass in the subjects of Engineering Graphics/Drawing and Engineering Mechanics of First Year of Engineering Programme along with Second Year subjects.
  - (ii) Eligibility of admission and admission criteria/ conditions to second Year Engineering shall as decided by the Government of Goa from time to time.

**Semester -- III**

**Admission:** In addition to the candidates who have passed Semester I to II, only those candidates, who have fulfilled the requirement of preceding semester and have no more than six papers as backlog from the two immediately preceding Semesters shall be considered eligible for admission to Semester – III.

**OC- 10A.17 Semester -IV**

**Admission:** In addition to the candidates who have passed Semester I to III, only those candidates, who have fulfilled the requirement of preceding semester and have no more than six papers as backlog from the three immediately preceding Semesters shall be considered eligible for admission to Semester - IV.

**OC- 10A.18 Semester -III**

**Examination:** A candidate who has successfully fulfilled the requirement of Semester III shall be eligible to appear at the Semester -III examination.

**OC- 10A.19 Semester -IV**

**Examination:** A candidate who has successfully fulfilled the requirement of Semester -IV shall be eligible to appear at the Semester -IV examination.



**OC- 10A.20 Second Year:**

In respect of the students who appear for examination in papers from more than one semester, the result of the higher semester shall be declared irrespective of the performance in the lower semester. However, the remark "Result Reserved for Lower Examination (RRLE)" shall be shown in the remark column, of Even Semester result if there is a backlog in any preceding semester.

**OC- 10A.21 Semester -V**

**Admission:** In addition to the candidates who have passed Semester I to IV, only those candidates who have fulfilled the requirement of the preceding semester and have not more than six papers as backlog from the three immediately preceding Semesters shall be considered eligible for admission to Semester -V.

**OC- 10A.22 Semester -VI**

**Admission:** In addition to the candidates who have passed Semester I to V, only those candidates who have fulfilled the requirements of the preceding semesters and have not more than six papers as backlog from the three immediately preceding Semesters shall be considered eligible for admission to Semester -VI.

**OC- 10A.23 Semester -V**

**Examination:** A candidate who has successfully fulfilled the requirement of Semester -V shall be eligible to appear at the Semester -V examination.

**OC- 10A.24 Semester -VI**

**Examination:** A candidate who has satisfactorily fulfilled the requirement of Semester -VI shall be eligible to appear at the Semester -VI examination.

**OC- 10A.25 Third Year:**

In respect of the students who appear for examination in papers from more than one semester, the result of the higher semester shall be declared irrespective of the performance in the lower semester. However, the remark "Result Reserved for Lower Examination (RRLE)" shall be shown in the remark column, of Even Semester result if there is a backlog in any preceding semester.

**OC- 10A.26 Semester -VII**

**Admission:** In addition to the candidates who have passed Semester I to VI, only those candidates, who have fulfilled the requirement of the preceding semester and have not more than six papers as backlog from the three immediately preceding Semesters shall be considered eligible for admission to Semester -VII.

**OC- 10A.27 Semester -VIII**

**Admission:** In addition to the candidates who have passed Semester I to VII, only those candidates, who have fulfilled the requirement of the preceding semester and have not more than six papers as backlog from the three immediately preceding semesters shall be considered eligible for admission to Semester -VIII.

**OC- 10A.28 Semester -VII**

**Examination:** A candidate who has satisfactorily fulfilled the requirement of Semester -VII shall be eligible to appear at the Semester -VII examination.

**OC- 10A.29 Semester -VIII**

**Examination:** A candidate who has satisfactorily fulfilled the requirement of Semester -VIII shall be eligible to appear at the Semester -VIII examination.

**OC- 10A.30 Fourth Year:**

In respect of the students who appear for examination in papers from more than one semester, the result of the higher semester shall be declared irrespective of the performance in the lower semesters. However, the remark "Result Reserved for Lower Examination (RRLE)" shall be shown in the remark column, of Even Semester result if there is a backlog in any preceding semester.

**OC-  
10A.31**

**Standard for Passing Examination:**

To pass an examination, as envisaged in the scheme of examination stipulated for the course, a candidate shall be required to:

- (i) Obtain a minimum of 40% of maximum marks in Theory Examination separately in each subject.
- (ii) Obtain 40% of maximum marks in the aggregate of Theory Examination, Sessional and Term Work marks in each subject.
- (iii) Obtain a minimum of 40% of maximum marks in Practical Examination separately in each subject.
- (iv) Obtain a minimum of 40% of maximum marks in Oral Examination separately in each subject.
- (v) Obtain a minimum of 40% of maximum marks in the Term Work (TW) in the following subjects:
  - (a) Workshop Practice – I (Semester – I),
  - (b) Workshop Practice – II (Semester – II)
  - (c) Project (Semester - VIII)

**OC-10A.32.1 Eligibility for Award of Class:**

A Class for passing examination shall be awarded at the end of each academic year examination, provided the candidate does not have any backlog.

First year: Based on marks in Semester I and Semester II examinations.

Second year: Based on marks in Semester III and Semester IV examinations.

Third year: Based on marks in Semester V and Semester VI examinations.

**Class for B.E. Degree:**

Cent percent weightage shall be given to marks scored in Semester VII and VIII and fifty percent weightage for marks scored in semester V and VI in deciding the award of class at B.E. examination. Semester VII and VIII should be cleared independently each in one sitting for being eligible for the award of class.

**OC- 10A.32.2** A class for passing an examination shall be awarded only if the candidate passes all theory papers, practical exams, oral exams and term work [as specified under OC- 10A.31 (v),(a),(b) and (c)]stipulated for that year, passing all these components of each semester examination in one sitting.

If the candidate is not satisfied with his/ her performance, he/she can avail a second and final chance to pass all the theory papers of the semester in one sitting, by availing the first regular chance to pass all the theory papers of a semester in one sitting without claiming exemption in any of the theory papers of the previous appearance.

Whenever a candidate registers to reappear for an examination, the marks scored in the previous examination shall be deemed null and void. However, the marks secured in sessionals/ internal assessment, term work, oral and practical in subjects, projects and industrial training shall necessarily be carried over without affecting the eligibility for class.

**OC- 10A.33 Criteria for Award of Class:**

A candidate who obtains 70 % and above of the aggregate marks shall be deemed to have passed the examination in First Class with Distinction.

**OC- 10A.33.1** Those of the successful candidates who obtain 60 % and above, but below 70% of the aggregate marks shall be deemed to have passed the examination in First Class.

**OC- 10A.33.2** Those of the successful candidates who obtain 50 % and above, but below 60% of the aggregate marks shall be deemed to have passed the examination in Second Class.

**OC- 10A.33.3** Those of the successful candidates who obtain less than 50% of the aggregate marks shall be deemed to have passed the examination in Pass Class. Other successful candidates will be awarded only a 'Pass' Remark.

**OC- 10A.34** A candidate appearing for a part of an examination shall not be eligible for the award of class in that year to which the examination belongs.

A candidate appearing for a part of an examination shall necessarily be exempted from reappearing in the subjects in which he has passed. However, the candidate shall have to appear in all papers of that examination which he/she is yet to pass.

**OC- 10A.35** Whenever a candidate registers to reappear in any paper of an examination in which he has failed, marks scored in that paper in the previous examination shall be deemed null and void. However, the marks secured in sessionals/ internal assessment, term work, oral and practical in subjects, projects and industrial training shall necessarily be carried over.

**OC- 10A.36 Repeating to a semester:**

An unsuccessful candidate in a given semester can repeat the entire semester by keeping terms of that semester again. However, in such cases, the performance of the candidate in the previous attempt shall be deemed as null and void.

**OC- 10A.37** A candidate who has secured the highest percentage of marks at the B.E. Degree and is eligible for the award of class shall be awarded rank certificate by the University,

**OC- 10A.38 Conduct of Examination:**

**OC- 10A.38.1** All the theory/ practical/ oral examinations for different subjects as envisaged in the scheme of examination for different branches for first year (Semester I and Semester II) and second year (Semester III and Semester IV) shall be conducted by the affiliated colleges on behalf of the University. The examiners for these examinations can be internal to the college. In the event of non availability of eligible examiners in a college, the Principal of the college shall get the list of examiners approved by OB-4 committee and shall substitute examiners. The clause of only internal examiners for semester I to semester IV examinations shall not be applicable to a newly affiliated college for the first three years of affiliation. The examiners for such colleges for semester I to IV examination shall be appointed by OB-4 committee.

**OC- 10A.38.2** For the theory examinations for Semester V to Semester VIII, there shall be two examiners for paper setting and evaluation, internal and external. For the paper setting, both the internal and external examiners shall be involved in the setting of each paper. Fifty percent of the subjects in a semester shall be assessed by internal examiners and other fifty percent by the external. Fifty percent of subjects shall include electives for evaluation by the internal examiners.

**OC- 10A.38.3** For all the practical/ oral examinations for Semester V to Semester VIII, there shall be two examiners from different affiliated colleges. In the event of two examiners from different colleges being not available, the examiners from institution / industry shall be appointed.

However, for the project examination, one examiner from affiliated college and one from any other institution / industry shall be appointed.

**OC- 10A.39** The existing ordinances regarding award of grace marks and revaluation of answer books for other faculties shall be applicable to B.E. courses. Any changes brought about in these ordinances in future, shall also be applicable to B.E. courses.

**OC- 10A.40 Requirement of non-teaching staff for conducting oral/ practical examination:**

There shall be a batch of 15 students for oral/ practical examination of Third year and Final Year and that of 20 students for First and Second Year examinations.

For conducting a practical examination for a batch, there shall be one technical assistant, one laboratory assistant and one laboratory attendant to assist the examiners.

For conducting oral examination for a batch, there shall be one laboratory assistant and one laboratory attendant to assist the examiners.

**OC- 10A.41 Improvement of Results:**

A candidate shall be permitted to improve upon his result in the B.E. Degree course subject to the following conditions:

- i. The candidate shall have passed the B.E. Degree examination.

- ii. The candidate shall have one additional opportunity to appear for B.E. (VII and VIII together) examination, in one and the same sitting.
- iii. The provision regarding the carrying forward of marks as given in Ordinance OC-10A.35 shall be applicable.
- iv. There shall be only one attempt for the purpose of improvement in performance for VII and VIII semesters.
- v. The candidate shall appear for improvement examination within one year of the declaration of B.E. results.
- vi. In case a candidate fails to improve upon the performance, the marks obtained in earlier examinations shall be retained. Improvement in performance means improving upon the class, and in case there is no change in class, it means improvement of percentage of marks.

**OC- 10A.42**

(a) A student who is from the existing scheme, i.e. revised in the year 2007-08 shall be Allowed To Keep Terms (ATKT) at every semester in such a manner that they shall complete instructions along with students of the last instructional batch, irrespective of number of backlogs and irrespective of any other condition(s) of eligibility for admission to the term/ semester.

However, all the Ordinances relating to the eligibility to appear for examination shall be applicable.

(b) A student who has not kept the term/ semester for the Semester-II of Academic Year 2015-16 shall be transferred to Semester-II of the revised scheme RC 2016-17. Such students shall be provided with instructional hours and shall be allowed to appear for the examination in the relevant subjects, as notified.

**ORDINANCE OC-10 B RELATING TO THE BACHELOR OF ENGINEERING DEGREE PROGRAMME. (w.e.f. 27<sup>th</sup> June, 2019)**

**OC-10B GENERAL**

Choice Based Credit System provides choice for students to select from the prescribed courses. Under the CBCS, the requirement for awarding a Degree is prescribed in terms of number of Credits to be completed by the students.

**OBJECTIVES**

- (a) To bring the undergraduate Engineering curriculum on par with the model curriculum recommended by All India Council for Technical Education (AICTE).
- (b) To impart quality education on par with international standards.
- (c) To offer new, relevant and need-based Courses.
- (d) To inculcate in students, responsibility and self-discipline in the learning process.
- (e) To enable students to acquire specific skills in keeping with their area of study.

- (f) To make the evaluation system continuous and more objective.
- (g) To provide a choice to the students in choosing their courses.

**Definition of Credit:**

1 Hr. Lecture (L) per week	1 credit
1 Hr. Tutorial (T) per week	1 credit
2 Hr. Practical (Lab) per week	1 credit

**OC- 10B.1 Nomenclature of the Degree:** The Nomenclature of the degree awarded by Goa University in Engineering shall be Bachelor of Engineering (B.E.).

**OC- 10B.2 Minimum duration of the degree:** The B.E degree shall be of four academic years duration. In each academic year, there shall be two Semesters. The course of study is designed for each term/Semester with the provision of University examination at the end of the Semester.

**OC- 10B.3 Classification of Academic Year and Semesters:** The distribution of Semesters shall be as follows:

**First Year Engineering:** I & II Semesters taken together

**Second Year Engineering:** III & IV Semesters taken together

**Third Year Engineering:** V & VI Semesters taken together

**Fourth Year Engineering:** VII & VIII Semesters taken together

Admission to each Semester shall be based on eligibility criteria stipulated for that Semester.

**OC- 10B.4 Eligibility for award of degree:** A Candidate admitted in First Year Engineering of four year degree course in Engineering shall have to pass all the eight Semester examinations to be eligible for the award of the degree.

**OC- 10B.5** A Candidate being eligible for admission directly to the second year of the four year degree course in Engineering shall be exempted from appearing at I & II Semester examinations and shall be eligible for the award of B.E. degree after passing examinations from III Semester to VIII Semester.

**OC- 10B.6 The University awards B.E Degree in the following disciplines:**

- (a) Degree of Bachelor of Engineering (B. E.) in Civil Engineering.
- (b) Degree of Bachelor of Engineering (B. E.) in Mechanical Engineering.
- (c) Degree of Bachelor of Engineering (B. E.) in Electrical and Electronics Engineering.
- (d) Degree of Bachelor of Engineering (B.E.) in Electronics & Telecommunication Engineering
- (e) Degree of Bachelor of Engineering (B.E.) in Computer Engineering
- (f) Degree of Bachelor of Engineering (B. E.) in Information Technology

- (g) Degree of Bachelor of Engineering (B. E.) in Mining Engineering
- (h) Degree of Bachelor of Engineering (B.E.) in Electronics & Communication Engineering

**Note:** In addition to the above, Degree of Bachelor of Engineering (B. E.) in any other branch of Engineering as and when the same is introduced by the University.

**OC- 10B.7 Duration of Course work and term:** The duration of the course work in each Semester shall be 90 teaching days. The teaching days here shall mean actual classroom /laboratory /industry training/contact teaching days, and shall not include days of examinations /tours /sports. The course work may contain classes in theory, practicals, assignments, tutorials, project work, internal assessment, and induction program and industry internship.

**OC- 10B.8 Mandatory Induction Program:** Two weeks induction program for students to be offered right at the start of the first year of the Engineering Course. Normal classes start only after the induction program is over. Its purpose is to make the students feel comfortable in their new environment, open them up, set a healthy daily routine, create bonding in the batch as well as between faculty and students, develop awareness, sensitivity and understanding of the self, people around them, society at large, and nature. However, if required, Institutes may schedule one week induction program at the start of each Semester of First Year of Engineering.

**OC- 10B.9 Internship:**

- (a) The Internship shall be completed during the period specified in the Scheme of Instruction and Examination. Minimum duration of the Internship shall be eight weeks.
- (b) The internship can be carried out in any industry/ R and D Organization/Research Institute/ Educational institute of repute.
- (c) The Department/Institute shall nominate staff member/s to facilitate, guide and supervise students under internship.
- (d) The Internal Guide has to visit place of internship at least once during the student's internship.
- (e) The students shall report the progress of the internship to the guide in regular intervals and seek his/her advice.
- (f) After the completion of Internship, students shall submit a report with 'Internship Completion Certificate' from the competent authority to the Head of the Department with the approval of both internal and external guides.

**OC- 10B.10 Open Elective (Electives from other technical and/ or emerging subject areas.):**

- (a) A student can select only one elective offered by any branch other than his/her branch of Engineering.
- (b) Selection of an open elective is not permitted if,

- i. A student does not have prerequisite knowledge of the subject.
- ii. The student has already completed the course in the First and Second year of the programme
- iii. The syllabus content of the open elective is similar to that of Departmental core courses or professional electives.
- iv. A similar course, under any category, is prescribed in the higher semesters.

**OC- 10B.11 Audit Course:**

- (a) The course work which carries zero credits is considered as an audit course.
- (b) Students have to satisfy the attendance and Internal assessment requirements. However, they need not have to appear for Semester end exams.

**OC- 10B.12 Fulfilling the requirement of a Semester:**

A candidate is considered to have successfully fulfilled the requirement of a Semester, provided he/she has minimum attendance of 75% of the total classes engaged in each subject in theory, tutorial and practical for that Semester. In addition, a candidate who is undergoing industry internship programme as per the scheme shall produce 'Internship Completion Certificate' from the competent authority to the respective institute of study.

A candidate is considered to have successfully fulfilled the requirement of a Semester, provided he/ she submits to the department the following.

- (a) a certified journal reporting the experiments conducted in the Practicals during the Semester as per scheme of instruction.

**AND**

- (b) the jobs, as per scheme of instruction, in the subjects as specified in the syllabus:
  - (i) Workshop Practice – I (Semester – I),
  - (ii) Workshop Practice – II (Semester – II)

**AND**

- (c) An Internship report as per scheme of instructions (Semester VII)

**AND**

- (d) A Project report, as per scheme of instructions (Semester - VIII)  
A candidate who fails to fulfill the above requirements shall not be eligible to appear for the examination of that Semester and shall have to repeat the Semester.

**OC- 10B.13 Term:** The Academic Schedule for each Academic year for the degree courses in Engineering shall be decided by the University



from time to time.

**OC- 10B.14 Eligibility for Admission**

- (a) A candidate eligible for admission to the first Semester of the Bachelor of Engineering (B. E.) Degree Courses of Goa University shall have passed the Higher Secondary School Certificate (Std. XII) Examination conducted by Goa Board of Secondary and Higher Secondary Education, or an examination conducted by the Central Board of Secondary Education, or any other examination, which in scope and standard, is deemed to be equivalent to the Higher Secondary School Certificate examination of Goa Board and must have obtained, the minimum percentage of marks in the specified subjects as prescribed below:
- (b) The candidate should have passed the Higher Secondary School Certificate (Std.XII) examination with English, Physics and Mathematics as compulsory subjects with one of the following subjects Chemistry/ Bio-Technology/ Computer Science / Biology and secured not less than 45% marks in the aggregate of subjects of Physics and Mathematics with one of the following subjects Chemistry/Bio-Technology/Computer Science/ Biology, and 40% marks in case of applicants belonging to SC, ST, and OBC.
- (c) A candidate seeking admission to the B.E. Degree course must have appeared and obtained a valid score at the Goa Common Entrance Test GCET conducted by Government of Goa or any other tests and conditions approved by the Government of Goa from time to time.

**OC- 10B.15 Semester –II**

A Candidate who has fulfilled the requirements of Semester–I shall be eligible for admission to Semester – II irrespective of Semester –I End examination results.

**OC- 10B.16 Eligibility for admission to Second Year Engineering Semester-III**

A candidate to be eligible for admission to Engineering Degree Programmes at Second Year/Third Semester Level must have:

- (a) Passed the Diploma in Engineering in the relevant branch with minimum of 45% (40% in case of SC/ST/OBC) aggregate marks at the Diploma course examination conducted by the Goa Board of Technical Education or an equivalent examination, conducted by a recognised Board of Technical Education in India or abroad.

**OR**

- (b) Passed Bachelor of Science Degree with Mathematics as a subject at Std. XIIth and with minimum of 45% (40% in case of SC/ST/OBC) marks in the aggregate (Final Year) from Goa University. B.Sc Degree holders are required to pass in the subject of Engineering Graphics of First Year of Engineering

Programme along with Second Year subjects.

**OR**

- (c) The Candidates who have fulfilled the requirements of Semester – I and Semester II and have not more than six papers as backlog shall be considered eligible for admission to Semester – III.

Note for OC-10B. 16 (a): Eligibility of admission and admission criteria / conditions to second Year Engineering shall be as decided by the Government of Goa from time to time.

**OC- 10B.17 Semester -IV**

The candidates who have fulfilled the requirements of Semester I to III and have not more than six papers as backlog shall be considered eligible for admission to Semester - IV.

**OC- 10B.18 Semester -V**

The candidates who have fulfilled the requirements of Semester I to IV and have not more than six theory papers as backlog from the three immediately preceding Semesters shall be considered eligible for admission to Semester -V.

**OC- 10B.19 Semester -VI**

The candidates who have fulfilled the requirements of Semester I to V and have not more than six papers as backlog from the three immediately preceding Semesters shall be considered eligible for admission to Semester -VI.

**OC- 10B.20 Semester -VII**

The candidates who have fulfilled the requirements of Semester I to VI, only those candidates and have not more than six papers as backlog from the three immediately preceding Semesters shall be considered eligible for admission to Semester -VII.

**OC- 10B.21 Semester -VIII**

The candidates who have fulfilled the requirements of Semester I to VII and have not more than six papers as backlog from the three immediately preceding Semesters shall be considered eligible for admission to Semester -VIII.

**OC-10B.22 SCHEME OF EXAMINATION**

There shall be a University examination (Regular / Repeat) at the end of each Semester. The duration of the University examination for each paper shall be as specified in the Scheme of Teaching and Examination for relevant programmes.

In respect of the students who appear for the exams of two consecutive Semesters in any academic year, the result of the higher Semester shall be declared irrespective of the performance in the lower Semester. However, the remark "Result Reserved for Lower Examination (RRLE)" shall be shown in the remark column of even Semester if there is a backlog in the preceding odd Semester.

(a) **Total Marks assigned to the Paper/Practical**

The B.E. degree examination shall consist of Papers (theory), Laboratory, Term work, Project and Project Report as provided in the respective schemes. The papers (theory) shall have internal assessment (Sessionals), as applicable. Laboratory shall have Term work, practicals and orals as applicable. Project shall have Term work and orals.

All Theory papers shall be of 100 marks each and Oral/Practical heads shall be of 25 or 50 marks as applicable. Weightage of marks in terms of Internal Assessment, Term work and Semester end examinations is provided in Scheme of Teaching and Examination for relevant programmes.

(b) **Pattern of Evaluation**

The maximum marks assigned to a Head of Passing in a subject Head shall be considered to be equivalent to 10 grade points. To pass in a subject Head a candidate must obtain at least 4 grade points or a minimum of P grade under each Head of Passing separately, as applicable for the subject Head.

(c) **Project:**

- i. The 'Project' may be purely an analytical piece of work or a completely experimental one or a field project or a design work or a combination of these. The Project work undertaken in Semester VII shall be continued in Semester VIII also.
- ii. The 'Project Report' shall be submitted on the 'Project', undertaken in Semester VII and VIII and shall be assessed by a panel of two examiners appointed by the University, consisting of the Guide (Internal Examiner cum Convener) and External Examiner.
- iii. Those of the candidates who fail to obtain at least 4 grade points or a minimum of P grade for Project Report shall have to re-submit the 'Project Report' or submit another "Project Report".

(d) **Grading scheme for B.E. Programme:**

A Grade Certificate shall be issued to all the registered students after every Semester based on the grades earned. The Grade Certificate will display the Course details (code, title, number of credits, grade secured). Marks awarded in each Course shall be represented in the form of Grades in the grade sheet issued at the end of each Semester.

Letter Grade shall be the index of the performance of students in a said Course, denoted by letters O, A+, A, B+, B, C, P and F, and calculated based on Grade Point and marks obtained for each Course, as shown in the table below.

<b>Letter Grade</b>	<b>Grade Point</b>	<b>Marks %</b>
O (Outstanding)	10	85 – 100
A+(Excellent)	9	75 – <85
A (Very Good)	8	65 – <75
B+(Good)	7	55 – <65
B (Above Average)	6	50 – <55
C (Average)	5	45 – <50
P (Pass)	4	40 – <45
F (Fail)	0	0 – <40
Ab (Absent)	0	---

(e) **Grade Point Average (GPA)**

The grade sheet in every Semester shall reflect Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA). The Final result shall be declared as Final Grade Point Average (FGPA), earned at the end of the Programme, which shall be a measure of overall cumulative performance of a student over Semesters V– VIII.

The Grade Point Average (GPA) shall be converted to a Letter Grade, as shown in the table below:

<b>CGPA</b>	<b>Grades</b>
10.0	O(Outstanding)
9.0 – <10	A+ (Excellent)
8.0 – <9.0	A (Very Good)
7.0 – <8.0	B+ (Good)
6.0 – <7.0	B (Above Average)
5.0 – <6.0	C (Average)
4.0 – <5.0	P (Pass)
Less than required credits or CGPA <4.0	F (Fail)

(f) **Grant of Term & Eligibility to appear for Examinations:**

- i. No candidate shall be allowed to keep terms for any higher Semester unless he/she has been granted terms for all the lower Semester(s).
- ii. A candidate is considered to have successfully fulfilled the requirement of a Semester and will be eligible for grant of term provided he/she has:
  1. In each subject, a minimum attendance of 75% of the total classes engaged in theory, tutorial and practical, separately, for

that Semester, and

2. Submitted a certified Journal reporting the experiments conducted during the Semester to the respective department.
- iii. The Internal Assessment will be based on at least three internal tests(80% weightage of marks for written test and 20% weightage of marks for continuous evaluation). The average of best two internal tests shall be the final result of the Internal Assessment
- iv. A candidate who fails to fulfill the above requirements shall not be granted the term and shall not be eligible to appear for the University examination of that Semester and will have to repeat the term for that Semester afresh.

(g) **Exemption Provision:**

- i. A candidate shall be declared to have passed a Semester examination when he / she obtains minimum P grade in all the heads of passing, separately, in all Courses. A candidate who fails in a Semester examination but secures at least 4 grade points or minimum of P grade in any Course may, at his/her option, be exempted from re-appearing for the same Course at subsequent attempt/s.
- ii. The grade points for those Course for which exemption is claimed shall be carried over to subsequent examinations and shall be considered along with grade points for the determination of CGPA.

(h) **Calculation of SGPA/CGPA/FGPA**

- i. On successful completion of a Semester, Semester Grade Point Average (SGPA) shall be calculated as follows:

$$SGPA = \frac{\sum_{i=1}^n C_i \cdot g_i}{\sum_{i=1}^n C_i}$$

where

n = total number of courses or part thereof in the Semester  
 $C_i$  = number of credits attached to the  $i^{\text{th}}$  course

$g_i$  = grade points earned in that course / part course

- ii. Cumulative Grade Point Average (CGPA) shall be calculated as follows:

$$CGPA = \frac{\sum_{i=1}^m C_i \cdot G_i}{\sum_{i=1}^m C_i}$$

where

m = total number of Semesters

$C_i$  = total number of credits in the  $i^{\text{th}}$  Semester

$G_i$  = SGPA in the  $i^{\text{th}}$  Semester

- iii. Final Grade Point Average (FGPA) shall be calculated as follows:

$$FGPA = \frac{\sum_{i=5}^m C_i G_i}{\sum_{i=5}^m C_i}$$

where

m = total number of Semesters

C<sub>i</sub> = total number of credits in the i<sup>th</sup> Semester

G<sub>i</sub> = SGPA in the i<sup>th</sup> Semester

(i) **Award of Degree:**

- i. A candidate who was admitted to Semester I of B.E. programme is required to pass the B.E. examination (all 8 Semesters) within a period of eight consecutive academic years after admission, failing which the admission of the candidate shall stand cancelled.
- ii. A candidate who admitted to III Semester of B.E. programme under lateral entry scheme shall pass the B.E. examination (all 6 Semesters) within a period of six consecutive academic years after admission, failing which the admission of the candidate shall stand cancelled.
- iii. The number of credits to be completed by students admitted to I Semester of B.E. programme shall be 160.
- iv. The number of credits to be completed by students admitted to III Semester of B.E. programme under lateral entry scheme shall be 126.
- v. A student will be eligible to get Under Graduate degree with Honours, if he/she completes an additional 20 credits. These shall be acquired through MOOCs not covered in the respective scheme of instruction.
- vi. If the candidate is not satisfied with his/ her performance, he/she can avail a second and final chance to pass all the theory papers of the Semester in one sitting, by availing the first regular chance to pass all the theory papers of a Semester in one sitting without claiming exemption in any of the theory papers of the previous appearance.

Whenever a candidate registers to reappear for an examination, the grades scored in the previous examination shall be deemed null and void. However, the grades secured in sessional/ internal assessment, term work, oral and practical Courses, projects and internship shall necessarily be carried over.

**OC- 10B.23 Repeating a Semester:**

An unsuccessful candidate in a given Semester can repeat the entire Semester by keeping terms of that Semester again. In such cases, the performance of the candidate in the previous attempt shall be deemed as null and void.

**OC- 10B.24.1 Conduct of Examination:**

All the theory/ practical/ oral examinations for different Courses as envisaged in the scheme of examination for different branches for first year (Semester I and Semester II) and second year (Semester III and Semester IV) shall be conducted by the affiliated colleges on behalf of the University. The examiners for these examinations can be internal to

the College. In the event of non availability of eligible examiners in a college, the Principal of the college shall get the list of examiners approved by OB-4 Committee and shall substitute the examiners. The clause of only internal examiners for Semester I to Semester IV examinations shall not be applicable to a newly affiliated college for the first three years of affiliation. The examiners for such colleges for Semester I to IV examination shall be appointed by OB-4 committee.

**OC- 10B.24.2** For the theory examinations for Semester V to Semester VIII, there shall be two examiners for paper setting and evaluation, internal and external. For the paper setting, both the internal and external examiners shall be involved in the setting of each paper.

Fifty percent of the subjects in a Semester shall be assessed by internal examiners and other fifty percent by the external. Fifty percent of subjects shall include electives for evaluation by the internal examiners.

**OC- 10B.24.3** For all the practical/ oral examinations for Semester V to Semester VIII, there shall be two examiners from different affiliated colleges. In the event of two examiners from different colleges being not available, the examiners from the same institution or an examiner from relevant Industry shall be appointed.

However, for the project examination, one examiner from affiliated college and one from any other institution or an examiner from relevant Industry shall be appointed.

**Note:** The relevant Ordinances regarding award of Entitlement marks and revaluation of answer books for other faculties shall be applicable to B.E. courses. Any amendments brought about in these ordinances in future, shall also be applicable to B.E. courses.

**OC- 10B.25 Requirement of non-teaching staff for conducting oral/ practical examination:**

There shall be a batch of maximum 15 students for oral/ practical examination of Third year and Final Year and that of maximum 20 students for First and Second Year examinations.

For conducting a practical examination for a batch, there shall be one technical assistant, one laboratory assistant and one laboratory attendant to assist the examiners.

For conducting oral examination for a batch, there shall be one laboratory assistant and one laboratory attendant to assist the examiners.

**OC- 10B.26 Improvement of Result:**

Improvement of results after the completion of the programme:

A candidate shall be permitted to improve upon his/her results in the BE degree programme, subject to the following conditions:

- a) The candidate has to pass the BE degree examination.
- b) The candidate shall have only one additional opportunity.
- c) The candidate shall appear for improvement examination within two years of the declaration of his/her final BE results.
- d) The candidate shall be allowed to improve the results only in the head 'Theory' of the subject heads.

- e) The candidate shall have to appear in all subjects with 'Theory' head, of all Semesters taken together, in one and the same sitting.
- f) The provision regarding the carrying forward of grades is as follows:
  - i) The grades secured in all heads other than 'Theory' head shall necessarily be carried over.
  - ii) In case the candidate fails to improve upon the CGPA, the grades obtained in earlier examinations shall be retained.
- g) In case the candidate improves upon the CGPA, the grades scored in the head –Theory in all the subject heads, in all the previous examinations, shall be deemed null and void, and shall be replaced by the new grades.

**Notes:**

1. A student who is from the scheme implemented in the year 2016-17 shall be Allowed To Keep Terms (ATKT) at every Semester in such a manner that they shall complete instructions along with students of the last instructional batch, irrespective of number of backlogs and irrespective of any other condition(s) of eligibility for admission to the term/ Semester.

However, all the requirements relating to the eligibility to appear for examination shall be applicable along with not more than eight papers as backlog from the three immediately preceding Semesters.

2. A student who has not kept the term/ Semester for the Semester-II of Academic Year 2018-19 shall be transferred to Semester-I of the revised scheme RC 2019-20.

3. A student admitted in the RC 2016-17 scheme who could not keep his/her terms in any of the Semester III to VIII due to various reasons shall require to migrate to the new revised CBCS scheme introduced in the academic year 2019-20. An equivalence committee comprising of the Chairperson and members of Board of Studies in the relevant branch of Engineering shall be established to look into this matter. The recommendation of the equivalence committee shall be final and binding to all stakeholders.

**OC-11 Ordinance relating to the examination for the Degree of Master of Engineering**  
(Under Section 24( 1) of the Goa University Act, 1984).

**OC-11.1 (Effective from 27<sup>th</sup> October, 2005)** Any person who has taken degree of Bachelor of Engineering of this University / or the degree of Bachelor of Engineering of any other University / Institution recognized as equivalent to the Bachelor of Civil Engineering degree of this University be admitted to the examination for the degree of Master of Engineering in Foundation Engineering.

**OC-11.2 (Effective from 27<sup>th</sup> October, 2005)** The M.E. Degree examination shall consist of papers, term work, seminar/project work, dissertation and viva-voce. The entire course shall be grouped in four semesters.



- OC-11.3 (Effective from 27<sup>th</sup> October, 2005)** To pass an examination for the M.E. Degree, a candidate must obtain at least 50 percent of the marks or CC grade obtainable under each head of passing in each theory paper, term work, seminar / project work, dissertation and viva-voce. A candidate who fails to secure a minimum of 50 per cent of the marks or CC grade assigned to the term work will be required to re-submit fresh term work at his re-appearance at the subsequent examination in the subject.
- OC-11.4 (Effective from 27<sup>th</sup> October, 2005)** Those of the candidates who fail to obtain 50 percent of the aggregate marks or CC grade for dissertation shall improve and re-submit the dissertation or submit another dissertation in subsequent semesters.
- OC-11.5 (Effective from 27<sup>th</sup> October, 2005)** Those of the successful candidates who have obtained 50% and above but below 60% of aggregate marks or a CGPA of 5.00 or more but less than 6.5 in the four semesters taken together and those who have obtained 60% and above but below 70% of the aggregate marks or a CGPA of 6.5 or more but less than 8.00 in the four semesters taken together and those who have obtained 70% and above of the aggregate marks or a CGPA of 8.00 or more in the four semesters taken together shall be declared to have passed the M. E. Examination in second class, first class and first class with distinction respectively. Grading pattern should follow the scheme given under OC-11.35.
- OC-11.6 (Effective from 27<sup>th</sup> October, 2005)** In order to be eligible for a class, the candidate must appear and pass the first, second and third semester examinations in not more than five consecutive semesters after registration with a provision that each semester examination has to be cleared in not more than two sittings. Further the candidate shall pass the dissertation and viva voce examination within a period of six consecutive semesters after registration.
- OC-11.7 (Effective from 27<sup>th</sup> October, 2005)** The candidate shall pass the whole M.E. Examination within a period of eight consecutive semesters after registration for getting degree, failing which the registration of the candidate shall stand cancelled.
- OC-11.8 (Effective from 27<sup>th</sup> October, 2005)** No candidate shall be allowed to attend any semester course unless he has satisfactorily kept terms for all the previous semesters.
- OC-11.9 (Effective from 27<sup>th</sup> October, 2005)** No candidate shall be allowed to appear for the dissertation and viva-voce examination unless he has satisfactorily kept terms for the Semester I, II, III, IV and passed fully semester I, II and III examinations.
- OC-11.10 (Effective from 27<sup>th</sup> October, 2005)** A candidate who fails in an examination but secures 50% or more of the marks in any theory paper and term work taken together or a minimum of CC grade separately may at his option be exempted from reappearing for same at a subsequent attempt and shall be declared to have passed the relevant semester examination when he has passed in the remaining heads of passing.
- OC-11.11 (Effective from 27<sup>th</sup> October, 2005)** The markings/grades for those heads of passing for which exemption is claimed shall be carried over to subsequent examinations and shall be considered along with marks/grades of other heads of passing for award of class.
- OC-11.12 (Effective from 27<sup>th</sup> October, 2005)** To be eligible for any award/prize, the candidate shall pass each semester examination in one and the same sitting.
- OC-11.13 (Effective from 27<sup>th</sup> October, 2005)** The M.E. Dissertation Project is aimed at training

the student to analyze independently any problem posed. The project may be purely analytical piece of work or a completely experimental one or a field project or a combination. The project can also involve a sophisticated design work. The project report should show clarity of thought and expression, critical appreciation of the existing literature and analytical and/or experimental or design skill.

**OC-11.14 (Effective from 27<sup>th</sup> October, 2005)** Through the project work, the student is expected to develop the ability to evaluate critically the results obtained, in a project work vis-a-vis the available information.

**OC-11.15 (Effective from 27<sup>th</sup> October, 2005)** The dissertation work shall be submitted in a bound form and it shall be assessed by an internal and external examiner appointed by the University.

Note: The regulations regarding degree course in M.E. Foundation Engineering of Semester I, Semester II, Semester III and Semester IV are given in **Schedule SOC-3.1 to SOC-3.4.**

**(Effective from 27<sup>th</sup> October, 2005)** Ordinance relating to the examination for the Degree of Master of Engineering. M.E. Six Semester Part-Time Course.

**OC-11.16 (Effective from 27<sup>th</sup> October, 2005)** Any person who has taken degree of Bachelor of Engineering of this University or the degree of Bachelor of Engineering of any other University/Institution recognized as equivalent to the Bachelor of Engineering degree of this University in any branch be admitted to the examination for the degree of Master of Engineering in Industrial Engineering.

**OC-11.17 (Effective from 27<sup>th</sup> October, 2005)** The M.E. Degree examination shall consist of paper, term work, seminar / project work, dissertation and viva voce. The entire course shall be grouped in six semesters.

**OC-11.18 (Effective from 27<sup>th</sup> October, 2005)** To pass an examination for the M.E. Degree, a candidate must obtain at least 50 percent of the marks or CC grade obtainable under each head of passing in each theory paper, term work, seminar/project dissertation and viva voce. A candidate who fails to secure a minimum of 50 per cent of the marks or CC grade assigned to the term work shall be required to re-submit fresh term work at his re-appearance at the subsequent examination in the subject.

**OC-11.19 (Effective from 27<sup>th</sup> October, 2005)** Those of the candidates who fail to obtain 50 per cent of the aggregate marks or CC grade for dissertation shall improve and re-submit the dissertation or submit another dissertation in subsequent semesters.

**OC-11.20 (Effective from 27<sup>th</sup> October, 2005)** Those of the successful candidates who have obtained 50% and above but below 60% of aggregate mark or a CGPA of 5.00 or more but less than 6.5 in the six semesters taken together and those who have obtained 60% and above but below 70% of the aggregate marks or a CGPA of 6.5 or more but less than 8.00 in the six semesters taken together and those who have obtained 70% and above of the aggregate marks or a CGPA of 8.00 or more in the six semesters taken together shall be declared to have passed the M.E. Examination in second class, first class and first class with distinction respectively. Grading pattern should follow the scheme given under OC-11.35.

- OC-11.21 (Effective from 27<sup>th</sup> October, 2005)** In order to be eligible for a class, the candidate must appear and pass the first, second, third, fourth and fifth semester examinations in not more than seven consecutive semesters after registration with a provision that each semester examination has to be cleared in not more than two sittings. Further the candidate shall pass the Dissertation and viva voce examination within a period of eight consecutive semesters after registration.
- OC-11.22 (Effective from 27<sup>th</sup> October, 2005)** The candidate shall pass the whole M.E. examination within a period of ten consecutive semesters after registration for getting degree, failing which the registration of the candidate shall stand cancelled.
- OC-11.23 (Effective from 27<sup>th</sup> October, 2005)** No candidate shall be allowed to attend any semester course unless he has satisfactorily kept terms for all the previous semesters.
- OC-11.24 (Effective from 27<sup>th</sup> October, 2005)** No candidate shall be allowed to appear for the dissertation and viva voce examination unless he has satisfactorily kept terms for the semester I, II, III, IV and V examinations.
- OC-11.25 (Effective from 27<sup>th</sup> October, 2005)** A candidate who fails in an examination but secures 50% or more of the marks in any theory paper and term work or a minimum of CC grade separately may, at his option, be exempted from re-appearing for same at a subsequent attempt and shall be declared to have passed the relevant semester examination when he has passed in the remaining heads of passing.
- OC-11.26 (Effective from 27<sup>th</sup> October, 2005)** The markings/grades of those heads of passing for which exemption is claimed will be carried over to subsequent examinations and shall be considered along with marks/grades of other heads of passing for award of class.
- OC-11.27 (Effective from 27<sup>th</sup> October, 2005)** To be eligible for any award/prize, the candidate shall pass each semester examination in one and the same sitting.
- OC-11.28 (Effective from 27<sup>th</sup> October, 2005)** The M.E. Dissertation Project is aimed at training the student to analyze independently any problem posed. The project may be purely analytical piece of work or a completely experimental one or a field project or a combination. The Project can also involve a sophisticated design work. The project report should show clarity of thought and expression, critical appreciation of the existing literature and analytical and/or experimental or design skill.
- OC-11.29 (Effective from 27<sup>th</sup> October, 2005)** Through the project work, the student is expected to develop the ability to evaluate critically the results obtained in a project work vis-a-vis the available information.
- OC-11.30 (Effective from 27<sup>th</sup> October, 2005)** The dissertation work shall be submitted in a bound form and it shall be assessed by an internal and external examiner appointed by the University.

Note: The regulations regarding degree course in M.E. (Industrial Engineering) part time programme for the Semester I, II, III, IV, V, and VI are given in Schedule SOC- 3.5 to SOC – 3.10.

**Ordinance relating to the examination for the Degree of Master of Engineering Four Semesters Full-Time Course in Information Technology**

- OC-11.31** (Effective from 27<sup>th</sup> October, 2005) Any person who has taken degree of Bachelor of Engineering of this University or the degree of Bachelor of Engineering of any other University / Institution recognized as equivalent to the Bachelor of Computer Engineering / Computer Science and Engineering / Electronics & Telecommunication Engineering / Electrical and Electronic Engineering / Information Technology degree of this University be admitted to the examination for the degree of Master of Engineering in Information Technology.
- OC-11.32** (Effective from 27<sup>th</sup> October, 2005) The M.E. degree examination shall consist of papers, internal assessment, orals, seminar, project work, dissertation and viva-voce. The entire course shall be grouped in four semesters.
- OC-11.33** (Effective from 27<sup>th</sup> October, 2005) The maximum marks assigned to a subject head shall be considered to be equivalent to 10 grade points. To pass in a subject head of M.E. degree, a candidate must obtain at least 5 grade points or a minimum of CC grade under each head separately.
- OC-11.34** (Effective from 27<sup>th</sup> October, 2005) Those of the candidates who fail to obtain at least 5 grade points or a minimum of CC grade for dissertation shall improve and re-submit the dissertation or submit another dissertation in subsequent semesters.
- OC-11.35** (Effective from 27<sup>th</sup> October, 2005) Those of the successful candidates who have obtained Cumulative Grade Point Average (CGPA) of 5.0 and above but less than 6.5 in the four semesters taken together and those who have obtained CGPA of 6.5 and above but less than 8 in the four semesters taken together and those who have obtained CGPA of 8 and above in the four semesters taken together shall be declared to have passed the M.E. examination in second class, first class and first class with distinction respectively. Grading scheme for M.E. Course.

Grade	Grade Points	Description of Performance
AO	10	Outstanding
AA	09	Excellent
AB	08	Very Good
BB	07	Good
BC	06	Fair
CC	05	Satisfactory
FF	00	Fail

Semester Grade Point Average (SGPA):

$$\text{SGPA} = \frac{\sum_{i=1}^n \text{c.g.}/}{\sum_{i=1}^n c_i}$$

where

n = total number of courses or part thereof in the semester

c<sub>i</sub> = number of credits attached to the i<sup>th</sup> course

g<sub>i</sub> = grade points earned in that course / part course

Cumulative Grade Point Average (CGPA):

$$\text{CGPA} = \frac{\sum_{i=1}^m C_i G_i}{\sum_{i=1}^m c_i}$$

where

m = total number of semesters

C<sub>i</sub> = total number of credits in the i<sup>th</sup> semester

G<sub>i</sub> = SGPA in the i<sup>th</sup> semester

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Final classification :- (to be awarded only after the candidate passes all courses of the programme)

1. Distinction: CGPA of 8.00 or above secured in stipulated time.
2. First Class: CGPA of 6.5 or more, but less than 8.00, secured in stipulated time.
3. Second class: CGPA of 5.00 or more, but less than 6.50, secured in stipulated time.
4. Passes: If the candidate takes more time than stipulated to pass with a class.

- OC-11.36 (Effective from 27<sup>th</sup> October, 2005)** In order to be eligible for a class, the candidate must appear and pass the first, second and third semester examination in not more than five consecutive semesters after registration with a provision that each semester examination has to be cleared in not more than two sittings. Further, the candidate shall pass the dissertation and viva voce examination within a period of six consecutive semesters after registration.
- OC-11.37 (Effective from 27<sup>th</sup> October, 2005)** The candidate shall pass the whole M.E. examination within a period of eight consecutive semesters after registration for getting degree, failing which the registration of the candidate shall stand cancelled.
- OC-11.38 (Effective from 27<sup>th</sup> October, 2005)** No candidate shall be allowed to attend any semester course unless he/she has satisfactorily kept terms for all the previous semesters.
- OC-11.39 (Effective from 27<sup>th</sup> October, 2005)** To be eligible for any award/prize, the candidate shall pass each semester examination in one and the same sitting.
- OC-11.40 (Effective from 27<sup>th</sup> October, 2005)** No candidate shall be allowed to appear for the viva voce examination of the dissertation / project unless he / she has satisfactorily kept terms for the semesters I, II, III and IV and passed fully semester I, II and III examination.
- OC-11.41 (Effective from 27<sup>th</sup> October, 2005)** A candidate who fails in an examination but secures at least 5 grade points or a minimum of CC grade or more in any subject head may at his / her option be exempted from re-appearing for the same at a subsequent

attempt and shall be declared to have passed the relevant semester examination when he / she has passed in the remaining subject heads.

**OC-11.42 (Effective from 27<sup>th</sup> October, 2005)** The grade points for those subject heads for which exemption is claimed shall be carried over to subsequent examinations and shall be considered along with grade points of other subject heads for award of class.

**OC-11.43 (Effective from 27<sup>th</sup> October, 2005)** The M.E. dissertation project is aimed at training the student to analyze independently any problem posed. The project may be a purely analytical piece of work or a completely experimental one or a field project or a combination. The project can also involve a sophisticated design work. The project report should show clarity of thought and expression, critical appreciation of existing literature and analytical and / or experimental or design skill.

**OC-11.44 (Effective from 27<sup>th</sup> October, 2005)** Through the project work, the student is expected to develop the ability to evaluate critically the results obtained in a project work vis-à-vis the available information.

**OC-11.45 (Effective from 27<sup>th</sup> October, 2005)** The dissertation work shall be submitted in a bound form and it shall be assessed by an internal and external examiner appointed by the University.

Note: The regulations regarding the degree course of Master of Engineering in Information Technology is given in Schedule SOC 3.11 to 3.14.

**OC-11A ORDINANCE GOVERNING THE FULL TIME AND PART TIME PROGRAMMES LEADING TO THE DEGREE OF MASTER OF ENGINEERING** (with effect from the academic year 2013-14).

**OC-11A GENERAL**

**OC-11A.1 Objectives:**

M.E. programmes are designed to impart higher level of technical education in the specialised areas of engineering and their applications.

**OC-11A.2 Duration of Programme:**

(i) The full time Programme shall be of 2 years duration, each academic year consisting of two semesters. The duration of each semester shall be of 18 weeks of instruction/learning, consisting of 90 instructional days or as indicated by AICTE from time to time.

(ii) The part time programme shall be of 3 years duration, each academic year consisting of two semesters. The duration of each semester shall be of 18 weeks (90 instructional days) or as indicated by AICTE from time to time.

**OC-11A.3 Degree to be awarded:**

Master of Engineering (M.E.) in respective specialization.

**OC-11A.4 Eligibility for Admission:**

(i) Any person with a degree of Bachelor of Engineering of minimum 4 years duration of Goa University or of any other University/Institution recognized as equivalent to the

Bachelor of Engineering degree of Goa University (including AMIE, AMICE and IETE) shall be eligible for admission, as per the table below in the appropriate/corresponding stream:

<b>Sr. No.</b>	<b>Master Engineering degree of</b>	<b>Qualifying Bachelor of Engineering degree</b>
01	Foundation Engineering	Civil Engineering
02	Information Technology	Computer Engineering/Computer Science & Engineering/Electronic & Telecommunication Engineering/ Electrical & Electronic Engineering/ Information Technology
03	Electronics & Telecommunication (Microelectronics)	Electronics & Telecommunication Engineering / Electronics & Communication Engineering/ Electronic Communication/Electronic Engineering /Electrical Engineering / Electrical & Electronics Engineering / Information Technology/ Computer Engineering /Computer Science & Engineering/ Instrumentation Engineering / Electronic Instrumentation/ Instrumentation & Control/Bio-medical Electronics/ Process Control Engineering / Instrumentation & Control Engineering/Control Engineering/ Industrial Electronics/ Power Electronics /Biomedical Engineering
04	Electronics & Telecommunication (Electronic Communication & Instrumentation)	Electronics & Telecommunication Engineering / Electronics & Communication Engineering/ Electronic Communication/Electronic Engineering /Electrical Engineering / Electrical & Electronics Engineering / Information Technology/ Computer Engineering /Computer Science & Engineering/ Instrumentation Engineering / Electronic Instrumentation/ Instrumentation & Control/Bio-medical Electronics/ Process Control Engineering / Instrumentation & Control Engineering/Control Engineering/ Industrial Electronics/ Power Electronics /Biomedical Engineering
05	Power & Energy Engineering	Electrical Engineering / Electrical & Electronics Engineering / Electronics & Telecommunication Engineering / Electronics & Communication Engineering/ Electronic Communication Engineering /Electronic Engineering / Instrumentation & Control Engineering/Control Engineering/ Instrumentation Engineering / Bio-medical Electronics/ Process Control/ Industrial Electronics/ Power Electronics/Power System Engineering / Power Engineering
06	Computer Science & Engineering	Computer Engineering/Computer Science & Engineering/Electronic & Telecommunication Engineering/ Electrical & Electronic Engineering/ Information Technology/Information Science & Engineering
07	Industrial Engineering	Any stream of Engineering
08	Any other PG programmes to be introduced subsequently	Qualifications as prescribed by the concerned Board of Studies and approved by the Academic Council.

- (ii) Candidates having any of the qualifying degrees from other than Goa University, shall be provisionally admitted to the respective ME programme, subject to submission of a Provisional Eligibility Certificate issued by Goa University.
- (iii) Candidates having any other degree not specified in the above list shall apply for issue of Provisional Eligibility Certificate to the University. Such cases shall be decided by a Committee comprising of the Registrar along with the Dean of the concerned faculty and Chairperson(s) of the Board(s) of Studies of the concerned subjects and issued by Goa University. Such candidate(s) shall be provisionally admitted to the respective ME programme, subject to submission of Provisional Eligibility Certificate.

### **OC-11A.5 COURSE STRUCTURE**

- (i) The number of theory papers and practicals for the Master of Engineering programme shall be as specified in the Scheme of Teaching and Examination for relevant programmes as given at Annexure 'A'.
- (ii) Contact hours for each paper shall be as specified in the Scheme of Teaching and Examination for relevant programmes as given at Annexure 'A'
- (iii) A student shall be eligible for the award of M.E. Degree in respective specialisation on successful completion of minimum number of credits specified in the scheme of teaching and examination for relevant programmes as given in Annexure A.
- (iv) One (1) Credit (Theory) shall be equivalent to 15 clock hours of contact teaching and One (1) Credit (Practicals) shall be equivalent to 30 clock hours of contact teaching.

### **OC-11A.6 SCHEME OF EXAMINATION**

There shall be a University examination (Regular and/or Repeat) at the end of each semester. The duration of the University examination for each paper shall be as specified in the Scheme of Teaching and Examination for relevant programmes as given at Annexure 'A'.

- (i) **Total Marks assigned to the Paper/Practical**  
The M.E. degree examination shall consist of Papers (theory), Laboratory, Seminar, Project and Dissertation as provided in the respective schemes. The papers (theory) shall have internal assessment and orals, as applicable. Laboratory shall have internal assessment, practicals and orals as applicable. Seminar, Project and Dissertation shall have internal assessment and orals. Internal assessment shall include presentation, demonstration, viva-voce and defence.  
All Theory papers shall be of 100 marks each and Oral/Practical heads shall be of 50 marks each. Weightage of marks in terms of internal assessment and semester end examinations is provided in Scheme of Teaching and Examination for relevant programmes as given at Annexure 'A' by way of breakup of credits.
- (ii) **Pattern of Evaluation**  
The maximum marks assigned to a Head of Passing in a subject Head shall be considered to be equivalent to 10 grade points. To pass in a subject Head a candidate



must obtain at least 5 grade points or a minimum of CC grade under each Head of Passing separately, as applicable for the subject Head.

**(ii) Dissertation & Project:**

- (a) All candidates who are eligible to undertake the course work under the subject Head "Dissertation" in semester IV (for full time programmes) and semester VI (for part time programmes) shall register with the department for such "Dissertation" by paying tuition fees for the semester. At the end of the semester if the "Dissertation" is found to be satisfactory and acceptable the Guide/Supervisor should issue a Dissertation Approval Sheet (Proforma enclosed at Annexure B). Those candidates who fail to obtain Dissertation Approval Sheet shall improve and re-submit the dissertation or submit another dissertation in subsequent semesters. The examination form for semester IV (for full time programmes) and semester VI (for part time programmes) submitted in respect of such candidates to the university shall be treated as null and void and examination fees forfeited.
- (b) The 'Project' may be purely an analytical piece of work or a completely experimental one or a field project or a design work or a combination of these. The Project work undertaken in semester III (for full time programmes) and semester V (for part time programmes) shall be continued with in semester IV (for full time programmes) and semester VI (for part time programmes).
- (c) The 'Dissertation' shall be submitted on the 'Project', undertaken in semester III and IV (for full time programmes) and Semester V and VI (for part time programmes). The dissertation shall be assessed by a panel of two examiners appointed by the University, consisting of the Guide (Internal Examiner cum Convenor) and External Examiner.
- (d) No candidate shall be allowed to appear for the examination of the "Dissertation" unless (i) he/she has satisfactorily kept terms for the semesters I, II, III and IV and passed fully semester I and II Examinations (for full time programmes) and has satisfactorily kept terms for semesters I, II, III, IV, V and VI and passed fully semesters I, II, III and IV Examinations (for part time programmes) and (ii) shall have at least one Conference presentation or publication (co-authored paper/publication included) or acceptance letter for such publication in the relevant area of the "Dissertation", to be duly certified by the guide in the Dissertation Approval sheet.
- (e) Those of the candidates who fail to obtain at least 5 grade points or a minimum of CC grade for dissertation shall improve and re-submit the dissertation or submit another dissertation in subsequent semesters.

**(iii) Grading scheme for M.E. programme:**

- 1) The grades to be awarded are: AO, AA, AB, BB, BC, CC and FF.
- 2) The examiner shall decide, depending on his/her perception about the degree of difficulty in the question paper, the minimum marks of  $(95 \pm 5)\%$ , for which he/she will award the highest grade AO.

- 3) The minimum pass grade CC is to be awarded for minimum marks of  $(45 \pm 5)\%$ , depending on the perception of the examiner about the degree of difficulty in the question paper.
- 4) The range and the percentage marks between the above two boundaries is to be split equally for the grades CC, BC, BB, AB and AA.
- 5) All candidates getting less marks than minimum fixed for CC grade, are to be given FF grade.
- 6) In the cases of Heads of Passing, namely, Internal Assessment, Orals and Practicals, the Examiners shall appropriately decide upon the cut-offs for CC and AO grade, depending on the extent, depth and range of questions, tests, experiments, assignments, seminars and tutorials involved.
- 7) The inter-relationship between the 'Grade' and 'Grade Points' is as follows:

Grade	Grade Points	Description of Performance
AO	10	Outstanding
AA	09	Excellent
AB	08	Very Good
BB	07	Good
BC	06	Fair
CC	05	Satisfactory
FF	00	Fail

**(iv) Grant of Term & Eligibility to appear for Examinations:**

- (a) No candidate shall be allowed to keep terms for any higher semester unless he/she has been granted terms for all the lower semester(s).
- (b) A candidate is considered to have successfully fulfilled the requirement of a semester and will be eligible for grant of term provided he/she has:
  - (i) In each subject, a minimum attendance of 75% of the total classes engaged in theory, tutorial and practical, separately, for that semester, &
  - (ii) Secured minimum CC grade in the Head 'Internal Assessment', in each and every subject Head of that semester.
- (c) The Internal Assessment will be based on one or more of the following forms assessments such as written test, practical, assignment, seminar and tutorial, as relevant to the subject. There shall be at least three (3) assessments and average of best two (2) shall be the final result of the Internal Assessment
- (d) A candidate who fails to fulfil the above requirements shall not be granted the term and shall not be eligible to appear for the university examination of that semester and will have to repeat the term for that semester afresh.

**(v) Exemption Provision:**

- (a) A candidate shall be declared to have passed a semester examination \ when he / she obtains minimum CC grade in all the heads of passing, separately, in all subjects.

- (b) A candidate who fails in a semester examination but secures at least 5 grade points or minimum of CC grade in any subject head may, at his/her option, be exempted from re-appearing for the same subject at subsequent attempt/s.
- (c) The grade points for those subject heads for which exemption is claimed shall be carried over to subsequent examinations and shall be considered along with grade points of other subject heads for award of class.

**(vi) Minimum requirements for Passing and Grading:**

- (a) Those of the successful candidates who have obtained in the four semesters taken together Cumulative Grade Point Average (CGPA) of 5.0 and above but less than 6.5 and those who have obtained CGPA of 6.5 and above but less than 8.0 and those who have obtained CGPA of 8.0 and above shall be declared to have passed the M.E. examination in second class, first class, and first class with distinction, respectively.

- (b) On successful completion of a semester, Semester Grade Point Average (SGPA) shall be calculated as follows:

$$SGPA = \frac{\sum_{i=1}^n c_i \cdot g_i}{\sum_{i=1}^n c_i}$$

where

n = total number of courses or part thereof in the semester

c<sub>i</sub> = number of credits attached to the i<sup>th</sup> course

g<sub>i</sub> = grade points earned in that course / part course

- (c) Those of the successful candidates who have obtained in the four semesters taken together Cumulative Grade Point Average (CGPA) of 5.0 and above shall be declared to have passed the M.E. examination.

Cumulative Grade Point Average (CGPA) shall be calculated as follows:

$$CGPA = \frac{\sum_{i=1}^m C_i \cdot G_i}{\sum_{i=1}^m C_i}$$

where

m = total number of semesters

C<sub>i</sub> = total number of credits in the i<sup>th</sup> semester

G<sub>i</sub> = SGPA in the i<sup>th</sup> semester

**(vii) Award of Degree:**

- (a) A candidate shall pass the M.E. examination (all 4 semesters for full time programmes or all 6 semesters for part time programmes) within a period of eight (for full time programmes) or twelve (for part time programmes) consecutive semesters after admission, failing which the admission of the candidate shall stand cancelled.

- (b) In order to be eligible for award of class for M.E. degree:

- (i) Full time programme:

A candidate must appear and pass the first, second and third semester examinations in not more than five consecutive semesters after his/her registration for the ME programme, provided he passes each semester examination in not more than two attempts. The candidate shall pass the "Dissertation" subject head within a period of six consecutive semesters after registration for the ME programme.

(ii) **Part time programme:**

A candidate must appear and pass the first, second, third, fourth and fifth semester examinations in not more than seven consecutive semesters after his/her registration, provided he passes each semester examination in not more than two attempts. The candidate shall pass the "Dissertation" subject head within a period of eight consecutive semesters after registration for the ME programme.

(viii) **Award of Class:-** The following remark shall be mentioned in the grade sheet of the candidate subject to their eligibility.

1. **First Class with Distinction:** CGPA of 8.00 or above secured in the stipulated time.
2. **First Class:** CGPA of 6.5 or more, but less than 8.00, secured in stipulated time.
3. **Second class:** CGPA of 5.00 or more, but less than 6.50, secured in stipulated time.
4. **Passes:** If the candidate takes more time than stipulated to pass with a Class.
5. **Fails:** CGPA of less than 5.00

(ix) **Improvement of Result:**

Improvement of results after the completion of the programme:

A candidate shall be permitted to improve upon his/her results in the ME degree programme, subject to the following conditions:

- a) The candidate has to pass the ME degree examination.
- b) The candidate shall have only one additional opportunity.
- c) The candidate shall appear for improvement examination within two years of the declaration of his/her final ME results.
- d) The candidate shall be allowed to improve the results only in the head 'Theory' of the subject heads.
- e) The candidate shall have to appear in all subjects with 'Theory' head, of all semesters taken together, in one and the same sitting.
- f) The provision regarding the carrying forward of grades is as follows:
  - i) The grades secured in all heads other than 'Theory' head shall necessarily be carried over.
  - ii) In case the candidate fails to improve upon the CGPA, the grades obtained in earlier examinations shall be retained.
- g) In case the candidate improves upon the CGPA, the grades scored in the head –Theory in all the subject heads, in all the previous examinations, shall be deemed null and void, and shall be replaced by the new grades.

**Annexure-'A'**

**I. Scheme of Teaching and Examination for Master of Engineering in Foundation Engineering Two years Full time Programme**

<b>Semester-I</b>										
<b>Subject Code</b>	<b>Subject</b>	<b>Hours per week</b>			<b>Scheme of Examination</b>					
		<b>L</b>	<b>T</b>	<b>P</b>	<b>Theory (Hrs)</b>	<b>Credits</b>				
						<b>Theory</b>	<b>IA</b>	<b>Practical</b>	<b>Oral</b>	<b>Total</b>
<b>MFE 1.1</b>	Paper 1 (Theory)	4	-	-	3	4	2	-	-	6
<b>MFE 1.2</b>	Paper 2 (Theory)	4	-	-	3	4	2	-	-	6
<b>MFE 1.3</b>	Paper 3 (Theory)	4	-	-	3	4	2	-	-	6
<b>MFE 1.4</b>	Paper 4 (Theory)	4	-	-	3	4	2	-	-	6
<b>MFE 1.5</b>	Paper 5 (Elective I)	4	--	-	3	4	2	-	-	6
<b>MFE 1.6</b>	Laboratory 1	---	---	8	--	---	2	-	2	4
	<b>Total</b>	<b>20</b>	<b>-</b>	<b>8</b>		<b>20</b>	<b>12</b>	<b>-</b>	<b>2</b>	<b>34</b>

<b>Semester-II</b>										
<b>Subject Code</b>	<b>Subject</b>	<b>Hours per week</b>			<b>Scheme of Examination</b>					
		<b>L</b>	<b>T</b>	<b>P</b>	<b>Theory (Hrs)</b>	<b>Credits</b>				
						<b>Theory</b>	<b>IA</b>	<b>Practical</b>	<b>Oral</b>	<b>Total</b>
<b>MFE 2.1</b>	Paper 6 (Theory)	4	-	-	3	4	2	-	-	6
<b>MFE 2.2</b>	Paper 7 (Theory)	4	-	-	3	4	2	-	-	6
<b>MFE 2.3</b>	Paper 8 (Theory)	4	-	-	3	4	2	-	-	6
<b>MFE 2.4</b>	Paper 9 (Theory)	4	-	-	3	4	2	-	-	6
<b>MFE 2.5</b>	Paper 10 (Elective II)	4	--	-	3	4	2	-	-	6
<b>MFE 2.6</b>	Laboratory 2	---	---	8	--	---	2	-	2	4
	<b>Total</b>	<b>20</b>	<b>-</b>	<b>8</b>		<b>20</b>	<b>12</b>	<b>-</b>	<b>2</b>	<b>34</b>

<b>Semester-III</b>										
<b>Subject Code</b>	<b>Subject</b>	<b>Hours per week</b>			<b>Scheme of Examination</b>					
		<b>L</b>	<b>T</b>	<b>P</b>	<b>Theory (Hrs)</b>	<b>Credits</b>				
						<b>Theory</b>	<b>IA</b>	<b>Practical</b>	<b>Oral</b>	<b>Total</b>

		L	T	P	Theory (Hrs)	Credits				
						Theory	IA	Practical	Oral	Total
<b>MFE 3.1</b>	Paper 11(Elective III)	4	-	-	3	4	2	-	-	6
<b>MFE 3.2</b>	Project	-	-	8	-	-	2	-	2	4
<b>MFE 3.3</b>	Laboratory 3	---	---	8	--	----	2	-	2	4
<b>MFE 3.4</b>	Seminar	---	---	8	--	----	2	-	2	4
	<b>Total</b>	4	-	<b>24</b>		<b>4</b>	<b>8</b>	-	<b>6</b>	<b>18</b>

Semester-IV										
Subject Code	Subject	Hours per week			Theory (Hrs)	Scheme of Examination				
		L	T	P		Theory	IA	Practical	Oral	Total
<b>MFE 4.1</b>	Dissertation	---	----	28	--	--	8	-	12	20
	<b>Total</b>	-	-	<b>28</b>	-	-	<b>8</b>	-	<b>12</b>	<b>20</b>

Summary for all four semesters										
Semester	Total Hours per Week			Theory Hrs	Scheme of Examination					
	L	T	P		Theory	IA	Practical	Orals	Total	
Semester 1	<b>20</b>	-	<b>8</b>		<b>20</b>	<b>12</b>	-	<b>2</b>	<b>34</b>	
Semester 2	<b>20</b>	-	<b>8</b>		<b>20</b>	<b>12</b>	-	<b>2</b>	<b>34</b>	
Semester 3	4	-	<b>24</b>		<b>4</b>	<b>8</b>	-	<b>6</b>	<b>18</b>	
Semester 4	-	-	<b>28</b>	-	-	<b>8</b>	-	<b>12</b>	<b>20</b>	
Total	44		68	-	44	40	-	22	106	

### Annexure-'A'

#### II. Scheme of Teaching and Examination for Master of Engineering in Electronics & Telecommunication Engineering (Microelectronics) Two years Full time Programme

Semester I										
Subject Code	Subject	Hours per Week			Scheme of Examination					
		L	T	P	Theory hrs	Credits				
						Theory	IA	Practical	Orals	Total
MEM1.1	Paper 1 Theory	4	-	-	3	4	2	-	-	6
MEM1.2	Paper 2 Theory	4	-	-	3	4	2	-	-	6
MEM1.3	Paper 3 Theory	4	-	-	3	4	2	-	-	6
MEM1.4	Paper 4 Theory	4	-	-	3	4	2	-	-	6
MEM1.5	Paper 5 Theory	4	-	-	3	4	2	-	-	6
MEM1.6	Paper 6 Laboratory 1	-	-	7	-	-	2	2	-	3
MEM1.7	Paper 7 Laboratory 2	-	-	7	-	-	2	2	-	3
	<b>Total</b>	<b>20</b>	<b>-</b>	<b>14</b>	<b>-</b>	<b>20</b>	<b>14</b>	<b>4</b>	<b>-</b>	<b>38</b>

Semester II										
Subject Code	Subject	Hours per Week			Scheme of Examination					
		L	T	P	Theory hrs	Credits				
						Theory	IA	Practical	Orals	Total
MEM2.1	Paper 8 Theory	4	-	-	3	4	2	-	-	6
MEM2.2	Paper 9 Theory	4	-	-	3	4	2	-	-	6
MEM2.3	Paper 10 Theory	4	-	-	3	4	2	-	-	6
MEM2.4	Paper 11 Theory	4	-	-	3	4	2	-	-	6
MEM2.5	Paper 12 Theory	4	-	-	3	4	2	-	-	6
MEM2.6	Paper 13 Laboratory 3	-	-	7	-	-	2	2	-	3
MEM2.7	Paper 14 Laboratory 4	-	-	7	-	-	2	2	-	3
	<b>Total</b>	<b>20</b>	<b>-</b>	<b>14</b>	<b>-</b>	<b>20</b>	<b>14</b>	<b>4</b>	<b>-</b>	<b>38</b>

Semester III										
Subject Code	Subject	Hours per Week			Scheme of Examination					
		L	T	P	Theory hrs	Credits				
						Theory	IA	Practical	Orals	Total
MEM3.1	Paper 15 Elective 1	4	-	-	3	4	2	-	-	6
MEM3.2	Paper 16 Elective 2	4	-	-	3	4	2	-	-	6
MEM3.3	Project	-	-	20	-	-	4	-	8	12
	<b>Total</b>	<b>8</b>	<b>-</b>	<b>20</b>	<b>-</b>	<b>8</b>	<b>8</b>	<b>-</b>	<b>8</b>	<b>24</b>

Semester IV										
Subject Code	Subject	Hours per Week			Scheme of Examination					
		L	T	P	Theory hrs	Credits				
						Theory	IA	Practical	Orals	Total
MEM4.1	Dissertation	-	-	28	-	-	6	-	14	20
	Total	-	-	28	-	-	6	-	14	20

Summary for all four semesters										
Semester	Total Hours per Week			Scheme of Examination						
	L	T	P	Theory hrs	Total Credits for Semester					
					Theory	IA	Practical	Orals	Total	
Semester 1	20	-	14	-	20	12	4	-	38	
Semester 2	20	-	14	-	20	12	4	-	38	
Semester 3	8	-	20	-	8	8	-	8	24	
Semester 4	-	-	28	-	-	6	-	14	20	
Total	48		76	-	48	38	8	22	120	



### Annexure-'A'

#### III. Scheme of Teaching and Examination for Master of Engineering in **ELECTRONICS & TELECOMMUNICATION (ELECTRONIC COMMUNICATION AND INSTRUMENTATION)** Two years Full time Programme

Semester I										
Subject Code	Subject	Hours per Week			Scheme of Examination					
		L	T	P	Theory hrs	Credits				
						Theory	IA	Practical	Orals	Total
MEECI1.1	Paper 1 Theory	4	-	-	3	4	2	-	-	6
MEECI1.2	Paper 2 Theory	4	-	-	3	4	2	-	-	6
MEECI1.3	Paper 3 Theory	4	-	-	3	4	2	-	-	6
MEECI1.4	Paper 4 Theory	4	-	-	3	4	2	-	-	6
MEECI1.5	Paper 5 Theory	4	-	-	3	4	2	-	-	6
MEECI1.6	Paper 6 Laboratory 1	-	-	7	-	-	2	2	-	4
MEECI1.7	Paper 7 Laboratory 2	-	-	7	-	-	2	2	-	4
	<b>Total</b>	<b>20</b>	<b>-</b>	<b>14</b>	<b>-</b>	<b>20</b>	<b>12</b>	<b>4</b>	<b>-</b>	<b>38</b>

Semester II										
Subject Code	Subject	Hours per Week			Scheme of Examination					
		L	T	P	Theory hrs	Credits				
						Theory	IA	Practical	Orals	Total
MEECI2.1	Paper 8 Theory	4	-	-	3	4	2	-	-	6
MEECI2.2	Paper 9 Theory	4	-	-	3	4	2	-	-	6
MEECI2.3	Paper 10 Theory	4	-	-	3	4	2	-	-	6
MEECI2.4	Paper 11 Theory	4	-	-	3	4	2	-	-	6
MEECI2.5	Paper 12 Theory	4	-	-	3	4	2	-	-	6
MEECI2.6	Paper 13 Laboratory 3	-	-	7	-	-	2	2	-	4
MEECI2.7	Paper 14 Laboratory 4	-	-	7	-	-	2	2	-	4
	<b>Total</b>	<b>20</b>	<b>-</b>	<b>14</b>	<b>-</b>	<b>20</b>	<b>12</b>	<b>4</b>	<b>-</b>	<b>38</b>

Semester III										
Subject Code	Subject	Hours per Week			Scheme of Examination					
		L	T	P	Theory hrs	Credits				
						Theory	IA	Practical	Orals	Total
MEECI3.1	Paper 15 Elective 1	4	-	-	3	4	2	-	-	6
MEECI3.2	Paper 16 Elective 2	4	-	-	3	4	2	-	-	6
MEECI3.3	Project	-	-	20	-	-	4	-	8	12
	Total	8	-	20	-	8	8	-	8	24

Semester IV										
Subject Code	Subject	Hours per Week			Scheme of Examination					
		L	T	P	Theory hrs	Credits				
						Theory	IA	Practical	Orals	Total
MEECI4.1	Dissertation	-	-	28	-	-	6	-	14	20
	Total	-	-	28	-	-	6	-	14	20

Summary for all four semesters										
Semester	Total Hours per Week			Scheme of Examination						
	L	T	P	Theory hrs	Total Credits for Semester					
					Theory	IA	Practical	Orals	Total	
Semester 1	20	-	14	-	20	12	4	-	38	
Semester 2	20	-	14	-	20	12	4	-	38	
Semester 3	8	-	20	-	8	8	-	8	24	
Semester 4	-	-	28	-	-	6	-	14	20	
Total	48		76	-	48	38	8	22	120	

### Annexure-'A'

#### IV. Scheme of Teaching and Examination for Master of Engineering (Power and Energy System Engineering) Two years Full time Programme

Semester-I										
Subject Code	Subject	Hours week per			Scheme of Examination					
		L	T	P	Theory (Hrs)	Credits				
						Theory	IA	Practical	Oral	Total
MPE 1.1	Paper 1 (Theory)	4	-	-	3	4	2	-	-	6
MPE 1.2	Paper 2 (Theory)	4	-	-	3	4	2	-	-	6
MPE 1.3	Paper 3 (Theory)	4	-	-	3	4	2	-	-	6
MPE 1.4	Paper 4(Elective-I)	4	-	-	3	4	2	-	-	6
MPE 1.5	Paper 5(Elective -II)	4	-	-	3	4	2	-	-	6
MPE 1.6	Laboratory 1	-	-	8	-	---	2	4	-	6
	<b>Total</b>	<b>20</b>	<b>-</b>	<b>8</b>	<b>-</b>	<b>20</b>	<b>12</b>	<b>4</b>	<b>-</b>	<b>36</b>

Semester-II										
Subject Code	Subject	Hours week per			Scheme of Examination					
		L	T	P	Theory (Hrs)	Credits				
						Theory	IA	Practical	Oral	Total
MPE 2.1	Paper 6 (Theory)	4	-	-	3	4	2	-	-	6
MPE 2.2	Paper 7 (Theory)	4	-	-	3	4	2	-	-	6
MPE 2.3	Paper 8(Theory)	4	-	-	3	4	2	-	-	6
MPE 2.4	Paper 9(Elective-III)	4	-	-	3	4	2	-	-	6
MPE 2.5	Paper 10(Elective-IV)	4	-	-	3	4	2	-	-	6
MPE 2.6	Laboratory 2	-	-	8	-	---	2	4	-	6
	<b>Total</b>	<b>20</b>	<b>-</b>	<b>8</b>	<b>-</b>	<b>20</b>	<b>12</b>	<b>4</b>	<b>-</b>	<b>36</b>

Semester-III										
Subject Code	Subject	Hours per week			Scheme of Examination					
		L	T	P	Theory (Hrs)	Credits				
						Theory	IA	Practical	Oral	Total
<b>MPE 3.1</b>	Paper 11 (Theory)	4	-	-	3	4	2	-	--	6
<b>MPE 3.2</b>	Paper 12(Elective-V)	4	-	-	3	4	2	-	--	6
<b>MPE 3.3</b>	Project	-	-	12	--	--	4	-	4	8
<b>MPE 3.4</b>	Seminar	-	-	8	--	----	2	-	2	4
	<b>Total</b>	<b>8</b>	<b>-</b>	<b>20</b>		<b>8</b>	<b>10</b>	<b>-</b>	<b>6</b>	<b>24</b>

Semester-IV										
Subject Code	Subject	Hours per week			Scheme of Examination					
		L	T	P	Theory (Hrs)	Credits				
						Theory	IA	Practical	Oral	Total
<b>MPE 4.1</b>	Dissertation	---	----	28	--	-	8	-	12	20
	<b>Total</b>	<b>-</b>	<b>-</b>	<b>28</b>	<b>-</b>	<b>-</b>	<b>8</b>	<b>-</b>	<b>12</b>	<b>20</b>

Summary for all four semesters										
Semester	Total Hours per Week				Scheme of Examination					
	L	T	P	Theory hrs	Total Credits for Semester					
					Theory	IA	Practical	Orals	Total	
Semester 1	<b>20</b>	-	<b>8</b>	-	<b>20</b>	<b>12</b>	<b>4</b>	-	<b>36</b>	
Semester 2	<b>20</b>	-	<b>8</b>	-	<b>20</b>	<b>12</b>	<b>4</b>	-	<b>36</b>	
Semester 3	8	-	<b>20</b>		<b>8</b>	<b>10</b>	-	<b>6</b>	<b>24</b>	
Semester 4	-	-	<b>28</b>	-	-	<b>8</b>	-	<b>12</b>	<b>20</b>	
Total	48		64	-	48	42	8	18	116	

**Annexure-'A'**

**V. Scheme of Teaching and Examination for Master of Engineering in Information Technology Two years Full time Programme**

<b>Semester-I</b>										
<b>Subject Code</b>	<b>Subject</b>	<b>Hours per week</b>			<b>Scheme of Examination</b>					
		<b>L</b>	<b>T</b>	<b>P</b>	<b>Theory (Hrs)</b>	<b>Credits</b>				
<b>Theory Credits</b>	<b>IA</b>					<b>Practical</b>	<b>Oral</b>	<b>Total</b>		
<b>MIT 1.1</b>	<b>Paper 1</b>	<b>4</b>	<b>-</b>	<b>-</b>	<b>3</b>	<b>4</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>6</b>
<b>MIT 1.2</b>	<b>Paper 2</b>	<b>4</b>	<b>-</b>	<b>-</b>	<b>3</b>	<b>4</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>6</b>
<b>MIT 1.3</b>	<b>Paper 3</b>	<b>4</b>	<b>-</b>	<b>3</b>	<b>3</b>	<b>4</b>	<b>3</b>	<b>-</b>	<b>-</b>	<b>7</b>
<b>MIT 1.4</b>	<b>Paper 4</b>	<b>4</b>	<b>-</b>	<b>3</b>	<b>3</b>	<b>4</b>	<b>3</b>	<b>-</b>	<b>-</b>	<b>7</b>
<b>MIT 1.5</b>	<b>Paper 5</b>	<b>4</b>	<b>-</b>	<b>3</b>	<b>3</b>	<b>4</b>	<b>3</b>	<b>-</b>	<b>-</b>	<b>7</b>
	<b>Total</b>	<b>20</b>	<b>-</b>	<b>9</b>		<b>20</b>	<b>13</b>	<b>-</b>	<b>-</b>	<b>33</b>

<b>Semester-II</b>										
<b>Subject Code</b>	<b>Subject</b>	<b>Hours per week</b>			<b>Scheme of Examination</b>					
		<b>L</b>	<b>T</b>	<b>P</b>	<b>Theory (Hrs)</b>	<b>Credits</b>				
<b>Theory</b>	<b>IA</b>					<b>Practical</b>	<b>Oral</b>	<b>Total</b>		
<b>MIT 2.1</b>	<b>Paper 6</b>	<b>4</b>	<b>-</b>	<b>3</b>	<b>3</b>	<b>4</b>	<b>3</b>	<b>-</b>	<b>-</b>	<b>7</b>
<b>MIT 2.2</b>	<b>Paper 7</b>	<b>4</b>	<b>-</b>	<b>3</b>	<b>3</b>	<b>4</b>	<b>3</b>	<b>-</b>	<b>-</b>	<b>7</b>
<b>MIT 2.3</b>	<b>Paper 8</b>	<b>4</b>	<b>-</b>	<b>3</b>	<b>3</b>	<b>4</b>	<b>3</b>	<b>-</b>	<b>-</b>	<b>7</b>
<b>MIT 2.4</b>	<b>Paper 9</b>	<b>4</b>	<b>-</b>	<b>3</b>	<b>3</b>	<b>4</b>	<b>3</b>	<b>-</b>	<b>-</b>	<b>7</b>
<b>MIT 2.5</b>	<b>Paper 10 (Elective I)</b>	<b>4</b>	<b>-</b>	<b>-</b>	<b>3</b>	<b>4</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>6</b>
	<b>Total</b>	<b>20</b>	<b>-</b>	<b>12</b>		<b>20</b>	<b>14</b>	<b>-</b>	<b>-</b>	<b>34</b>

Semester-III										
Subject Code	Subject	Hours per week			Scheme of Examination					
		L	T	P	Theory Exam (Hrs)	Credits				
						Theory	IA	Practical	Oral	Total
MIT 3.1	Paper 11	4	--	3	3	4	3	-	--	7
MIT 3.2	Paper 12	4	--	3	3	4	3	-	--	7
MIT 3.3	Paper 13(Elective-II)	4	--	3	3	4	3	-	--	7
MIT 3.4	Project	--	--	12	--	-	3	-	2	5
	<b>Total</b>	<b>12</b>	<b>--</b>	<b>21</b>		<b>12</b>	<b>12</b>	<b>-</b>	<b>2</b>	<b>26</b>

Semester-IV										
Subject Code	Subject	Hours per week			Scheme of Examination					
		L	T	P	Theory Exam (Hrs)	Credits				
						Theory	IA	Practical	Oral	Total
MIT 4.1	Paper 14	4	-	3	3	4	3	-	-	7
MIT 4.2	Dissertation	---	----	26	--	--	6	-	9	15
	<b>Total</b>	<b>4</b>		<b>29</b>		<b>4</b>	<b>9</b>	<b>-</b>	<b>9</b>	<b>22</b>

Summary for all four semesters										
Semester	Total Hours per week			Scheme of Examination						
	L	T	P	Theory Exam (Hrs)	Total Credits For Semester					
					Theory	IA	Practical	Oral	Total	
<b>Sem 1</b>	<b>20</b>	<b>-</b>	<b>9</b>	<b>-</b>	<b>20</b>	<b>13</b>	<b>-</b>	<b>-</b>	<b>33</b>	
<b>Sem 2</b>	<b>20</b>	<b>-</b>	<b>12</b>	<b>-</b>	<b>20</b>	<b>14</b>	<b>-</b>	<b>-</b>	<b>34</b>	
<b>Sem 3</b>	<b>12</b>	<b>--</b>	<b>21</b>	<b>-</b>	<b>12</b>	<b>12</b>	<b>-</b>	<b>2</b>	<b>26</b>	
<b>Sem 4</b>	<b>4</b>		<b>29</b>	<b>-</b>	<b>4</b>	<b>9</b>	<b>-</b>	<b>9</b>	<b>22</b>	
<b>Grand Total</b>	<b>56</b>	<b>--</b>	<b>71</b>	<b>-</b>	<b>56</b>	<b>48</b>	<b>-</b>	<b>11</b>	<b>115</b>	

**Annexure-'A'**

**VI. Scheme of Teaching and Examination for Master of Engineering (Computer Science and Engineering) Two years Full time Programme**

<b>Semester-I</b>										
<b>Subject Code</b>	<b>Subject</b>	<b>Hours per week</b>			<b>Scheme of Examination</b>					
		<b>L</b>	<b>T</b>	<b>P</b>	<b>Theory (Hrs)</b>	<b>Credits</b>				
						<b>Theory</b>	<b>IA</b>	<b>Practical</b>	<b>Oral</b>	<b>Total</b>
<b>MCSE 1.1</b>	Paper 1 (Theory)	4	-	-	3	4	2	-	-	6
<b>MCSE 1.2</b>	Paper 2 (Theory)	4	-	-	3	4	2	-	-	6
<b>MCSE 1.3</b>	Paper 3 (Theory)	4	-	-	3	4	2	-	-	6
<b>MCSE 1.4</b>	Paper 4(Elective-I)	4	-	-	3	4	2	-	-	6
<b>MCSE 1.5</b>	Paper 5(Elective -II)	4	-	-	3	4	2	-	-	6
<b>MCSE 1.6</b>	Laboratory 1	---	-	8	--	---	2	4	-	6
	<b>Total</b>	<b>20</b>	<b>-</b>	<b>8</b>	<b>-</b>	<b>20</b>	<b>12</b>	<b>4</b>	<b>-</b>	<b>36</b>

<b>Semester-II</b>										
<b>Subject Code</b>	<b>Subject</b>	<b>Hours per week</b>			<b>Scheme of Examination</b>					
		<b>L</b>	<b>T</b>	<b>P</b>	<b>Theory (Hrs)</b>	<b>Credits</b>				
						<b>Theory</b>	<b>IA</b>	<b>Practical</b>	<b>Oral</b>	<b>Total</b>
<b>MCSE 2.1</b>	Paper 6 (Theory)	4	-	-	3	4	2	-	-	6
<b>MCSE 2.2</b>	Paper 7 (Theory)	4	-	-	3	4	2	-	-	6
<b>MCSE 2.3</b>	Paper 8(Theory)	4	-	-	3	4	2	-	-	6
<b>MCSE 2.4</b>	Paper 9(Elective-III)	4	-	-	3	4	2	-	-	6
<b>MCSE 2.5</b>	Paper 10(Elective-IV)	4	-	-	3	4	2	-	-	6
<b>MCSE 2.6</b>	Laboratory 2	---	-	8	--	---	2	4	-	6
	<b>Total</b>	<b>20</b>	<b>-</b>	<b>8</b>	<b>-</b>	<b>20</b>	<b>12</b>	<b>4</b>	<b>-</b>	<b>36</b>

Semester-III										
Subject Code	Subject	Hours week per			Scheme of Examination					
		L	T	P	Theory (Hrs)	Credits				
						Theory	IA	Practical	Oral	Total
MCSE 3.1	Paper 11 (Theory)	4	-	--	3	4	2	-	--	6
MCSE 3.2	Paper 12(Elective-V)	4	-	--	3	4	2	-	--	6
MCSE 3.3	Project	--	--	14	--	--	4	-	4	8
MCSE 3.4	Seminar	---	---	6	--	----	2	-	2	4
	<b>Total</b>	8	-	<b>20</b>		<b>8</b>	<b>10</b>	-	<b>6</b>	<b>24</b>

Semester-IV										
Subject Code	Subject	Hours week per			Scheme of Examination					
		L	T	P	Theory (Hrs)	Credits				
						Theory	IA	Practical	Oral	Total
MCSE 4.1	Dissertation	---	----	28	--	-	8	-	12	20
	<b>Total</b>	-	-	<b>28</b>	-	-	<b>8</b>	-	<b>12</b>	<b>20</b>

Summary for all four semesters										
Semester	Total Hours per Week			Scheme of Examination						
	L	T	P	Theory hrs	Total Credits for Semester					
					Theory	IA	Practical	Orals	Total	
Semester 1	<b>20</b>	-	<b>8</b>	-	<b>20</b>	<b>12</b>	<b>4</b>	-	<b>36</b>	
Semester 2	<b>20</b>	-	<b>8</b>	-	<b>20</b>	<b>12</b>	<b>4</b>	-	<b>36</b>	
Semester 3	8	-	<b>20</b>		<b>8</b>	<b>10</b>	-	<b>6</b>	<b>24</b>	
Semester 4	-	-	<b>28</b>	-	-	<b>8</b>	-	<b>12</b>	<b>20</b>	
Total	48		64	-	48	42	8	18	116	



**Annexure-'A'**

**VII. Scheme of Teaching and Examination for Master of Engineering in Industrial Engineering Three Years Part Time Programme**

<b>Semester-I</b>										
<b>Subject Code</b>	<b>Subject</b>	<b>Hours week per</b>			<b>Scheme of Examination</b>					
		<b>L</b>	<b>T</b>	<b>P</b>	<b>Theory (Hrs)</b>	<b>Credits</b>				
						<b>Theory</b>	<b>IA</b>	<b>Practical</b>	<b>Oral</b>	<b>Total</b>
<b>MIE 1.1</b>	Paper 1 (Theory)	6	-	--	3	4	1	-	1	6
<b>MIE 1.2</b>	Paper 2 (Theory)	6	-	--	3	4	1	-	1	6
<b>MIE 1.3</b>	Seminar I	---	4	8	--	----	2	-	4	6
	<b>Total</b>	<b>12</b>	<b>4</b>	<b>8</b>		<b>8</b>	<b>4</b>	<b>-</b>	<b>6</b>	<b>18</b>

<b>Semester-II</b>										
<b>Subject Code</b>	<b>Subject</b>	<b>Hours week per</b>			<b>Scheme of Examination</b>					
		<b>L</b>	<b>T</b>	<b>P</b>	<b>Theory (Hrs)</b>	<b>Credits</b>				
						<b>Theory</b>	<b>IA</b>	<b>Practical</b>	<b>Oral</b>	<b>Total</b>
<b>MIE 2.1</b>	Paper 3 (Theory)	6	-	--	3	4	1	-	1	6
<b>MIE 2.2</b>	Paper 4 (Theory)	6	-	--	3	4	1	-	1	6
<b>MIE 2.3</b>	Paper 5 (Theory)	5	--	2	--	----	2	-	4	6
	<b>Total</b>	<b>17</b>	<b>-</b>	<b>2</b>		<b>8</b>	<b>4</b>	<b>-</b>	<b>6</b>	<b>18</b>

<b>Semester-III</b>										
<b>Subject Code</b>	<b>Subject</b>	<b>Hours week per</b>			<b>Scheme of Examination</b>					
		<b>L</b>	<b>T</b>	<b>P</b>	<b>Theory (Hrs)</b>	<b>Credits</b>				
						<b>Theory</b>	<b>IA</b>	<b>Practical</b>	<b>Oral</b>	<b>Total</b>
<b>MIE 3.1</b>	Paper 6 ( Elective I)	5	--	2	3	4	1	-	1	6
<b>MIE 3.2</b>	Paper 7 (Theory)	6	-	--	3	4	1	-	1	6
<b>MIE 3.3</b>	Paper 8 (Theory)	6	-	--	--	----	2	-	4	6
	<b>Total</b>	<b>17</b>	<b>-</b>	<b>2</b>	<b>-</b>	<b>8</b>	<b>4</b>	<b>-</b>	<b>6</b>	<b>18</b>

<b>Semester-IV</b>										
<b>Subject Code</b>	<b>Subject</b>	<b>Hours week per</b>			<b>Scheme of Examination</b>					
		<b>L</b>	<b>T</b>	<b>P</b>	<b>Theory (Hrs)</b>	<b>Credits</b>				
						<b>Theory</b>	<b>IA</b>	<b>Practical</b>	<b>Oral</b>	<b>Total</b>
<b>MIE 4.1</b>	<b>Paper 9 ( ElectiveII)</b>	5	--	2	3	4	1	-	1	6
<b>MIE 4.2</b>	<b>Paper 10 (Theory)</b>	6	-	--	3	4	1	-	1	6
<b>MIE 4.3</b>	<b>Seminar II</b>	---	4	8	--	----	2	-	4	6
	<b>Total</b>	<b>11</b>	<b>4</b>	<b>10</b>		<b>8</b>	<b>4</b>	<b>-</b>	<b>6</b>	<b>18</b>

Semester-V										
Subject Code	Subject	Hours week per			Scheme of Examination					
		L	T	P	Theory (Hrs)	Credits				
						Theory	IA	Practical	Oral	Total
<b>MIE 5.1</b>	Paper 11(Elective III)	5	--	2	3	4	1	-	1	6
<b>MIE 5.2</b>	Project	-	2	6	-	---	2	-	4	4
<b>MIE 5.3</b>	Seminar III	-	2	6	-	---	2	-	4	4
	<b>TOTAL</b>	<b>5</b>	<b>4</b>	<b>14</b>		<b>4</b>	<b>5</b>	<b>-</b>	<b>9</b>	<b>14</b>

Semester-VI										
Subject Code	Subject	Hours week per			Scheme of Examination					
		L	T	P	Theory (Hrs)	Credits				
						Theory	IA	Practical	Oral	Total
<b>MIE 6.1</b>	Dissertation	-	4	24	-	-	8	-	12	20
	<b>Total</b>	<b>-</b>	<b>4</b>	<b>24</b>	<b>-</b>	<b>-</b>	<b>8</b>	<b>-</b>	<b>12</b>	<b>20</b>

Summary for all four semesters										
Semester	Total Hours per Week			Scheme of Examination						
	L	T	P	Theory (Hrs)	Total Credits for Semester					
					Theory	IA	Practical	Orals	Total	
Semester 1	12	4	<b>8</b>	-	<b>8</b>	<b>4</b>	-	<b>6</b>	<b>18</b>	
Semester 2	17	-	<b>2</b>	-	<b>8</b>	<b>4</b>	-	<b>6</b>	<b>18</b>	
Semester 3	17	-	<b>2</b>	-	<b>8</b>	<b>4</b>	-	<b>6</b>	<b>18</b>	
Semester 4	<b>11</b>	<b>4</b>	<b>10</b>	-	<b>8</b>	<b>4</b>	-	<b>6</b>	<b>18</b>	
Semester 5	5	4	14	-	4	<b>5</b>	-	<b>9</b>	<b>14</b>	
Semester 6	-	4	24	-	-	8	-	12	20	
<b>Total</b>	<b>62</b>	<b>16</b>	<b>60</b>	<b>-</b>	<b>36</b>	<b>29</b>		<b>45</b>	<b>106</b>	

### Annexure-'B'

### **Dissertation Approval Sheet**

The dissertation entitled \_\_\_\_\_ by  
Mr/Ms/Mrs \_\_\_\_\_ completed in the year 20\_\_ - \_\_ is approved as a partial fulfillment of  
the requirements for the Degree of MASTER OF ENGINEERING in \_\_\_\_\_  
and is a record of bonafide work carried out successfully under our guidance.  
Mr/Ms/Mrs \_\_\_\_\_ has \_\_\_\_\_ number of Conference/Journal publications in  
the relevant area of the "Dissertation".

\_\_\_\_\_  
(Internal Supervisor)  
Name:  
Designation:  
Department:  
College/Institute:

\_\_\_\_\_  
(External Supervisor)  
Name:  
Designation:  
Department:  
Company/College

\_\_\_\_\_  
(Head of Department)  
Name:  
Designation:  
Department:  
College/Institute:  
Date:

\_\_\_\_\_  
(Principal)  
Name:  
College/Institute

**OC-12 Ordinance relating to the Three year integrated degree courses in Arts, Science & Commerce (B.A., B.Sc & B.Com.) except B.Sc. (Home Science) and B.Sc. (Naval Science)**

(Under Section 24(1) of the Goa University Act, 1984).

These ordinances shall come into effect for F.Y.B.A., F.Y.B.Sc. & F.Y.B.Com. from the Academic Year 1994-95, for S.Y.B.A., S.Y.B.Sc. & S.Y.B.Com. from the Academic Year 1995-96 and for T.Y.B.A., T.Y.B.Sc. & T.Y.B.Com. from the Academic Year 1996-97. However, OC-8.1 shall come into effect for F.Y.B.A., F.Y.B.Sc. & F.Y.B.Com. and S.Y.B.A., S.Y.B.Sc. & S.Y.B.Com. from the Academic Year 1996-97.

**Ordinance for the Three Year integrated degree of Bachelor of Arts.**

**OC-12.1** The course for the degree of Bachelor of Arts (B.A.) shall be of three years duration.

**OC-12.2** A candidate for being eligible for admission to the integrated course leading to the degree of Bachelor of Arts must have passed.

(A) the Higher Secondary Certificate (Std. XII) examination conducted by the Goa State Board of Secondary and Higher Secondary Education, in the following subjects:

(i) English (Higher level or Lower level)

(ii) Any one of the modern Indian Languages or Modern Foreign Languages (Higher level or Lower level)

(iii) to (vi) Four other subjects from among the subjects mentioned below:

OR

(iii) to (vi) Three subjects from among the subjects mentioned below and one subject from among the remaining optional subjects prescribed for Higher Secondary School Certificate Examination.

1. Modern Indian Language (Any language other than the one offered under compulsory languages).
2. Modern Foreign Language (Any language other than the one offered under compulsory languages).

- |              |                   |                              |
|--------------|-------------------|------------------------------|
| 3. Sanskrit  | } Anyone language | 10. Mathematics & Statistics |
| 4. Prakrit   |                   | 11. Political Science        |
| 5. Pail      |                   | 12. Sociology                |
| 6. Arabic    |                   | 13. Philosophy               |
| 7. Persian   |                   | 14. Logic                    |
| 8. History   |                   | 15. Psychology               |
| 9. Geography |                   | 16. Economics                |

(B) The Higher Secondary Certificate (Std. XII) Examination of the Vocational stream conducted by the Goa Board of Secondary and Higher Secondary Education in one of the following subjects:

- |  |                                      |
|--|--------------------------------------|
| 1. Office Secretaryship/Stenography        | 8. Programme Assistant               |
| 2. Accountancy & Auditing                  | 9. Auto Engineering Technology       |
| 3. Marketing and Salesmanship              | 10. Industrial Management            |
| 4. Commercial Garment Designing and Making | 11. Insurance                        |
| 5. Poultry and Swine Production            | 12. Food Production                  |
| 6. Electronic Technology                   | 13. Catering & Restaurant Management |
| 7. Maintenance & Repairs & Electrical &    | 14. Computer Software Application    |

Electrical Domestic Appliances **OR**

(C) The Higher Secondary School Certificate (Std. XII Examination conducted by the Goa Board of Secondary and Higher Secondary Education must satisfy the conditions laid down by the University for admission to the First Year Examination of Three Years Integrated course leading to the degree of Bachelor of Science or Bachelor of Commerce **OR**

(D) Must have passed an examination of another University or body recognized as equivalent thereto.

**OC-12.4** Students migrating from any other recognized University may be considered for admission to S.Y. B.A. or T.Y.B.A. provided that

(i) they have passed the First Year or First Year and Second Year examination respectively in all the subjects from that University.

(ii) they should have offered at the First Year/Second Year the same subjects prescribed under Elective Group available under the scheme of this University as per Ordinance OC-12.6.

### **OC-12.5 Scheme of Papers:**

**OC-12.5.1** A student for the Three Year Integrated B.A. degree course other than Journalism shall be required to offer 21 papers carrying 100 marks each. The year-wise scheme of these papers shall be as under.

#### **First Year B.A.**

(Seven papers carrying 100 marks each)

A. (1) Compulsory English Paper I

(2) One language from the Language Optional Group as prescribed in OC-12.6

B. (3) (4) Any one paper from the Foundation Optional Group as prescribed in OC-12.6 and Computer Awareness Course

C. (5) (6) (7) One paper in each of the three subjects from the Elective Group as prescribed in Ordinance OC-12.6

#### **Second Year B.A.**

(Seven papers carrying 100 marks each)

A. (1) Compulsory English Paper II

B. (2) Any one paper other than the one offered at F.Y.B.A from the Foundation Group as prescribed in OC-12.6

C. (3) (4) Any two papers from the Applied Component Group as prescribed in Ordinance OC-12.6.

D. (5) (6) (7) One paper in each of the three subjects already selected at F.Y.B.A. from the Elective Group as prescribed in OC-12.6

#### **Third Year B.A.**

(Seven papers carrying 100 marks each)

A. (1) to (6) Three papers each in any two subjects offered by the student at S.Y.B.A. from the Elective Group.

(B) (7) One paper from the Field-work cum Project work Oriented Group as prescribed in OC-12.7  
**OR**

A. (1) to (6) Six papers in any one subject offered by the student at S.Y.B.A. from the Elective Group.

B. (7) One paper each from the Field-work cum Project-work Oriented Group as prescribed in OC-12.7.

**OC-12.6** The following shall be the subjects prescribed under Language optional Group:

- |               |             |             |             |
|---------------|-------------|-------------|-------------|
| 1) French     | 4) Spanish  | 7) Konkani  | 10) Kannada |
| 2) German     | 5) Sanskrit | 8) Urdu     | 11) Hindi   |
| 3) Portuguese | 6) Marathi  | 9) Gujarati | 12) Russian |

**OC-12.6** (ii) The following shall be the subjects prescribed under Foundation Group:

1) Logic 2) Elementary Mathematics 3) Ecology 4) History of Culture Science & Art 5) History of India's Freedom Struggle 6) Yoga Studies (Theory and Practice) 7) Dialectics & Methodology of Science 8) History of Human Civilization 9) Philosophy of Science 10) Founders of Science in Ancient India 10) Founders of Science in Ancient India 11) Elementary Statistical Methods 12) Gandhian Studies 13) Population Education 14) Resource Geography of Goa 15) Futurology 16) Current Affairs 17) Diversity, Unity and Nation Building in India 18) Indian Culture & Heritage 19. Society and Culture and 20) Social Development.

(iii) The following shall be the subjects prescribed under Applied Component Group:

- |  |                             |  |
|--|-----------------------------|--|
| 1) Labour Welfare and Industrial Relations | 6) Environmental Studies    | 13) Management of Small Scale Industries |
| 2) Co-operative Management                 | 7) Food and Nutrition       | 14) Export Management                    |
| 3) Mass Communication                      | 8) Journalism               | 15) Basics of Library Science            |
| 4) Child Psychology and Child Guidance     | 9) Advertising              | 16) Consumer Education                   |
| 5) Computer Systems                        | 10) Tourism & Hotelry       | 17) Marketing Research                   |
|  | 11) Rural Industrialization | 18) Entrepreneurship                     |
|  | 12) Rural Banking           |  |

(iv) The following shall be the subjects prescribed under **Elective Group**:

Eight papers or five papers in anyone of the following subjects may be offered at F.Y., S.Y. and T.Y. B.A.

- |            |               |              |                |                       |
|------------|---------------|--------------|----------------|-----------------------|
| 1) English | 4) Portuguese | 7) Konkani   | 10) Economics  | 13) Psychology        |
| 2) French  | 5) Sanskrit   | 8) Hindi     | 11) History    | 14) Geography         |
| 3) German  | 6) Marathi    | 9) Sociology | 12) Philosophy | 15) Political Science |

Five papers in anyone of the following subjects may be offered at F.Y.B.A., S.Y.B.A. & T.Y.B.A.

1) Commerce 2) Mathematics 3) Statistics

Two papers in any one of the following subjects may be offered only at F.Y.B.A. and S.Y.B.A.

1) Education 2) Physical Education 3) N.C.C. 4) Social Work 5) Economy of Goa.

**OC-12.7 Field work -cum- project-work oriented group.**

**OC-12.7.1** Every student in T.Y. B.A., B.Com. and B.Sc. shall complete a project work in chosen area in anyone of the subjects in the course of study from F.Y. to T.Y. B.A., B.Com. & B.Sc.

**OC- 12.7.2** The projects shall be based on field work, library work, laboratory or on the job training or any similar work assigned by the concerned teacher on topics identified by him and shall be considered equivalent to a paper carrying 100 marks. The teacher may assign a project to each student individually or to a group of students comprising not more than 6 students.

**OC-12.8 Scheme of instruction shall be as follows:**

**OC-12.8.1** The number of lectures assigned to each paper in a subject shall be three per week. In addition there shall be one tutorial period per week per batch assigned to each paper in a subject. The size of each tutorial batch shall not ordinarily exceed 40 students. The duration of each lecture period and tutorial period shall be 45 minutes.

**OC-12.9** The guidance for the project paper provided by a teacher to a batch of 10 students assigned to him for project work shall be deemed to be equivalent to four periods of instruction per week. Ordinarily a teacher shall be assigned a batch comprising not more than ten students for guidance. If the number of students is less than five the guidance to students by a teacher shall be deemed to be equivalent to two period of instruction per week.

The pattern for assigning students in a project paper shall be as under:

Batch No.	No. of students	Batch No.	No. of students	Batch No.	No. of students	Batch No.	No. of students
1 <sup>st</sup>	1 to 10	2 <sup>nd</sup>	11 to 20	3 <sup>rd</sup>	21 to 30	4 <sup>th</sup>	31 to 40
5 <sup>th</sup>	41 to 50	6 <sup>th</sup>	51 to 60	7 <sup>th</sup>	61 to 70	8 <sup>th</sup>	71 to 80
9 <sup>th</sup>	81 to 90						

**OC-12.10** The Principal of the college may permit a student of F.Y.B.A. class of his college to change one or more of the optional subjects taken by him on or before 31st July of the year.

**OC-12.11 Scheme of papers for Journalism**

**OC-12.11.1** A student for the Three Year Integrated B.A. Degree course in Journalism shall be required to offer 21 papers carrying 100 marks each. The year wise scheme of these papers shall be as under:

**First Year B.A. (Journalism)**  
(Seven papers carrying 100 marks each)

A. (1) Compulsory English - Paper I.

(2) One of the languages from the Language Optional Group as prescribed in OC-12.6.

B.(3) One paper from the Foundation Optional Group as Prescribed in OC-12.6 History of India's Freedom Struggle.

(4) Computer Awareness. Graphics & Printing

C. Three papers as given under:

(5) History of the Indian Press

(6) Society, Social change and Problems of Indian Society

(7) Development Economics.

**Second Year B.A. (Journalism)**  
(Seven papers carrying 100 marks each)

- A. (1) Compulsory English - Paper II
- B. (2) One paper other than the one offered at F.Y.B.A. from the Foundation Group as prescribed in OC-12.6
- C. History of Science Culture and Art Two papers from the Applied Component as prescribed in OC-12.6  
(3) Advertising  
(4) Public Relations
- D. Three Papers of 100 marks each from the Elective Group.  
(5) Principles of Social Psychology  
(6) Political Ideas and Institutions  
(7) Principles, Responsibilities and Laws of the Press (Indian Constitution)

**Third Year B.A. (Journalism)**

- A. Six papers in Journalism offered by the student under
- B.
- |                                     |  |
|-------------------------------------|--|
| (1) News gathering and News writing | (4) Photo-Journalism and Newspaper Management      |
| (2) Editing and Translating News.   | (5) Introduction to Mass Media: Radio, TV and Film |
| (3) Feature and Editorial Writing   | (6) Current Affair                                 |
- B (7) Field Work cum Project Work (25 marks for each of the following)
- |                                 |                            |   |                            |
|---------------------------------|----------------------------|---|----------------------------|
| (i) Internship<br>For 100 hours | (ii) Laboratory<br>Journal | (iii) Visits to Media<br>and other Institutions | (iv) Media Study<br>Report |
|---------------------------------|----------------------------|---|----------------------------|

(OC-12.10 shall not be applicable to students of Journalism)

**OC-13 Ordinance for the Three Year integrated Degree of Bachelor of Science**  
(Under Section 4(1) of the Goa University Act, 1984).

**OC-13.1** The course for the Degree of Bachelor of Science (B.Sc.) shall be of three years duration.

**OC-13.2** A candidate for being eligible for admission to the three year integrated course leading to the Degree of Bachelor of Science (B.Sc.) must have passed:

A. The Higher Secondary School Certificate Examination at Std. XII conducted by the Goa Board of Secondary and Higher Secondary Education in the following subjects:

- (i) English (Higher level or Lower level)  
(ii) Any one of the Modern Indian Languages or the Modern Foreign Languages (Higher level or Lower level)  
(iii) to (vi) Four subjects from among the subjects mentioned below carrying a total of 400 marks  
**OR**  
(iii) to (vi) Three subjects from among the subjects mentioned below carrying a total of 300 marks and one subject from among the remaining optional subjects prescribed for the H.S.S.C. Examination.



1. Mathematics & Statistics      2. Physics      3. Chemistry  
 4. Biology (Botany & Zoology) 5. Earth Science      6. Computer Science  
 7. Electronics **OR**

B. The Higher Secondary School Certificate Examination at Std. XII of the Vocational Stream conducted by the Goa Board of Secondary and Higher Secondary Education in the following courses.

1. Electronic Technology	2. Maintenance & Repairs of Electrical & Electric Domestic Appliances	3. Programme Assistant	4. Auto Engineering Technology
5. Poultry and Swine Production	6. Computer Software Application	7. Horticulture	8. Floriculture

**OR**

C. The examination of another University or Body, recognized as equivalent thereto.

**OC-13.3** A student migrating from any other recognized University may be considered for admission to Second Year B.Sc. provided that:

(i) He has clearly passed the First Year examination from that University.

(ii) He has offered at the First Year the same subjects as a student from Goa University is required to offer at First Year B.Sc. (except Computer Awareness) to be eligible to pursue the studies at Second Year B.Sc. as per the relevant ordinances.

B. A student migrating from any other recognized University may be considered for admission to Third Year B.Sc. provided that:

(i) He has clearly passed the First Year and Second Year examinations from the earlier University.

(ii) the subject or subjects to be offered by him/her at Third year B.Sc. is/or are among the subjects offered by him/her at F.Y.B.Sc. and S.Y.B.Sc. in the earlier University.

#### **OC-13.4 Scheme of Papers**

A. A student for the Three Year Integrated B.Sc. degree course shall be required to offer 21 papers carrying 100 marks each. The year wise scheme of these papers shall be as under:

#### **First Year B. Sc.**

(7 papers carrying 100 marks each)

(1) One paper in Computer Awareness

(2), (3), (4), (5), (6), (7) Two papers in each of the three subjects to be chosen in the following manner:

(a) all three subjects from the Physical Sciences Group as prescribed under OC-13.5 (provided that with Computer Science, only Physics and Mathematics - Statistics shall be chosen) **OR**

(b) all three subjects from Life Sciences Group as prescribed under OC-13.6 **OR**

(c) two subjects from Physical Sciences Group of OC-13.5 and one subject from the remaining Groups under OC-13.6 or OC-13.7 **OR**

(d) two subjects from Life Sciences Group of OC-13.6 and one subject from the remaining groups under OC-13.5 or OC-13.7 **OR**

(e) one subject each from Physical Sciences Group of OC-13.5, Life Sciences Group of OC-13.6 and the remaining Group OC-13.7 (Provided further that with Computer Science, only Physics and Mathematics - Statistics shall be chosen).

B. A student to be admitted to the Second Year of the Three Year integrated B.Sc. degree course must have passed the examination of F.Y.B.Sc. and shall offer the following papers:

**Second Year B.Sc.**

(7 papers carrying 100 marks each)

(1) One paper in a subject chosen from Foundation Course Group as prescribed in OC-13.8

(2) to (7) two papers each in three subjects which shall be same as those chosen at F.Y.B.Sc.

C. A student to be admitted to Third Year of the Three Year integrated B.Sc. course must have passed the examination of S.Y.B.Sc. and shall offer the papers in the following manner:

**Third Year B.Sc.**

(7 papers carrying 100 marks each)

(i) All six papers in one of three subjects offered by the student at the S.Y.B.Sc. **OR**

(ii) three papers each in two of the three subjects offered by the student at S.Y.B.Sc.

(iii) in addition to (i) or (ii) above, a student shall undertake one project in the subject or in one of the subjects chosen at T.Y.B.Sc. The project shall be completed in the manner prescribed in OC-13.12.

**OC-13.5 Physical Science** shall comprise the following subjects:

1. Physics
2. Chemistry
3. Mathematics & Statistics
4. Electronics
5. Computer Science

**OC-13.6 Life Sciences Group** shall comprise the following subjects: 1. Botany

2. Zoology
3. Microbiology
4. Biochemistry
5. Biophysics
6. Marine Science
7. Forest Science
8. Fisheries.

**OC-13.7** The following additional Groups may be offered wherever such facilities exist:

- A. 1. Psychology
2. Geography
3. Economics
4. Actuarial Science
5. Rural Studies
6. Environmental Studies

B. **Earth Sciences Group** shall comprise of the following subjects:

1. Earth Science
2. Oceanography
3. Meteorology
4. Geophysics
5. Geochemistry

**OC-13.8 Foundation Course Group** shall comprise the following subjects:

1. Communication Skills
2. History of Science, Culture and Art
3. Dialectics and Methodology of Science
4. Indian Culture and Heritage
5. History of Human Civilization
6. Philosophy of Science
7. Founders of Sciences in Ancient India
8. Science Journalism
9. Logic
10. Ecology
11. History of India's Freedom Struggle
12. Yoga Studies
13. Gandhian Studies
14. Population Education
15. Resource Geography of Goa
16. Futurology
17. Current Affairs
18. Diversity, Unity and Nation Building in India
19. Entrepreneurship

**OC-13.9** At F.Y.B.Sc. and S.Y.B.Sc. the syllabus for each paper in a science subject having practicals, shall consist of two parts, one part containing the theory and the other prescribing the practical work related to the theory. In the case of papers having no practicals the syllabus for the paper shall contain theory only.

**OC-13.10** At T.Y.B.Sc. the syllabus in one science subject having practicals shall consist of four theory papers and four practicals associated with the theory content of the papers. The four practicals shall be considered equivalent to two theory papers while allotting the marks at the examination. The syllabus for six theory papers in one science subject at T.Y.B.Sc. having no practicals shall contain theory only.

**OC-13.11** At T.Y.B.Sc. the syllabus for the three papers of a science subject having practicals, shall contain two theory papers and two associated practicals. The two associated practicals shall be considered equivalent to one paper while allotting marks at the examination. The syllabus for the three papers of a science subject having no practicals at T.Y.B.Sc. shall contain only theory papers.

#### **OC-13.12 Field Work-cum-Project work**

**OC-13.12.1** A student at T.Y.B.Sc. shall be required to complete one Project in an area related to the subject or one of the subjects offered at T.Y.B.Sc. A student offering three papers each in two subjects shall be required to complete one project in an area related to any one of these two subjects.

**OC-13.12.2** The Project shall be based on field work, library work or laboratory work or on the job training or any similar work assigned by the concerned teacher on topics identified by him and shall be considered equivalent to a paper carrying 100 marks. The teacher may assign a project to each student individually or to a group of students comprising not more than ten students. The Project paper shall be assigned four lecture periods per week per batch.

#### **OC-13.13 Scheme of instruction shall be as follows:**

**OC-13.13.1** At F.Y.B.Sc. and S.Y.B.Sc. for subjects having practicals each paper shall be covered in three lecture periods and three periods of practical per week. The list of experiments connected with the theory in that paper shall be prescribed by the concerned Board of Studies in that subject and shall normally contain not less than 15 experiments per paper. For subjects having no practicals each paper shall be covered in three lecture periods and one tutorial period per week. The size of each tutorial batch shall not ordinarily exceed 40 students. The duration of each lecture period and practical period and tutorial period shall be of 45 minutes. The tutorial shall be administered in Batches.

**OC-13.14** At T.Y.B.Sc. each theory paper shall be covered in four lecture periods per week. Each practical shall be covered in four periods per week. The experimental work prescribed for practicals shall normally be connected with the content of the theory papers and shall normally contain not less than 15 experiments per practical. The duration of each lecture period and practical periods shall be of 45 minutes each.

**OC-13.15 (Effective from 1<sup>st</sup> July, 2009)** For all Science subjects except Computer Science the strength of a batch for practical shall be ordinarily 15, for Computer Science, the strength of a batch for practicals shall be 10 students.

**(Effective from 1<sup>st</sup> July, 2009)** The following tables shall be followed for preparing practical batches.

Table 1 (For all science subjects with practical component)		
Batch No	Student strength	Remarks
1st	1-15	No fresh batch to be started till number exceeds 20
2 <sup>nd</sup>	21-30	No fresh batch to be started till number exceeds 35
3 <sup>rd</sup>	36-45	No fresh batch to be started till number exceeds 50
4 <sup>th</sup>	51-60	No fresh batch to be started till number exceeds 65
5 <sup>th</sup>	66-75	No fresh batch to be started till number exceeds 80
6 <sup>th</sup>	81-90	No fresh batch to be started till number exceeds 95
7 <sup>th</sup>	96-105	No fresh batch to be started till number exceeds 110
8 <sup>th</sup>	111-120	No fresh batch to be started till number exceeds 125

**(Effective from 1<sup>st</sup> July, 2009)**

Table 2 (For Computer Science)		
Batch No	Student Strength for Computer Science	Remarks
1st	1-10	No fresh batch to be started till the number exceeds 15
2nd	16-20	No fresh batch to be started till the number exceeds 25
3rd	26-30	No fresh batch to be started till the number exceeds 35

**Table 3** (for Computer Science)

Batch No.	Student strength for Computer Science
1 <sup>st</sup>	1 – 10
2 <sup>nd</sup>	11 – 20
3 <sup>rd</sup>	21 – 30

**OC-13.16** The pattern for assigning the students in a Project paper shall be as under:

Batch No.	No. of students	Batch No.	No. of students
1 <sup>st</sup> Batch	1 to 10 students	6 <sup>th</sup> Batch	51 to 60 students
2 <sup>nd</sup> Batch	11 to 20 students	7 <sup>th</sup> Batch	61 to 70 students
3 <sup>rd</sup> Batch	21 to 30 students	8 <sup>th</sup> Batch	71 to 80 students
4 <sup>th</sup> Batch	31 to 40 students		81 to 90 students
5 <sup>th</sup> Batch	41 to 50 students		

**OC-13.16.1** The guidance provided by a teacher to a batch of not more than 10 students and not less than 5 students for the Project paper shall be considered equivalent to four lecture periods per week per batch. However, the work of any teacher guiding a batch less than 5 students for the Project paper shall be deemed equivalent to 2 lecture periods per week for that batch.

**OC-13.17** The Principal of a College may permit a student of his College to change on or before 31<sup>st</sup> July of an Academic Year one or more optional subjects offered by a student at the time of admission.

**OC-14 Ordinance relating to the Three Year Integrated degree of Bachelor of Commerce**  
(Under Section 24(1) of the Goa University Act, 1984).

**OC-14.1** The course for the degree of Bachelor of Commerce (B.Com.) shall be of three years duration.

**OC-14.2** A candidate for being eligible for admission to the three year integrated course leading to the degree of Bachelor of Commerce (B.Com.) must have passed:

A. The Higher Secondary School Certificate (Std. XII) Examination conducted by the Goa State Board of Secondary and Higher Secondary Education in the following subjects:

(i) English (Higher Level or Lower Level)

(ii) Any one of the Modern Indian Languages or Modern Foreign Languages (Higher- Level or Lower Level)

(iii) to (vi) Four other subjects from among the subjects mentioned below: **OR**

(iii) To (vi) Three subjects from among the subjects mentioned below and one subject from among the remaining optional subjects prescribed for the H.S.S.C. Examination.

i) Economics      ii) Book Keeping and Accountancy      iii) Organization of Commerce  
iv) Geography      v) Mathematics and Statistics      vi) Secretarial Practice  
vii) Co-operation      **OR**

B. The Higher Secondary Certificate (Std. XII) Examination in vocational stream conducted by the Goa State Board of Secondary and Higher Secondary Education in one of the following subjects:

1. Office Secretaryship/Stenography    2. Accountancy & Auditing    3. Marketing and Salesmanship    4. Programme Assistant    5. Insurance    6. Industrial Management    7. Commercial Garment Designing & Making      **OR**

C. Must have passed the examination of another University or Body recognized as equivalent thereto.

**OC-14.3** Students migrating from any other recognized University may be considered for admission to S.Y.B.Com. or TY.B.Com. provided that:

(i) They have passed the First Year or First Year and Second Year Examination respectively in all the subjects from that University.

(ii) They should have offered at the First Year/Second Year the same subjects available under the scheme of this University.

#### **OC-14.4 Scheme of Papers:**

**OC-14.4.1** A student for the three year integrated degree course shall be required to offer 24 papers carrying 100 marks each. The year-wise scheme of these papers shall be as under:

##### **F.Y. B.Com. (8 papers)**

1. English
2. Geography of Resources
3. Business Economics Paper - I
4. Mathematical Techniques
5. General Management
6. Accounting and Financial Management - Paper I
7. Computer Awareness
8. Elective Course - Paper I

##### **S.Y. B.Com. (8 papers)**

1. Business Communication
2. Business Environment
3. Business Economics-Paper II
4. Business and Industrial Laws
5. Accounting and Financial Management - Paper II
6. Statistical Techniques
7. Business Organization
8. Elective Course Paper - II.

##### **T.Y. B.Com. (8 papers)**

1. Industrial Organization and Management
2. Business Economics - Paper III
3. Application Oriented Course - Paper I
4. Application Oriented Course - Paper II
5. Elective Course - Paper III
6. Elective Course - Paper IV
7. Elective Paper – V.
8. Project work in the chosen area (Elective Course).

#### **Subjects**

The following shall be the subject prescribed under the **Application Oriented Courses**:

1. Export Management
2. Marketing Research
3. Regulation of Trade Practice
4. Farm Management including Financing
5. Advertising
6. Co-operative Management
7. Labour Welfare and Industrial Relations
8. Mass Communication
9. Tourism and Hotelry
10. Rural Industrialization
11. Introduction to Journalism
12. Rural Banking
13. Management of Small Scale Industry
14. Computer Systems
15. Portfolio Management
16. Sociology of Development
17. Industrial and Organization Psychology
18. Industrial and Organization Psychology
19. Political Science, Development Administration Public Administration
20. Environmental Science
21. Entrepreneurship.

Students shall be required to select two of the subjects at T.Y.B.Com.

The following shall be the subjects prescribed under the **Elective Courses Group**:

1. Financial Accounting, Auditing & Taxation
2. Cost Accounting and Management Account
3. Business Management
4. Banking and Finance
5. Quantitative Techniques & Operations Research
6. Actuarial Science & Principles of Insurance
7. Company Secretarial Practice
8. Applied Economics.

(Students shall be required to select one subject in First Year).

### **OC-14.5 Field Work cum Project Work Oriented Group**

**OC-14.5.1** Students offering a subject under the Elective Group shall be required to complete one Project in an area related to that subject.

**OC-14.5.2** The project shall be based on field work library work or any similar work assigned by the concerned teacher on topics identified by him and shall be considered equivalent to a paper carrying 100 marks. The teacher may assign a project to each student individually or to a group of students comprising not more than 6 students.

### **OC-14.6 Scheme of instruction shall be as follows:**

**OC-14.6.1** The number of lectures assigned to each paper in a subject shall be three per week. In addition, one tutorial period per week per batch shall be assigned to each paper in a subject. The size of each tutorial batch shall not ordinarily exceed 40 students. The duration of each lecture period and tutorial period shall be 45 minutes.

**OC-14.6.2** The guidance provided by a teacher to a batch of 10 students assigned to him for project work shall be deemed to be equivalent to four periods of instruction per week. Ordinarily a teacher shall be assigned a batch comprising not more than ten students for guidance. If the number of students is less than five, the guidance to students by a teacher shall be deemed to be equivalent to two period of instruction per week.

The pattern for assigning students in the project paper shall be as under:

Batch No.	Student No.	Batch No.	Student No.	Batch No.	Student No.
1 <sup>st</sup>	1 to 10	4 <sup>th</sup>	31 to 40	7 <sup>th</sup>	61 to 70
2 <sup>nd</sup>	11 to 20	5 <sup>th</sup>	41 to 50	8 <sup>th</sup>	71 to 80
3 <sup>rd</sup>	21 to 30	6 <sup>th</sup>	51 to 60	9 <sup>th</sup>	81 to 90

**OC-14.7.1** The Principal may permit a student of F.Y.B.Com. class of his college to change on or before 31<sup>st</sup> July, the Elective subject offered by the student at the time of admission.

**OC-14.7.2** The Principal may permit a student of T.Y. B.Com. class of his college to change on or before 31<sup>st</sup> July of the year one or more Application Oriented subjects offered by the student at the time of admission.

### **OC-15 Ordinance for the Degree of Bachelor of Pharmaceutical Science of the Goa University** (Under Section 24(1) of the Goa University Act, 1984). (Revised Four Year Course according to AICTE Norms)

A candidate for the examination for the degree of B. Pharm. Sciences produce a certificate to the effect that he/she has passed

**OC-15.1 (Effective from 14<sup>th</sup> June, 2012)** A candidate for being eligible for admission to the B. Pharm course must have:

(i) Passed the Higher Secondary School Certificate (Std. XII<sup>th</sup>) examination of the Goa Board of Secondary and Higher Secondary Education or its equivalent examination (excluding SSSE of National Open School) with English, Physics and Chemistry as compulsory subjects with one of the following subjects Mathematics/Bio-Technology/Computer Science/Biology and secured not less than 45% marks in the aggregate of subjects of Physics and Chemistry, with one of the following subjects Mathematics/Bio-Technology/Computer Science/Biology (40% for the applicants belonging to SC, ST and OBC only).

(ii) Appeared and obtained a valid score at the Goa Common Entrance Test (GCET) conducted by the Government of Goa for the year of admission.

**OC-15.2** A candidate for the degree of B. Pharmacy Sciences shall be required to pass four examinations conducted by this University viz., the First, the Second, the Third and the Fourth B. Pharmacy Sciences.

**OC-15.3** The course of study for the degree of B. Pharmacy Sciences shall be of eight terms duration.

**OC-15.4** Failure to pass the First, the Second and the Third B. Pharmacy Sciences examination shall not disqualify the candidate from presenting himself on a subsequent occasion on a new application being forwarded and fresh fee paid. However, for fourth B. Pharmacy Sciences, failure to pass the Fourth B. Pharmacy Sciences Examination after four attempts shall disqualify the candidate from presenting himself as candidate on any subsequent occasion.

**OC-15.5** As a part of curriculum every candidate for the degree of B. Pharmacy Sciences shall be required to work for at least four weeks in an approved Pharmaceutical manufacturing house or in an approved hospital or in an approved drug store where operations relevant to his course of study are carried out, at the end of the Third year of the course and shall produce a satisfactory report of work and attendance to the Head of the College/Institution who in turn shall send all the certificates to the Registrar, Goa University. Failure to submit the certificate of training shall make candidate ineligible from appearing for the Final B. Pharmacy Sciences examination.

**OC-15.6(a)** To ensure the uniform attention of students to their work throughout each year of their study, the marks of each examination shall be awarded jointly on the basis of the annual University examination and periodic test. Eighty percent of marks shall be allotted to each of the theory papers and practical examinations held by the University and twenty percent marks to the periodic tests in respective subject heads of theory and practical conducted by the College as part of the University examination.

(b) There shall be maximum three periodic tests in theory subjects throughout each year of study. Out of which two best performances in theory shall be sent to the University. In practical subjects, there shall be only two such tests prior to the University Examination in each subject. Marks of both these tests shall be sent to the University.

All periodic test marks shall be submitted in a sealed cover to the University prior to the commencement of the University examination.

(c) The marks obtained by students in such tests shall be recorded in the Office of the College/Institution. Within a fortnight after each test and the cumulative percentage of final marks earned thereon communicated to the Registrar of the University by the Head of the College/Institution before the date of the commencement of the annual examination.



(d) The marks obtained by candidates in the periodic tests shall be carried over to subsequent examination unless fresh periodic test marks are submitted.

(e) Fresh periodic tests shall not be conducted by the respective colleges/institutions to give an opportunity to improve on the candidate's previous performance. The fresh periodic test shall be conducted only for the failures at the University Examination in the respective subject heads subsequent to their appearing at the said University Examination.

Periodic tests for the students, who have failed at the University Examination, shall be held only in one consolidated test covering the entire syllabus of the respective subjects.

Further, in case of students who have failed in the University examination for want of aggregate total of 50% but passing in all subjects, the student may be allowed to appear for periodic test for the subject he chooses for the University Examination. The periodic test shall be given in one consolidated test covering the entire syllabus of the respective subject.

(f) The candidates whose marks are thus carried over as per OC-15.6(d) and (e) shall be eligible for class.

**OC-15.7** No candidates shall be admitted to the First, Second, Third and Fourth B. Pharm. Sciences examination unless he produces satisfactory testimonials of having previously passed

(i) Higher Secondary School Certificate Examination of Goa Board or equivalent examination.

(ii) The First B. Pharmacy Sciences Examination of this University and/or Second B. Pharmacy Sciences and/or Third B. Pharmacy Sciences Examination of this University respectively and kept two terms in the College/Institution recognized for the purpose by this University.

**OC-15.8** Notwithstanding anything contained in OC-15.7, a candidate who has failed to pass the First or the Second or the Third B. Pharmacy Sciences examination, but has passed in all but one of the subject heads and also obtained an aggregate of at least 50 per cent of the total marks in these subject heads taken together, shall be allowed to keep terms and to appear for the next higher examination viz., the Second or the Third or the Fourth B. Pharmacy Science Examination, as the case may be, after keeping two terms, but will not be declared to have passed the next higher examination under any circumstances unless he has reappeared (i) in the subject of the First, the Second or Third B. Pharmacy Sciences examination in which he/she had failed or (ii) in one of the subjects if the First, Second or the Third Year B. Pharmacy Sciences Examination as the case may be, if his failure to pass that examination was only on account of his failure to obtain 50% of the total marks obtainable in the whole examination and has passed in that one subject obtaining such marks as may be, required to secure at least 50 per cent of the total marks obtainable in the whole examination as required by OC-15.6 and for the purpose of deciding whether a candidate has secured 50 per cent of the total marks obtainable in the whole examination referred to above, the marks of the candidate at the previous examination in all but one of the subject head in which he/she has reappeared shall be carried over.

**OC-15.9** To pass the First, Second, Third or Fourth B. Pharmacy Sciences Examination, a candidate must obtain at least

- 1) 40 per cent of the marks in each theory head (excluding periodic test marks)
- 2) 40 per cent of the marks in each practical exam (excluding periodic test marks)

**Note:** The theory and practical in a subject shall be construed as separate heads of the examination.

**OC-15A Ordinance relating to the Degree of Bachelor of Pharmacy (B.Pharm.) Course**  
(With effect from the academic year 2011-12)

**OC-15A GENERAL**

**OC-15A.1 Objectives**

The growth of the pharmaceutical industry sector is tremendous over the last few decades due to the technological and intellectual advancements contributed by pharmacy graduates. The need for pharmacy graduates is ever growing in the health sector too recently as community pharmacists with the vision of various organizations to provide health for all.

Pharmacy graduates are required to acquire knowledge and be equipped with necessary skills to work competently in pharmaceutical industry and to practice the profession of pharmacy. The graduate should have knowledge of drug design and synthesis, drug analysis, mechanism of action of drugs, drug interactions, herbal medicines, designing of pharmaceutical dosage forms, quality assurance and storage. The graduates should also comprehend the concept of community pharmacy and be able to participate in health care programmes and act as a vital link between the Physician and Patients for achieving better health of community. The graduates should be able to detail the physicians and market the dosage forms for diagnosis, prophylactic and therapeutic purposes.

**OC-15A.2 Duration of Course:** The duration of the Course shall be four academic years. Each year shall be divided into two semesters. The duration of each semester will be 18 weeks (90 instructional days).

**OC-15A.3 Degree to be awarded:** Bachelor of Pharmacy (B. Pharm.)

**OC-15A.4 Eligibility for Admission**

1. Entry levels into the course shall be at the beginning of the Semester I or at the beginning of the Semester III (for candidates who have passed Diploma in Pharmacy Examination).
2. **(Effective from 18<sup>th</sup> July, 2013)** Eligibility criteria for admission to first year of degree course in pharmacy:
  - a. Candidate should be an Indian National and should have passed the HSSC (Std XII) Examination of Goa State Board of Secondary and Higher Secondary Education or its equivalent examination with subject English, Physics & Chemistry as compulsory subjects along with one from Mathematics/Computer Science/Biotechnology/Biology and secured minimum **45%** marks (Minimum **40%** marks in case of candidates belonging to SC, ST and OBC) in the subjects Physics, Chemistry and Biology/ Mathematics/Biotechnology/Computer Science added together (For the purpose of preparing the merit list, the highest marks obtained in any one of the subjects of Mathematics/Computer Science /Biotechnology/Biology, shall be considered) and obtained a positive score at Common Entrance Test Conducted by Directorate of Technical Education, Government of Goa, for the year of admission.
  - b. As per the Regulations of Pharmacy Council of India, candidates passing Senior Secondary School Examination conducted by National Open School, New Delhi are not eligible for admission. A candidate seeking admission to the B.Pharm degree course must have appeared and obtained a valid score at the Goa Common Entrance Test GCET conducted by Government of Goa or such other test approved by Government of Goa for the year of admission.
3. Students from other University/Board shall be admitted only on production of a provisional statement of eligibility issued by the University.

4. Eligibility Criteria for Direct Admission at the entry level of Semester III (Second Year B. Pharm.) of the course:

The candidate who has passed the final examination leading to the post Higher/Senior Secondary two year Diploma Course in Pharmacy conducted by the Board of Technical Education, Goa State, or equivalent examination from the Institute approved by the Pharmacy Council of India and with minimum 50% marks, and obtained a positive score at Common Entrance Test for Lateral entry admission to Semester III conducted by Directorate of Technical Education, Government of Goa for the year of admission.

#### **OC-15A.5 COURSE STRUCTURE**

##### **(i) Number of Courses**

The number of theory papers and practicals for the Bachelor of Pharmacy course shall be as recommended by the Board of Studies in Pharmacy from time to time.

##### **(ii) Contact hours**

Each semester ordinarily shall be of 18 weeks of instructional period. The examination for that semester shall be held during or after the 19<sup>th</sup> week after the commencement of the semester. Instruction for each course shall be of 2 hours for theory or 4 hours for practical per week.

#### **OC-15A.6 SCHEME OF EXAMINATION**

There shall be a University examination (Regular and/or Repeat) at the end of each semester. The duration of the University examination for each course shall be of 2 hours for theory or 4 hours for practical.

##### **(i) Total marks assigned to the Paper/ Practical**

Each paper shall be of 50 marks, out of which 10 marks in each paper shall be assigned to internal assessment/ internal tests and 40 marks on the basis of University examination at the end of the semester in both theory and practicals separately.

##### **(ii) (Notified on 26<sup>th</sup> July, 2017) Pattern of Evaluation**

Each theory paper and practical shall be of 50 marks, out of which the candidate shall be examined for 40 marks University examination on the basis of paper setting & evaluation of the entire answer script by external and internal examiners **separately**.

Remaining 10 marks in each paper shall be assigned to internal assessment/ internal tests in both theory and practical separately.

There shall be double evaluation for all the B. Pharm. theory answer scripts by the examiners appointed by Goa University from the master panel, and average marks of the two evaluators will be considered.

The answer script shall be taken up for third evaluation if the difference in marks by the two evaluators is more than 20% of maximum marks. In such cases, average of two highest marks shall be considered.

Consequent to this, there shall be no re-valuation.

### **OC-15A.7 Allowed To Keep Term (ATKT) Rules:-**

- (i) **(Effective from 11<sup>th</sup> November, 2013)** A candidate shall be eligible for ATKT Provided that :-
- (a) **(Effective from 11<sup>th</sup> November, 2013)** The candidate should not have failed in more than 4 theory and 2 practical heads of the odd and even semesters of the Academic year taken together.
- (b) The candidate should have secured 50% marks on the aggregate.
- (c) The candidate passing in all subjects but has failed because of lack of aggregate 50% marks of the total marks obtainable in theory and practical taken together. However, the candidate has an option to choose the number of papers to reappear and obtain the required aggregate of 50% marks. In such cases the candidate shall not claim the benefit of earlier marks in case they fail to improve the percentage in any paper.
- (d) If a candidate having ATKT remains absent in the subsequent examinations, the ATKT continues.

Eligibility to move to the higher semester/year

<b>To move to semester III</b>	<b>Should have cleared Semester I &amp; II OR Should be eligible for ATKT for Semester III</b>
<b>To move to semester V</b>	<b>Should have cleared semester I,II,III &amp; IV OR Should have cleared semester I &amp; II and eligible for ATKT for semester V</b>
<b>To move to semester VII</b>	<b>Should have cleared semester I,II,III,IV,V &amp; VI OR Should have cleared semester I,II,III &amp; IV and eligible for ATKT for semester VII</b>

- (ii) A candidate failing in Semester I, III, V and VII shall be promoted to next higher semester i.e. II, IV, VI and VIII irrespective of the number of papers in which he/she is failing.

### **OC-15A.8 Exemption Provision**

- (1) Candidates are eligible to claim exemption in a paper(s) and/or practicals provided he/she have obtained 50% marks in the head of passing.
- (2) Candidates who have failed but have obtained the overall aggregate of 50% marks, he/she shall necessarily appear in the papers they have failed in.
- (3) Candidates who have not obtained the overall aggregate of 50% marks, may opt to reappear in any number of papers, to enable them to obtain the prescribed passing percentage. In such cases the candidates shall not claim the benefit of earlier marks in case they fail to improve the percentage in any paper.

### **OC-15A.9 Provisions related to repeat examinations**

A candidate who has failed in a particular semester or has ATKT shall be allowed to appear for the repeat examination on a new application being forwarded and a fresh fee paid. A candidate must

submit the prescribed application form along with fees. A candidate must appear for the examination in the place and time as decided by the admitting Institute/the University as the case may be.

#### **OC-15A.10 Minimum requirements for Passing, Grading and Award of Degree**

- (i) The maximum marks for each paper shall be 50 and minimum marks for passing the paper shall be 20 (40%). However an aggregate of 50% of total marks shall be secured by the candidate for passing the semester. No separate passing is prescribed for internal test.
- (ii) A candidate shall be considered as passed in the paper when he/she has secured the minimum marks prescribed for the Semester Examination.
- (iii) A candidate shall be considered as having passed the Semester only when the candidate passes in all the papers and obtains overall a minimum of 50% of the aggregate marks prescribed for the Semester.
  
- (iv) The total duration available for the students to complete the course shall be two times the actual duration prescribed for the course.
- (v) The internal test marks shall be carried forward.
  
- (vi) **(Notified on 26<sup>th</sup> July, 2017)** The general Ordinance pertaining to grace marks shall be applicable. However, there shall be no revaluation.
  
- (vii) The degree of Bachelor of Pharmacy shall be awarded to the candidates who have passed all the eight semesters and successful completion of the field training as specified under Ordinance OC-15A.11. Class shall be awarded to the candidates on the basis of total marks obtained in semester VII & VIII independently in one and the same sitting.

The classes are as under:

- (a) 70% and above - Distinction
  - (b) 60% and above but below 70% - First Class
  - (c) 50% and above but below 60% - Second Class
  - (d) A student who does not clear all the paper of the examination in one and the same sitting is not eligible for any Class/Distinction/Honours. The remark against his/her result will be "Passes".
- (viii) Candidates who have not passed Semester VII and/or VIII in one sitting and desire to obtain class shall be required to reappear for the examination in all the papers on payment of fees with fresh application. Consequently, the candidate shall forfeit all the previous marks and results of all the papers of the semester for which he/she has reappeared for the examination. However, marks obtained at internal test shall be carried forward.

#### **OC-15A.11 FIELD TRAINING/ WORK AT THE COURSE OF STUDY**

Every candidate shall be required to work for at least four weeks in a Pharmaceutical Industry or Pharmacy or Hospital or Pharmaceutical Research and Development Organization or Public Testing Laboratory (Pharmaceuticals) at the end of the Semester VI of the course of study, and shall submit satisfactory report of such work to the Head of the candidate's Institute, who in turn will forward it to the University.

**OC-16 (Effective from June 2018) Ordinance relating to the examination in the Faculty of Medicine the Degree of Bachelor of Medicine & Bachelor of Surgery (M.B.B.S.)\*** (Under Section 24(1) of the Goa University Act, 1984).

## **General**

### **OC-16.1 (Effective from 11<sup>th</sup> June, 2012) Eligibility for admission to First Year M.B.B.S.**

Candidates for the Degree of MBBS for being eligible for admission to the Medical College affiliated to this University must have:

- (i) Completed the age of 17 years on or before 31<sup>st</sup> December of the academic year of admission to become eligible for admission to First Year.
- (ii) Passed the Higher Secondary Certificate (Std. XII<sup>th</sup>) examination of Goa Board of Secondary and Higher Secondary Education or its equivalent examination with English and secured not less than 50% marks in the aggregate of subjects of Physics, Chemistry and Biology taken together (40% for the applicants belonging to SC, ST and OBC only and 45% for applicants belonging to PH category).
- (iii) **(effective from 17<sup>th</sup> July, 2013)** A candidate seeking admission to the MBBS degree course must have appeared and obtained a valid score /rank at NEET conducted by CBSE for the year of admission.

**OC-16.2** Admission to the First M.B.B.S. course shall be made by 1<sup>st</sup> August in each academic year.

**OC-16.3** Number of working days in each year shall not be less than 240 (two hundred and forty) inclusive of the days of the examinations.

### **OC-16.4 (Effective from June 2018) General**

*Candidates for the Degree of M.B.B.S. shall be required to undergo a period of certified study extending over 4½ academic years, consisting of 9 semesters. After a period of study extending over two semesters or one year in the subjects specified in OC-16.5, the candidates, on production of necessary certificates and the payment of examination fees, shall be entitled to appear for the First M.B.B.S. Examination. After passing the First M.B.B.S. Examination candidates shall be required to spend 7 semesters or three and one half years in a continuous study of Para-Clinical and Clinical group of subjects and pass the Second M.B.B.S. Examination before being entitled to appear for the clinical subjects in Final M.B.B.S. Part-I Examination. Only those candidates, who pass the Final M.B.B.S. Part-I Examination, shall be allowed to appear for the Final M.B.B.S. Part-II Examination. The Degree of M.B.B.S. shall not be conferred on a candidate unless s/he has successfully undergone the Compulsory Rotatory Internship Training of 12 months duration in the manner prescribed in OC-16.36 subsequent to her/his passing the Final M.B.B.S. Examination.*

**OC-16.5** Every student shall undergo a period of training extending over 4 ½ academic years divided into 9 semesters. The period of 4 ½ years shall be divided into three phases as:

(a) **Phase-I** (2 semesters) - consisting of Pre-clinical subjects (Human Anatomy, Physiology including

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\* The First M.B.B.S. course comes into force with effect from academic year 1997-98 and the examination under the said course will be held for the first time in June 1998.

Bio-Physics, Bio-chemistry and introduction to Community Medicine including Humanities). Besides 60 hours for introduction to Community Medicine including Humanities, rest of the time shall be somewhat equally divided between Anatomy and Physiology plus Biochemistry combined (physiology 2/3 and Biochemistry 1/3) as in schedule OSC-4.7.

(b) **Phase-II** (3 semesters) - consisting of para-clinical/clinical subjects. During this phase, teaching of para-clinical and clinical subjects shall be done concurrently and collaterally. The para-clinical subjects shall consist of Pharmacology, Pathology, Microbiology, Forensic Medicine including Toxicology and part of Community Medicine. The clinical subjects shall consist of all those detailed below in Phase III. Out of the time for para-clinical teaching, approximately equal time shall be allotted to Pharmacology, Pathology, Microbiology, and Forensic Medicine and Community Medicine combined (1/3 Forensic Medicine and 2/3 Community Medicine) as shown in schedule OSC-4.14.

(c) (effective from 22<sup>nd</sup> December, 2009) **Phase-III (Continuation of study of clinical subject for seven semesters after passing Phase-I) – The clinical subjects to be taught during phase II and III are Medicine and its allied specialities, Surgery and its allied specialities, Obstetrics and Gynecology and Community Medicine.**

Medicine and its allied specialities training shall include General Medicine, Pediatrics, Tuberculosis and Chest Diseases, Skin and Sexually Transmitted Diseases, Psychiatry, Infectious Diseases, etc. The Surgery and its allied Specialities shall include-General Surgery Orthopedic Surgery including Physiotherapy and Rehabilitation, ophthalmology, Otorhinolaryngology Anesthesiology, Dentistry, Radiotherapy, Radiodiagnosis etc. The Obstetrics and Gynecology training shall include Family Planning and Family Welfare.

The time for teaching clinical subjects from 3<sup>rd</sup> to 9<sup>th</sup> semester shall be as shown in Schedule OSC-4.21 and OSC-4.28 respectively for Third M.B.B.S. Part-I and Part-II Examinations.

Candidates, before presenting themselves for the University Examination as in schedule OSC-4.6 at the end of the First M.B.B.S., Second M.B.B.S., Third M.B.B.S. Part-I and Third M.B.B.S. Part-II courses of study, shall have combined 75% attendance in theory and in non-lecture teachings i.e., seminars, group discussions, tutorials, demonstrations, practicals, hospital postings, bed-side clinics, etc. in each subject of the examination at the time of filling the examinations form and shall produce certificates from the Head of the Department/Dean of the Medical College of having satisfactorily completed the course of study (both in theory and practicals) in the subject of examination.

**OC-16.6** The phase distribution and the timing of the examinations shall be as under:

Phase	Semester distribution			Time of University Examination
	6 Months	6 Months	6 Months	
I	1	2		1 <sup>st</sup> Professional Examination (during Second Semester)
II	3	4	5	2 <sup>nd</sup> Professional Examination (during fifth Semester)
III - Part I	6	7		3 <sup>rd</sup> Professional Part-I Examination (during seventh Semester)
III - Part II	8	9		3 <sup>rd</sup> Professional Part-II Examination (during ninth Semester)

Note:

- (a) Passing in 1<sup>st</sup> Professional is compulsory before proceeding to Phase II training.
- (b) A student who fails to pass in the 2<sup>nd</sup> Professional Examination shall not be allowed to appear in 3<sup>rd</sup> Professional Part-I Examination unless he/she passes all subjects of 2<sup>nd</sup> Professional Examination.
- (c) Passing in 3<sup>rd</sup> Professional (Part-I) Examination is not compulsory before entering for 8<sup>th</sup> and 9<sup>th</sup> semester training; however, passing in 3<sup>rd</sup> Professional Part-I is compulsory for being eligible for 3<sup>rd</sup> Professional Part-II examination.

**OC-16.7** During the 3<sup>rd</sup> to the 9<sup>th</sup> Semesters, clinical postings of three hours duration daily as specified in the table below shall be followed for the various departments after Introductory Course in Clinical Methods in Medicine and Surgery each of 2 weeks duration for the entire class:

Total Subjects	3 <sup>rd</sup> Seme- ster (Wk.)	4 <sup>th</sup> Seme- ster (Wk.)	5 <sup>th</sup> Seme- ster (Wk.)	6 <sup>th</sup> Seme- ster (Wk.)	7 <sup>th</sup> Seme- ster (Wk.)	8 <sup>th</sup> Seme- ster (Wk.)	9 <sup>th</sup> Seme- ster (Wk.)	Total Weeks
General Medicine §	6	-	4	-	4	6	6	26
Paediatrics	-	2	-	2	2	4	2	10
TB & Chest Diseases	-	2	-	-	-	-	-	02
Skin & VD	-	2	-	2	-	2	-	06
Psychiatry	-	-	2	-	-	-	-	02
Radiology*	-	-	-	-	2	-	-	02
General Surgery@	6	-	4	-	4	6	6	26
Orthopedic#	-	-	4	4	-	-	2	10
Ophthalmology	-	4	-	4	-	-	2	10
E.N.T.	-	4	-	4	-	-	-	08
Obst. + & Gynaec. (including family welfare)	2	4	4	-	4	4	6	24
Community Medicine	4	4	-	4	-	-	-	12
Casualty	-	-	-	2	-	-	-	02
Dentistry	-	-	-	-	2	-	-	02
Total (in weeks)	18	22	18	22	18	22	22	142

§ The posting in General Medicine includes exposure to laboratory medicine and infectious diseases.

\* The posting in Radiology includes training in Radio Diagnosis and Radio Therapy.

@ The posting in Surgery includes exposure to dressing and Anaesthesia.

# The posting in Orthopaedics includes exposure to Rehabilitation and Physiotherapy.

+ The posting in Obstetrics includes maternity training and family medicine with the 3<sup>rd</sup> semester posting being in Family Welfare Planning.

**OC-16.8 (Effective from June 2018)** *Candidates, before presenting themselves for the University Examination as in schedule OSC-4.6 at the end of the First M.B.B.S., Second M.B.B.S., Third M.B.B.S. Part-I and Third M.B.B.S. Part-II courses of study, shall require to have a minimum of 75% attendance inclusive of attendance in non-lecture teaching, such as seminars, group discussions, tutorials, demonstrations, practicals, hospital (Tertiary, Secondary, Primary) posting & bed side clinics, etc in each subject of the examination at the time of filling the examination form and shall produce certificates from the Head of the*



*Department/Dean of the Medical College of having satisfactorily completed the course of study (both in theory and practicals) in the subject of examination.*

**OC-16.9 (Effective from June 2018)** *Candidates, for being eligible to appear in the University Examination under the Ordinance OSC-4.6 in a particular subject, must have secured minimum 35% marks of the total marks fixed for internal assessment in that subject. Weightage of internal assessment shall be 20% of the total marks in each subject.*

**OC-16.10.1 (Effective from June 2018)** *Failure to pass an examination shall not debar candidate from appearing at any, subsequent examination on the submission of a new application, the payment, of fresh fees and the production of the certificates showing that they have, during the interval between the declaration of their failure and subsequent reappearance at the examination, pursued a further course of study in the subject of the examination to the satisfaction of the Head of the Medical College and attained a minimum of 75% attendance inclusive of attendance in non-lecture teaching, such as seminars, group discussions, tutorials, demonstrations, practicals, hospital (Tertiary, Secondary, Primary) posting & bed side clinics, etc. For passing the First M.B.B.S. candidates shall be permitted not more than four chances (actual examinations) provided the four chances are taken within a period of three years from the date of their admission to the first M.B.B.S. course. Candidates failing to pass the First M.B.B.S. Examination in four chances shall be debarred from continuing further medical studies under this University.*

**OC-16.10.2** Candidates shall be deemed to have failed to pass an examination under the provision of this Ordinances if their names have been submitted by the Dean of the Medical College for inclusion in the list of candidates appearing for the examination and if the candidates have failed to pass the examination either because they have not attained the standard of passing or because they have been absent from the whole examination or from any part of it.

**OC-16.11.1** To pass in each subject of the examination the candidate shall obtain 50% of the full marks in the aggregate with a minimum of 50% in the theory including orals and minimum of 50% in practical examination separately in one and the same sitting.

**OC-16.11.2** A candidate who has passed any of the subject of the examination by obtaining 50% marks as mentioned above shall be exempted from appearing in that subject at the subsequent examination and shall be declared to have passed the whole examination when he has passed in all the subjects in that examination.

**OC-16.12** The subject or subjects in which successful candidates may have distinguished themselves shall be shown in the mark list. In order to obtain distinction in any of the subjects of the examination, a candidate shall obtain 75% of the full marks allotted to that subject without any grace marks in that subject.

**OC-16.13** (effective from 14<sup>th</sup> July, 2005) The grace marks up to a maximum of five marks may be awarded at the discretion of the University to a student who has failed only in one subject that is theory and / or practical but has passed in all other subjects of that examination.

**OC-16.14** There shall be no revaluation of answer books of written test(s) in any of the subject(s) of the examinations.

**OC-16.15** Except as otherwise provided, only those candidates shall be eligible for University awards who pass the whole examination, at one and the same sitting at the first attempt without any grace marks in any subject of the examination, in the July session for the First, and the January session for the Second, and Part-I and Part-II of the Third M.B.B.S. Examination.

**OC-16.16** No person shall be appointed as an examiner in any of the subjects of the M.B.B.S. examinations, unless he has taken at least 5 years previously a doctorate degree of a recognized university or an equivalent qualification in that particular subject of the examination and has had at least 5 years of total teaching experience in that subject at undergraduate level at a faculty position in a college affiliated to a recognized University. There shall be a minimum of 4 examiners of which not less than 50% shall be external examiners. Of the 4 examiners, the senior most internal examiner shall act as Convenor. The External examiners shall not be from the same University and preferably be from outside the State. The External examiners shall rotate at an interval of 2 years. There shall be a Chairman of the Board of paper setters who shall be an internal examiner and shall moderate the questions.

### **First M.B. B.S. Examination\***

**OC-16.17** Candidates, entering upon the courses in the academic year 1997-98 and thereafter before admission of the First M.B.B.S. Examination under OC-16.08 shall produce certificates of having attended, over a period of 2 academic semesters, the following courses to the satisfaction of the Head of the College:

- i) Human Anatomy            ii) Human Physiology including Bio-physics            iii) Human Biochemistry            iv) Community Medicine

Provided that there shall be no University Examination in the subject of Community Medicine at the end of the pre-clinical course of study.

**1. Human Anatomy:** The course shall comprise of (a) Principles of human embryology; (b) Principles of human genetics; (c) Histology; and (d) Gross Anatomy of the entire human body including living anatomy and applied anatomy.

The practical teaching in Gross Anatomy should be done by the students dissecting the human body along with demonstrations of dissected parts, bones, models and charts. The practical training in Histology includes the principles of histological techniques but excluding block making, section cutting and staining.

The teaching in the subject of Human Anatomy shall be done in the form of lectures, demonstrations, tutorial, seminars, group discussions, electives, etc. with special emphasis on the applied aspect of the subject and integrated teaching.

**2. Human Physiology including Bio-Physics:** The course shall comprise of: (a) General and systemic physiology of human body; (b) Principles of bio-physics as applicable to human body; (c) Growth, development, nutrition and dietetics; (d) Experimental work involving demonstration of functions of various organ systems of mammalian and other animals including use of instruments required for such demonstration for the purpose of assessment of functions in the human body; and (e) General aspects of the applied physiology and clinical human physiology.

The teaching in subject of Physiology shall be done in the form of lectures, tutorials, group

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\* The examination under this Ordinance shall be held for the first time in June 1998.

discussions, demonstrations, practicals, elective work, students seminars Problem-based learning and integrated teaching.

**3. Human Biochemistry:** The course shall comprise of:

(a) The course in Biochemistry shall be oriented to human biochemistry with emphasis on the applied aspects of biochemical processes in conditions of health and diseases; (b) Biochemical examinations of samples of body fluids, etc.; and (c) Laboratory work in practical biochemistry; (d) General aspects of metabolic basis of disease.

The teaching in the subject of Human Biochemistry shall be done in the form lectures, tutorials, demonstrations, practicals, group discussions, seminars elective, etc. and integrated teaching.

**4. Community Medicine:** During the pre-clinical period, the students shall undergo the course of instructions for introducing them to Community Medicine.

(a) Introduction to community Medicine including History of Medicine; (b) Role of nutrition in health and diseases; (c) Concepts in health and Health for All; (d) Principles of sociology including demography, population dynamics, elements of bio-statistics, social factors related to health and diseases, urban and rural societies impact of urbanisation on health and disease, community behaviour and ecology; (e) Health Education; (f) Genetics; (g) Environmental hygiene;

Note: (1) The teaching of Community Medicine shall be in the form of 60 hours of lectures, demonstrations and seminars.

**OC-16.18 (Effective from June 2018) Migration:**

- (1) Migration of students from one medical college to another medical college may be granted on any genuine ground subject to the availability of vacancy in the college where migration is sought and fulfilling the other requirements laid down in the Regulations. Migration would be restricted to 5% of the sanctioned intake of the college during the year. No migration will be permitted on any ground from one medical college to another located within the same city.*
- (2) Migration of students from one College to another is permissible only if both the colleges are recognised by the Central Government under section 11(2) of the Indian Medical Council Act, 1956 and further subject to the condition that it shall not result in increase in the sanctioned intake capacity for the academic year concerned in respect of the receiving medical college.*
- (3) The applicant candidate shall be eligible to apply for migration only after qualifying in the first professional MBBS examination. Migration during clinical course of study shall not be allowed on any ground.*
- (4) For the purpose of migration an applicant candidate shall first obtain "No Objection Certificate" from the college where he/she is studying for the present and the University to which that college is affiliated and also from the college to which the migration is sought and the university to it that college is affiliated*
- (5) He/She shall submit his application for migration within a period of 1 month of passing (Declaration of result of the 1st Professional MBBS examination) alongwith the above cited four "No Objection Certificates" to: (a) the Director of Medical Education of the State, if migration is sought from one*

*college to another within the same State or (b) the Medical Council of India, if the migration is sought from one college to another located outside the State.*

**OC-16.19 (Effective from June 2018)** *Failure to pass the First M.B.B.S. Examination shall not debar candidates from appearing at any subsequent examination on the submission of a new application, the payment of fresh fees, and the production of certificates showing that they have during the interval between the declaration of their failure and subsequent reappearance at the examination, pursued a further course of study in the subjects of the examination to the satisfaction of the Dean, Goa Medical College. Candidates failing to pass the First M.B.B.S. Examination in four chances shall be debarred from pursuing further studies under this University.*

*Candidates shall be deemed to have failed to pass an examination under the provision of the above ordinance, if their names have been submitted by the Dean, Goa Medical College for inclusion in the list of candidates of the examination, and if the candidates have failed to pass the examination either because they have not attained the standard or because they have been absent from the whole examination or from any part of it.*

*Passing 1<sup>st</sup> M.B.B.S. Examination is compulsory before entering training for the 3<sup>rd</sup> semester.*

**OC-16.20** A candidate who has passed in any of the subjects of the First M.B.B.S. Examination is exempted from appearing in that subject at subsequent examination and shall be declared to have passed the whole examination when he has passed in all the subjects of the First M.B.B.S. Examination.

### **Second M.B.B.S. Examination**

**OC-16.21** No candidate shall be admitted to the Second M.B.B.S. Examination unless he has passed the First M.B.B.S. Examination and has been engaged in medical studies at a Medical College affiliated to Goa University for a period of one and one-half years or three academic semesters after passing the First M.B.B.S. Examination.

**OC-16.22** Before admission to the Second M.B.B.S. Examination, under the provisions of OC-16.8, candidates shall present certificates of having attended over a period of three semesters, the following course to the satisfaction of the Head of the College:

1. Pharmacology
2. Pathology
3. Microbiology
4. Forensic Medicine and Toxicology
5. Community Medicine

#### **1. Pharmacology**

The course shall comprise of:

- (a) Pharmacology including Pharmacotherapy and Toxicology of drugs with special reference to study of drugs in the Indian Pharmacopoea;
- (b) Introduction of clinical/applied pharmacology;
- (c) Experimental pharmacology through demonstrations; and
- (d) Principles of practical pharmacy.

The teaching in the subject of Pharmacology shall be done in the form of lectures, practicals, demonstrations, tutorials, seminars, group discussions, electives, etc. with special emphasis on the applied aspect of the subject and integrated teaching.

## **2. Pathology**

The course shall comprise of the following:

General Pathology of diseases and their morbid anatomy; (b) Clinical and chemical pathology, and haematology of commonly encountered diseases; and (c) Laboratory diagnosis of diseases.

The teaching in the subject of Pathology shall be done in the form of lectures, demonstrations, practicals, tutorials, seminars, group discussions, electives, etc. with special emphasis on the applied aspect of the subject and integrated teaching. Teaching in Pathology and Microbiology shall be co-ordinated and reflect their close relationship with each other.

## **3. Microbiology**

The course shall comprise of the following:

(a) Microbiology with special emphasis on preventive aspects, including introduction to the principles and practice of bacteriology, mycology, virology, etc.; (b) Parasitology with special emphasis on the prevailing parasitic diseases in India; and (c) Immunology and related phenomenon; (d) Laboratory diagnosis of common-infective syndromes.

The teaching in the subject of Microbiology shall be done in the form of lectures, practicals, demonstrations, tutorials, seminars, group discussions, electives, etc. with special emphasis on the applied aspect of the subject and integrated teaching. Teaching in pathology and microbiology shall be co-ordinated and reflect their close relationship with each other.

## **4. Forensic Medicine and Toxicology**

The course shall consist of:

(a) A course of instructions in Forensic Medicine, Medical Jurisprudence and toxicology and (b) Candidates will be required to attend 10 medico-legal autopsies.

The teaching in the subject of Forensic Medicine & Toxicology shall be in the form of lectures, demonstrations, practicals, tutorials, seminars, group discussions, electives, etc. with special emphasis on the applied aspect of the subject and integrated teaching.

## **5. Community Medicine**

The course shall comprise of:

(a) Screening for disease; (b) Communicable diseases; (c) Non-communicable diseases; (d) Maternal and child health and family welfare; (e) Demography and Basic Medical statistics; and (f) Occupational health.

The teaching in the subject of Community Medicine shall be done in the form of lectures, demonstrations, practicals, tutorials, seminars, group discussions, electives, etc. with special emphasis on the applied aspect of the subject and integrated teaching.

**OC-16.23** Failure to pass the examination shall not debar candidates from appearing at any subsequent examination on the submission of a new application, the payment of a fresh fee and the production of certificates showing that they have, during the interval between the declaration of their failure and subsequent reappearance at the examination, pursued a further course of study in the subjects of the examination, to the satisfaction of the Dean, Goa Medical College.

Candidates shall be deemed to have failed to pass an examination under the above ordinance, if their names have been submitted by the Dean, Goa Medical College for inclusion in the list of candidates for the examination, and if the candidates have failed to pass the examination either

because they have not attained the standard or because they have been absent from the whole examination or from any part of it.

Passing 2<sup>nd</sup> Professional Examination is not compulsory before entering training for 6<sup>th</sup> to 9<sup>th</sup> semester.

**OC-16.24** A candidate who has passed in any of the subjects of the Second M.B.B.S. Examination is exempted from appearing in that subject at subsequent examination and will be declared to have passed the whole examination when he has passed in all the subjects of the Second M.B.B.S. Examination.

### **The Third M.B.B.S. Examination**

**OC-16.25** No candidate shall be admitted to the Third M.B.B.S. examination unless he has passed the Second M.B.B.S. examination and has been engaged in medical studies at the Medical College recognized by Goa University, for at least one clear term, after passing the Second M.B.B.S. Examination and for at least two and half years after passing the First M.B.B.S. Examination for Third M.B.B.S. Part-I Examination and for at least three and half years after passing the First M.B.B.S. Examination for Third M.B.B.S. Part-II Examination.

**OC-16.26** The examination in the Third M.B.B.S. shall be in two parts. The Third M.B.B.S. Part-I Examination shall be during the 7<sup>th</sup> semester of Phase III training in the subjects of Oto-Rhino-Laryngology, Ophthalmology and Community Medicine and the Third M.B.B.S. Part-II Examination shall be during the 9<sup>th</sup> semester at the end of Phase III training in the subjects of Medicine, Paediatrics, Surgery, Obstetrics and Gynaecology.

**OC-16.27** The clinical postings in the subjects of Third M.B.B.S. Part-I Examination shall be as shown in table under OC-16.8. Period of posting shall not be less than three hours per day.

### **Third M.B.B.S. Part-I Examination**

**OC-16.28** Before admission to the Third M.B.B.S. Part-I Examination, under the provision of OC-16.8, candidates shall present certificates of having attended, over a period of 2 ½ years (3<sup>rd</sup> to 7<sup>th</sup> semesters), the following courses to the satisfaction of the Head of the College:

1. Oto-Rhino-Laryngology (ENT), 2. Ophthalmology 3. Community Medicine.

**1. Oto-Rhino-Laryngology (ENT):** The course shall consist of:

(a) Ear: Anatomy of ear, Physiology and functional tests of hearing and equilibrium, Diseases of external ear, Diseases of middle ear, middle ear surgery, diseases of mastoid, causes and management of deafness, vertigo.

(b) Nose: Anatomy and physiology of nose and paranasal sinuses, Acute and chronic rhinitis, nasal polyposis, epistaxis, sinusitis, Diseases of nasal septum, Foreign body in nose, tumors of nose and paranasal sinuses.

(c) Throat: Anatomy and physiology of pharynx, Acute and chronic conditions of pharynx, adenoidectomy, tonsillectomy, tumors of pharynx, naso-pharynx and laryngeal pharynx, Anatomy of larynx, tracheobronchial tree and oesophagus, Diseases of larynx, Foreign bodies in larynx and tracheobronchial tree; Tracheostomy, endoscopic examination in ENT.

**2. Ophthalmology:** The course shall consist of:

(a) Applied Anatomy and Physiology of eye, Diseases of eyelids, Conjunctivitis, Trachoma, Orbital cellulites; (b) Diseases of Cornea, Eye Bank, Diseases of Sclera, Glaucoma, Ocular trauma; (c) Cataract and its management, Diseases of Retina, Introduction to recent advances in Vitreo-retinal

Surgery, Slit Lamp, Refractive errors, squints; and (d) Community Ophthalmology.

**3. Community Medicine:** The course shall consist of:

(a) Historical perspectives, Health for All, Concepts of health and disease, Social Sciences and health, Health education and communication. (b) Principles of epidemiology and epidemiologic methods, Screening for disease, Epidemiology of communicable diseases and epidemiology of chronic non-communicable diseases and conditions. (c) Demography and family planning, Preventive medicine in obstetrics, Paediatrics and geriatrics, Nutrition and health, Genetics and health (d) Environment and health, Occupational health, Mental health (e) Health information and Basic Medical Statistics, Health planning and management, Health care of the community, Health programmes in India and International health.

**OC-16.29** Failure to pass Third M.B.B.S. Part-I Examination shall not debar candidates from appearing at any subsequent examination on the submission of a new application, the payment of a fresh fee and the production of certificates showing that they have, during the interval between the declaration of their failure and subsequent reappearance at the examination, pursued a further course of study in the subjects of the examination, to the satisfaction of the Dean, Goa Medical College.

Candidates shall be deemed to have failed to pass the examination under the above ordinance, if their names have been submitted by the Dean, Goa Medical College for inclusion in the list of candidates for the examination, and if the candidates have failed to pass the examination either because they have not attained the standard or because they have been absent from the whole examination or from any part of it.

Passing in 3<sup>rd</sup> M.B.B.S. Part-I Examination is not compulsory before entering for 8<sup>th</sup> and 9<sup>th</sup> semester training; however, passing in 3<sup>rd</sup> M.B.B.S. Part-I Examination is compulsory for being eligible for 3<sup>rd</sup> M.B.B.S. Part - II Examination.

**OC-16.30** A candidate who has passed in any of the subjects of the Third M.B.B.S. Part-I Examination is exempted from appearing in that subject at subsequent examination and shall be declared to have passed to whole examination when he has passed in all the subjects of the Third M.B.B.S. Part-I Examination.

### **Third M.B.B.S. Part-II Examination**

**OC-16.31** No candidate shall be admitted to the Third M.B.B.S. Part-II Examination unless, he has passed the Second M.B.B.S. examination and has been engaged in medical studies at the Medical College recognized by Goa University, for at least one clear term, after passing the Third M.B.B.S. Part-I Examination, and for at least three and half years after passing the First M.B.B.S. Examination.

**OC-16.32** The clinical postings in the subjects of Third M.B.B.S. Part-II Examination shall be as shown in table under OC-16.7. Period of posting shall not be less than three hours per day.

**OC-16.33** Before admission to the Third M.B.B.S. Part-II Examination, under the provision of OC-16.8, candidates shall present certificates of having attended, over a period of 3 ½ years (3<sup>rd</sup> to 9<sup>th</sup> semesters), the following courses to the satisfaction of the Head of the College.

(1) General Medicine, Therapeutics, Applied Pathology and Allied subjects (2) Paediatrics (3) Surgery including Orthopaedics (4) Obstetrics, Gynaecology, Family Planning and Neonatology.

**OC-16.34** A failure to pass the Third M.B.B.S. Part-II Examination, shall not debar candidates from appearing at any subsequent examination, on the submission of a new application, the payment of a fresh fee and production of certificates showing that they have, during the interval between the declaration of their failure and subsequent reappearance at the examination, further pursued a course of the study in the subject of the examination to the satisfaction of the Dean, Goa Medical College.

Candidates shall be deemed to have failed to pass an examination under the above clause, if their names have been submitted by the Dean, Goa Medical College for inclusion in the list of candidates appearing for the examination, and if the candidates have failed to pass the examination because they have not attained the prescribed standard of passing.

**OC-16.35** A candidate who has passed in any of the subjects of the Third M.B.B.S. Part-II Examination is exempted from appearing in that subject at subsequent examination and shall be declared to have passed the whole examination when he has passed in all the subjects of the Third M.B.B.S. Part-II Examination.

**OC-16.36 Internship**

Candidates for being eligible for the award of the degree of Bachelor of Medicine and Bachelor of Surgery shall be required to successfully undergo the Compulsory Rotatory Internship Training of twelve months duration, in the manner hereinafter provided, to the satisfaction of the Head of the Institution and Goa University.

**OC-16.37 (Effective from June 2018) Compulsory Postings:**

Community Medicine	2 months	Ophthalmology	15 days
Medicine including 15 days of Psychiatry	2 months	Oto-rhino-laryngology	15 days
Surgery including 15 days of Anaesthesia	2 months	Casualty	15 days
Obst./Gynae. including Family Welfare Planning	2 months	Elective Postings	15 days
Paediatric	1month	Orthopaedics including PMR (Physical Medicine and Rehabilitation)	1 month

**(Effective from June 2018) Elective subjects:**

*Subjects for elective posting shall be as follows:*

- (a) Dermatology and Sexually Transmitted Diseases, (b) Tuberculosis and Respiratory Diseases, (c) Radio-diagnosis (d) Forensic Medicine (e) Blood Bank (f) Psychiatry*

**OC-16.38** No candidates shall be admitted to the internship training programme without obtaining



provisional registration with the State/Indian Medical Council.

**OC-16.39** No period of Internship can be condoned by the authorities of the College or/and University without written approval of the Medical Council of India.

**OC-17 Ordinances relating to the course of study for the degree of Bachelor of Dental Surgery (B.D.S.)\*** (Under Section 24(1) of the Goa University Act, 1984).

**General**

**OC-17.1 (Effective from 12<sup>th</sup> June, 2012)** Every candidate for being eligible for admission to a Dental college affiliated to this University must have:

(i) Completed the age of 17 years on or before 31<sup>st</sup> December of the academic year of admission to become eligible for admission to First Year.

(ii) Passed the Higher Secondary Certificate (Std. XII<sup>th</sup>) examination of Goa Board of Secondary and Higher Secondary Education or its equivalent examination with English and secured not less than 50% marks in the aggregate of subjects of Physics, Chemistry and Biology taken together (40% for the applicants belonging to SC, ST and OBC only and 45% for applicants belonging to PH category).

(iii) **(Effective from 17<sup>th</sup> July, 2013)** A candidate seeking admission to the BDS degree course must have appeared and obtained a valid score /rank at NEET conducted by CBSE for the year of admission.

**OC-17.2** A candidate shall be admitted to the First, Second, Third or the Final B.D.S. examination only on producing a certificate signed by the Head of the college of having attended clinics, lectures, seminars, laboratories for not less than three-fourths of the hours of the course per term in each of the subjects and has completed the requirement of the course prescribed in each of the subjects to the satisfaction of the Head of the Department. (No changes)

**OC-17.2.** (a) Failure to pass the examination shall not debar candidates from appearing at any subsequent examination, on the submission of a new application, the payment of fresh fee, and the production of a certificate showing that they have, during the interval between the declaration of their failure and subsequent reappearance at the examination, pursued a further course of study in the subjects in which they wish to present themselves for the examination for the time being, to the satisfaction of the Head of a Dental College recognized by the University. Provided further that candidates who fail to pass this examination on four occasions shall not be eligible to reappear thereat. (No changes).

Candidates shall be deemed to have failed to pass the examination under the above Ordinance if their names have been submitted by the Principal of their College for inclusion in the list of candidates for the examination and if they have failed to pass the examination either because they have not attained the standard of passing or because they have been absent from the whole examination or from any part of it. (No changes).

**Second Year Examination for the Degree of B.D.S.**

**OC-17.3.** A candidate shall be admitted to this examination subsequent to his passing First Year Examination for the Degree of B.D.S. of this University and after satisfying the requirement under OC-17.2. (Amended)

**OC-17.4.** No candidate will be allowed to keep terms for the Second Year unless he/ she passes all the subjects of the First Year BDS Examination in conformity with schedule SOC-5.3 (Amended).

### **Third Year Examination of the Degree of B.D.S.**

**OC-17.5.** A candidate shall be admitted to this examination subsequent to his passing Second Year Examination for the Degree of B.D.S. of this University and after satisfying the requirement under OC-17.2 (Amended).

**OC-17.6.** No candidate will be allowed to keep terms for the Third Year unless he/ she passes all the subjects of the Second Year BDS Examination in conformity with schedule SOC-5.8 (Amended).

Final Examination for the Degree of Bachelor of Dental Surgery (B.D.S.)

**OC-17.7.** A candidate shall be admitted to the Part I examination of the Final BDS subsequent to his passing the Third Year Examination for the Degree of B.D.S. of the University and after satisfying the requirement under OC-17.2. (Amended.)

**OC-17.8** A Candidate shall be admitted to the Part II examination of Final BDS after satisfying the requirement under OC-17.2 irrespective of his/ her performance at the part-I Examination and will be permitted to appear for Part-I and Part-II examinations simultaneously. (Amended )

**OC-17.9.** No candidate will be allowed to keep terms for the Final Year unless he/ she passes all the subjects of the Third Year BDS Examination in conformity with Schedule SOC-5.13. (Amended).

**OC-17.10.** A student who has passed the Part I Examination at the Final Year B.D.S. Course of this University in conformity with Schedule OSC-5.13 shall be allowed to keep terms and appear for the Part II Examination for the Final Year Degree of B.D.S. after keeping one term with 75% attendance, but shall not be declared to have passed this examination under any circumstances unless he/ she has passed the Part I Examination of the Final B.D.S. examination. (Amended ).

**OC-17.11.** Failure to pass the examination shall not debar candidate from appearing at any subsequent examination, in the submission of a new application, the payment of a fresh fee, and the production of a certificate showing that they have, during the interval between the declaration of their failure and subsequent re-appearance at the examination pursued a further course of study in the subject in which they wish to present themselves for the examination for the time being, to the satisfaction of the Head of a Dental College recognized by the University. (Amended).

**OC-17.12** Candidates shall be deemed to have failed to pass the examination under the above Ordinance if their names have been submitted by the Head of their College for inclusion in the list of candidates for the examination and if they have failed to pass the examination either because they have not attained the standard of passing or because they have been absent from the whole examination or from any part of it. (Amended ).

**OC-17A (Effective from 15<sup>th</sup> April, 2014) Ordinance relating to the course of study for the Degree of Bachelor of Dental Surgery (B.D.S.)** (Under Section 24(1) of the

Goa University Act, 1984).

**OC-17A GENERAL**

**OC-17A.1 OBJECTIVES**

The Bachelor of Dental Surgery program is designed for the systematic acquisition of adequate knowledge, laboratory and clinical skills and professional attitudes for the competent practice of general dentistry.

**OC-17A.2 DURATION OF THE COURSE**

The BDS degree program shall be of four years duration with 240 teaching days in each academic year and followed by one year of compulsory rotating Internship.

**OC-17A.3 DEGREE TO BE AWARDED**

Bachelor of Dental Surgery (BDS)

**OC-17A.4 ELIGIBILITY FOR ADMISSION**

**OC-17A.4.1 To the BDS program**

For admission to the First Year Bachelor of Dental Surgery (BDS) degree program, a candidate shall have:

1. Completed 17 years on or before 31st December of the year of admission.
2. Obtained minimum prescribed marks/percentile at the National Eligibility cum Entrance Test (NEET) or fulfilled the criteria as stated in the prospectus for Professional Degree Courses issued by the Directorate of Technical Education, Government of Goa with effect from the academic year 2014-2015.

**OC-17A.4.2 To each academic year**

1. A candidate shall be admitted to the First, Second, Third and Fourth/Final BDS Examination only on satisfying the prescribed attendance requirement for Lectures, Practicals/Clinics, Seminars and fulfilling quota requirements of the program per term in each of the subjects.
2. Any candidate who does not pass the I BDS examination within three years from the date of admission shall have to discontinue from the program and his/her registration stands cancelled.

**OC-17A.5 MIGRATION :**

1. Migration from one dental college to another is not the right of the student. However, migration from one dental college to another may be considered by the Dental Council of India only in the beginning of II BDS program in exceptional case of declaration of disturbed condition in the Dental College area by the Government and/or on extreme compassionate ground of death of supporting guardian, provided the following criteria are fulfilled:
  - a. Both, the college at which the student is studying at present and the one to which migration is sought to, are recognized by the Dental Council of India.
  - b. The candidate should have passed the first BDS examination.
  - c. The candidate submits the application for migration to the authorities concerned within a period of one month of passing the first BDS examination.
  - d. The candidate must submit an affidavit stating that he/she will pursue 240 days of prescribed study before appearing at the II BDS examination at the transferee dental college. The affidavit should be duly certified by the Registrar of the concerned University in which he/she is seeking transfer. The transfer will be applicable only after receipt of the affidavit.
2. All applications for migration shall be referred to the Dental Council of India by the college authorities. No Institution/University shall allow migration directly without the prior approval of the Council.

**OC-17A.6 COURSE STRUCTURE**

**OC-17A.6.1 NUMBER OF COURSES/PAPERS**

**I BDS**

1. GENERAL HUMAN ANATOMY INCLUDING EMBRYOLOGY AND HISTOLOGY
2. GENERAL HUMAN PHYSIOLOGY AND BIOCHEMISTRY
3. DENTAL ANATOMY, EMBRYOLOGY AND ORAL HISTOLOGY

**(Effective from 2nd June, 2015) II BDS**

1. GENERAL PATHOLOGY AND MICROBIOLOGY
2. GENERAL AND DENTAL PHARMACOLOGY AND THERAPEUTICS
3. DENTAL MATERIALS
4. PRECLINICAL LABORATORY PROGRAMS
  - I. CONSERVATIVE DENTISTRY - ONLY PRACTICAL AND VIVA
  - II. PRECLINICAL PROSTHODONTICS AND CROWN AND BRIDGE-ONLY PRACTICAL AND VIVA VOCE

**III BDS**

1. GENERAL MEDICINE
2. GENERAL SURGERY
3. ORAL PATHOLOGY AND MICROBIOLOGY

**IV BDS  
PART I**

1. PUBLIC HEALTH DENTISTRY
2. PERIODONTOLOGY
3. ORTHODONTICS AND DENTOFACIAL ORTHOPEDICS
4. ORAL MEDICINE DIAGNOSIS AND RADIOLOGY

**PART II**

5. ORAL AND MAXILLOFACIAL SURGERY

6. CONSERVATIVE DENTISTRY AND ENDODONTICS

7. PROSTHODONTICS AND CROWN AND BRIDGE

8. PAEDIATRIC AND PREVENTIVE DENTISTRY

The syllabus shall be as prescribed by the BDS Course Regulations, Dental Council of India and adopted by the Goa University.

**OC-17A.7 CONTACT HOURS/LECTURES**

The total number of contact hours for lectures/ practicals/ clinics shall be as prescribed by the Dental Council of India from time to time.

**OC-17A.8 TOTAL MARKS ASSIGNED FOR EACH PAPER**

**MARKS DISTRIBUTION IN EACH SUBJECT**

EACH SUBJECT SHALL HAVE A MAXIMUM OF **200** MARKS

THEORY: **100**

UNIVERSITY WRITTEN EXAM **70**

VIVA VOCE **20**

INTERNAL ASSESSMENT(WRITTEN) **10**

PRACTICAL/CLINICAL: **100**

UNIVERSITY EXAM **90**

INTERNAL ASSESSMENT(PRACTICAL)**10**

## **OC-17A.9 SCHEME OF EXAMINATION**

The scheme of examination for the BDS program shall be divided into I BDS examination at the end of the first academic year, II BDS examination at the end of the second year, III BDS examination at the end of the third year and IV BDS examination in two parts, Part I and Part II at the end of the first and the second terms respectively of the fourth academic year.

A candidate shall be allowed to appear for the BDS Examination after keeping two terms with 75% Attendance in theory and practical components individually and fulfils the other requirements as laid down in the Ordinances.

### **OC-17A.9.1 WRITTEN EXAMINATION**

1. The written examination in each subject shall consist of one paper of three hours duration and shall have a maximum of 70 marks.
2. In the subjects of Physiology & Biochemistry and General Pathology & Microbiology each paper will be divided into two parts, A and B of equal marks.
3. The question paper should contain different types of questions such as essays, short answers and multiple choice objectives.

### **OC-17A.9.2 PRACTICAL AND CLINICAL EXAMINATION**

1. OBJECTIVE STRUCTURED CLINICAL EXAMINATION  
A number of examination stations with specific instructions for clinical and/or laboratory procedures, spotters, experiments etc.
2. Practical and Viva voce only in University Examination in II BDS for Preclinical Laboratory programs
  - a. Preclinical Prosthodontics and Crown & Bridge
  - b. Preclinical Conservative Dentistry
  - c. Preclinical Orthodontics

### **OC-17A.9.3 TOTAL MARKS ASSIGNED TO THE PAPER/PRACTICAL SUBJECT WISE**

The total number of marks assigned to each paper/practical/clinic examination shall be as prescribed by the Dental Council of India from time to time. However, the breakup for the evaluation of the practical component shall be as decided by the Board of Studies and duly approved by the Academic Council.

### **OC-17A.9.4 PATTERN OF EVALUATION**

Evaluation is achieved by formative or internal assessment conducted by the institution periodically and by summative or University examinations conducted at the end of the academic year.

- a. INTERNAL ASSESSMENT  
The Continuous Assessment Examinations may be held at least three times in a given academic year and the average marks of these examinations should be considered.  
Ten percent of the total marks in each subject, separately for Theory and Practical/Clinical Examination should be set aside for the Internal Assessment.

b. UNIVERSITY EXAMINATION

The components of the evaluation process are:

1. Written Exam
2. Viva Voce
3. Practical Exam
4. Clinical Exam

**OC-17A.9.5 EXEMPTION PROVISION**

The record/log books can be carried over to subsequent appearances, if necessary.

**OC-17A.9.6 PROVISIONS RELATING TO REPEAT EXAMINATIONS FOR FAILURES**

- a. Examination to be conducted twice annually in July and January.
- b. A candidate who fails in one subject in an examination is permitted to go to the next higher class and appear for the examination in that subject and is required to pass, before being permitted to appear for the next higher examination.
- c. A candidate who fails in one subject in the III BDS and is allowed to go to the IV BDS (Part I) is required to first appear for and be declared successful in the concerned subject of the III BDS before he/she is permitted to appear for the IV BDS (Part I) exam. Such a candidate may exercise the option of appearing at all eight subjects of the IV BDS at the end of the academic year.
- d. Any candidate who fails in any subject(s) in IV BDS Part-I examination is permitted to appear at the Part-II examination and should complete both parts successfully before he/she is declared to have passed the IV BDS exam and permitted to proceed with the Dental Internship Program.
- e. Under no circumstances will a candidate be permitted to appear simultaneously at lower and higher class exams.
- f. A candidate who fails in more than one subject in an examination is required to continue for an additional term and appear at the examinations in those subjects and pass before being permitted to go to the next higher class.



### **OC-17A.9.7 MINIMUM REQUIREMENTS FOR PASSING AND GRADING**

1. For declaration of a pass in a subject, a candidate shall secure 50% marks in the University examination both in theory and practical/clinical examinations separately as stipulated:

- a. 50 % marks in aggregate in University theory including viva voce and internal assessment combined.
- b. 50 % marks in aggregate University practical/clinical examination and internal assessment combined.

In case of Preclinical Prosthodontics, Orthodontics and Conservative Dentistry in II BDS, where there is no written examination, minimum for pass is 50% of marks in Practical and Viva voce, including Internal Assessment, ie 50/100 marks.

#### **2. GRACE MARKS**

Grace Marks upto a maximum of 5 marks may be awarded to students who have failed in only one subject, but passed in all other subjects.

Grace marks may not be added to confer class.

### **OC-17A.9.8 IMPROVEMENT OF CLASS/REVALUATION**

There shall be no provision for improvement of class and revaluation once the results have been declared. However, there shall be provision for applying for verification of marks.

### **OC-17A.10 AWARDING OF DEGREE**

Only those candidates who pass the whole examination in the first attempt will be eligible for distinction, class or prize/scholarship.

50 % of the total marks or more: **PASS CLASS**

60 % of the total marks or more: **SECOND CLASS**

70% of the total marks or more : **FIRST CLASS**

75% and above of the total marks: **DISTINCTION**

**OC-18 (effective from 27<sup>th</sup> May, 2016) Ordinance relating to examination for the Degree of Bachelor of Homoeopathic Medicine & Surgery (B.H.M.S.)** (under Section 24(1) of the Goa University Act, 1984).

#### **OC-18.1 General**

- (i) A candidate for being eligible for admission to the BHMS Degree Course to the Homoeopathic Medical Colleges affiliated to this University must have:
- (ii) Completed the age of 17 years on or before 31st December of the academic year of admission to become eligible for admission to First Year.
- (iii) (a) Passed the Higher Secondary Examination or the India School Certificate Examination which is equivalent to 10+2 Higher Secondary Examination after a period of twelve years' study, the last two years of study comprising Physics, Chemistry, Biology (Botany & Zoology) with Mathematics or any other elective

subjects, with English at a level not less than Core Course of English as prescribed by the National Council of Educational Research and Training.

OR

(b) Passed the intermediate examination in Science of an Indian University or Board or other recognized examining body with Physics, Chemistry and Biology, which shall include a practical test in these subjects, and English as a compulsory subject.

OR

(c) Passed the pre-professional or pre-medical examination with Physics, Chemistry and Biology, after passing either the Higher Secondary School Examination, or the Pre-University or an equivalent Examination, which shall include a practical test in Physics, Chemistry and Biology, and English as a compulsory subject.

OR

(d) Passed the first year of the three-year degree of a recognized University, with Physics, Chemistry and Biology including a practical test in these subjects, provided the examination is a University Examination and the candidate has passed 10+2 with English at a level not less than a core course.

OR

(e) Passed any other examination which, in scope and standard, is found to be equivalent to the intermediate science examination of an Indian University or Board, with Physics, Chemistry and Biology, including practical test in each subject, and English as a compulsory subject.

(iv) A candidate seeking admission to the BHMS degree course must have appeared and obtained a valid score /rank at Goa Common Entrance Test, or NEET, or such other test, if any, conducted/ approved by the Government of Goa for the year of admission.

(v) Blind, including colour blind, deaf or dumb candidates shall not be allowed for admission in the Course.

**OC-18.2** The medium of instruction for the course of B.H.M.S. shall be English.

**OC-18.3** Admission to the First B.H.M.S Course shall be done by 1<sup>st</sup> August in each Academic year.

**OC-18.4** Number of working days in each year shall not be less than 240 days (Two Hundred and Forty) inclusive of the days of Examination.

**OC-18.5** **Programme**

1. Candidate for the degree of B.H.M.S. shall be required to undergo a period of study extending over 4½ years, consisting of 9 semesters. After a period of study extending over 2 semesters or 1 year, in the subject specified in OC-18.7, the candidates, on production of necessary certificates and the payment of examination fees as prescribed by the University shall be entitled to appear for the First B.H.M.S. examination.

2. The candidate shall not be permitted to join Second BHMS, unless he/she has passed in all the subjects of First BHMS.

- (a) After passing the First B.H.M.S. examination, for which they shall be allowed four attempts (actual examination), provided that the four attempts are taken within a period of 4½ years from the date of admission to the course. Candidates shall be required to spend 7 semesters or 3½ years of a continued study of para-clinical and clinical subjects concurrently and collaterally and shall have to pass the examination at the end of each year to be eligible to appear for the examination of each successive year.
  - (b) If a candidate is unable to pass the examination in four attempts, he/she shall be required to repeat the First BHMS course in all the subjects in one year and shall appear for the examination in all the subjects.
  - (c) However, a student appearing for Final BHMS (Fourth year) examination and has only one subject to pass at the end of prescribed attempts, he/she shall be permitted to appear at the next examination in that particular subject to complete the examination with this special attempt.
3. The Degree of BHMS shall not be conferred on a candidate unless he has successfully undergone the compulsory rotatory Internship training for a period of 12 months, in the manners prescribed in OC-18.20 as recommended by the Central Council of Homoeopathy, subsequent to his passing the final BHMS examination. However, no period of Internship shall be condoned.
  4. The training period of 4½ years shall be divided into four years as:
    - a. **First B.H.M.S. (Two Semesters)** consisting of the subjects of: Human Anatomy, Histology and Embryology, Human Physiology including Bio-Chemistry, Homoeopathic Pharmacy, Homoeopathic Materia Medica, Organon of Medicine including Principles of Hom. Philosophy and Psychology. There shall be no University examination in the subjects Materia Medica, Organon of Medicine including Principles of Hom. Philosophy and Psychology.
    - b. **Second B.H.M.S. (Two Semesters)** consisting of: Pathology & Microbiology, Forensic Medicine and Toxicology, Organon of Medicine & Principles of Hom. Philosophy, Homoeopathic Materia Medica, Surgery including ENT, Ophthal, Dental & Hom. Therapeutics., Obstetrics & Gynaecology, Infant care & Hom. Therapeutics. There shall be no University examination in the subject: Surgery including ENT, Ophthalmology, Dentistry & Hom. Therapeutics, Obstetrics & Gynaecology, Infant care & Hom. Therapeutics,
    - c. **Third B.H.M.S (Two Semesters)** consisting of: Surgery including ENT, Ophthalmology, Dentistry & Hom. Therapeutics, Obstetrics & Gynaecology, Infant Care & Hom. Therapeutics, Homoeopathic Materia Medica. Organon of Medicine, Practice of Medicine & Hom. Therapeutics, Repertory and Community Medicine. There shall be no University examination in the subject: Practice of Medicine, Repertory and Community Medicine.
    - d. **Fourth B.H.M.S (Three Semesters)** consisting of: Practice of Medicine and Hom. Therapeutics. Homoeopathic Materia Medica, Organon of Medicine and Principles of Hom. Philosophy, Repertory and Community Medicine.

- e. During the third to ninth Semesters, clinical postings of three hours duration daily shall be conducted by each department only after introductory teaching in clinical methods in Medicine, Surgery, Obstetrics and Gynecology, each of two weeks durations, and the Case-taking, Analysis and evaluation, choice of repertory, Reportorial totality, selection of remedy and repetition of dose, of four weeks duration for the entire class at beginning of second B.H.M.S. and third B.H.M.S. of the Degree Course.
- f. The posting in second to fourth B.H.M.S. shall include exposure to laboratory investigations, rehabilitation, physiotherapy and maternity training and family welfare Unit.
- g. The scope of the subject shall be as indicated in the syllabus.

### OC-18.6

#### Schedule of Examination

1. The year-wise distribution and the schedule of the examination shall be as under:

Year	Semester			University Examination
First B.H.M.S.	1	2		First B.H.M.S. Professional Examination shall be held in the 12th month of admission to First BHMS.
Second B.H.M.S.	3	4		Second B.H.M.S. Professional Examination shall be held in the 24th month of admission to First BHMS. .
Third B.H.M.S.	5	6		Third B.H.M.S. Professional Examination shall be held in the 36th month of admission to First BHMS.
Fourth B.H.M.S.	7	8	9	Final B.H.M.S. Professional Examination shall be held in the 54th month of admission to First BHMS.

- a. **FIRST BHMS**

COURSES	THEORY		PRACTICAL INCLUDING ORAL		TOTAL MARKS
	NO. OF PAPERS	TOTAL MARKS	PRACTICALS	ORAL	
1. Anatomy	02	200	100	100	400
2. Physiology	02	200	100	100	400
3. Homoeopathic Pharmacy	01	100	50	50	200

b. **SECOND BHMS**

SUBJECT	THEORY		PRACTICAL INCLUDING ORAL		TOTAL MARKS
	NO. OF PAPERS	TOTAL MARKS	PRACTICALS	ORAL	
1. Pathology	02	200	50	50	300
2. Forensic Medicine and Toxicology	01	100	50	50	200
3. Homoeopathic Materia Medica	01	100	50	50	200
4. Organon of Medicine	01	100	50	50	200

c. **THIRD BHMS**

SUBJECT	THEORY		PRACTICAL INCLUDING ORAL		TOTAL MARKS
	NO. OF PAPERS	TOTAL MARKS	PRACTICALS	ORAL	
1. Surgery	02	200	100	100	400
2. Gynecology and Obstetrics	02	200	100	100	400
3. Homoeopathic Materia Medica	01	100	50	50	200
4. Organon of Medicine	01	100	50	50	200

d. **FINAL BHMS**

SUBJECT	THEORY		PRACTICAL INCLUDING ORAL		TOTAL MARKS
	NO. OF PAPERS	TOTAL MARKS	PRACTICALS	ORAL	
1. Medicine	02	200	100	100	400
2. Homoeopathic Materia Medica	02	200	100	100	400
3. Organon of Medicine	02	200	50	50	300
4. Repertory	01	100	50	50	200
5. Community Medicine	01	100	50	50	200

**OC-18.7**

Seventy five per cent attendance at the minimum in each of the subjects (in theory and practical including clinical) for appearing in the University examinations shall be compulsory.

1. In order to pass in a subject, a candidate shall obtain 50% of total marks in aggregate with a minimum of 50% marks in theory examination and minimum of 50% marks in practical including oral examination at one and the same sitting.

2. A candidate, who has passed any of the subject of the examination by obtaining 50% of marks as per the provisions of this Ordinance shall not be required to appear in that subject at the subsequent examination, and shall be declared to have passed the whole examination only when he/she has passed in all the subjects of that examinations.
3. Failure to pass the examination shall not debar a candidate from appearing at any subsequent examination; however, the candidate shall be required to re-apply with payment of examination fees.
4. There shall be a supplementary examination each year, which shall be conducted within two months of declaration of results.
5. If a candidate fails to pass the examinations in four subsequent examinations including the first examination, he/she shall be required to repeat the course of studies in all the subjects and in all parts for one year to the satisfaction of the Head of the College and shall appear for the examination in all the subjects.
  - (i) For non-appearance at examination for any reason, a candidate shall not be permitted to avail additional chance to appear in that examination.
  - (ii) Every candidate shall be required to complete the Course, including the passing of examination in all subjects and complete compulsory internship training, within a period of eleven years from the date of admission in First B.H.M.S Degree Course in the college concerned, failing which his name shall be removed from the roll of the college.
  - (iii) The examining body shall ensure that the result of the examination is published latest within one month of the last date of examination, so that the students can complete the course in 5½ years after admission.
6. (i) The candidate shall pass First B.H.M.S examination in all subjects at least one semester (Six months) before he is allowed to appear in the Second B.H.M.S examination provided that he/she has passed in the subjects of anatomy and physiology (including Biochemistry) examination two semesters (twelve Months) before he is allowed to appear in the Second B.H.M.S examination
  - (ii) The candidate shall be required to pass the Second BHMS examination before being entitled to appear for Third BHMS examinations, and pass the Third BHMS examination before being entitled to appear for the Final BHMS examination.
  - (iii) Provided that if a candidate appearing for the Final BHMS examination has only one subject to pass at the end of prescribed four chances, he/she shall be allowed to appear at the next examination in that particular subject in which he has failed and shall complete the examination with this special chance.

**OC-18.8** In order to pass the examination, grace marks up to a maximum of 10 marks may be awarded to a student who has failed in one or more subjects.

**OC-18.9** There shall be verification of marks of answer books of theory examination in any of the subject(s). However, there shall be no provision for revaluation, as there is double evaluation.

**OC-18.10** The subject or subjects in which successful candidates may have distinguished themselves shall be shown in the mark list. In order to obtain distinction in any of

the subjects of the examination a candidate shall obtain 75% of the full marks allotted to that subject without any grace marks in that subject.

**OC-18.11**

Except as otherwise provided, only those candidates who pass the whole examination in the first attempt without any grace marks in any subject at the Regular examination, shall be eligible for University Awards/Medals.

**OC-18.12**

No person shall be appointed as an examiner for any of the subjects of B.H.M.S. other than the holder of qualifications prescribed for the teaching staff in the Homoeopathy Central Council (minimum standards requirement of Homoeopathic Colleges and attached hospitals) Regulation, 2013, and who has at least three years continuous regular teaching experience in the subject concerned, gained in a Degree level Homoeopathic Medical college, shall be appointed as an internal/ external examiner or paper setter / moderator for the BHMS Degree Course Examination.

1. Internal examiners fulfilling the required criteria shall be appointed from amongst the teaching staff of the Homoeopathic Medical College to which the candidate or student belongs.  
In cases of non-availability of an Internal Examiner, examination may be conducted by appointing another external examiner.
2. No person shall be appointed as an external examiner in any allied medical subject unless he possesses a recognized Post-graduate medical qualification as required for appointment to a relative teaching post in accordance with the provisions of the Central Council of Homoeopathy (minimum standards of education) Regulation, 2013
3. External examiners shall be appointed only from the teaching staff of recognized Homoeopathic colleges and colleges of Modern Medicine from different States/ Union Territories and different Universities.
4. Persons in Government employment may also be considered for appointment as external examiners provided they possess a recognized Post-graduate medical qualification and teaching experience as specified above.
5. There shall be a minimum of two examiners in each subject having less than 300 marks, four examiners in each subject having 300 marks and above; of which not less than 50% shall be external to ensure that the Theory and Practical examination is conducted by equal number of External & Internal examiners. In case of examination in clinical subjects viz. Medicine, Surgery, Gynaecology & Obstetrics, the examiners with Allied Medical qualification shall be appointed for Proper/Clinical subjects, whereas the examiner in the subject with Homoeopathic qualification can be appointed for Proper as well as Therapeutics sections.  
Each Theory Paper in the subject shall be evaluated separately by two examiners, one internal and one external.
6. Oral and practical examination shall as a rule, be conducted by the internal and external examiners with mutual co-operation. The convener shall submit to the University, mark sheets showing marks assigned by each of the examiners, duly signed, and a consolidated mark sheet signed by all the examiners, showing marks scored under various sub-heads.

7. The Chairman / Convener shall be the Senior-most person from amongst the Internal Examiners or Paper Setters appointed for theory and oral / practical / clinical examinations. The eligibility qualification for the Chairman shall be the same as for appointment of a Professor.
8. A Moderator shall be a Professor or Associate Professor/ Reader; however, an Assistant Professor / Lecturer with five years experience as an examiner, shall be eligible to be appointed as Moderator.
9. A Paper Setter shall be a Professor or Associate Professor/ Reader; however, an Assistant Professor / Lecturer with three years experience as an examiner shall be eligible to be appointed as Paper Setter.

### **OC-18.13**

#### **Internship**

##### **1. General:**

Every student shall be required after passing the final B. H. M. S. examination to undergo the compulsory rotatory internship to the satisfaction of the Head of the Institute. The period of internship shall be of twelve months, so as to be eligible for the award of the degree and permanent registration.

All parts of the Internship shall be undertaken at the hospital attached to the College and in case where such hospital cannot accommodate all of its students for internship, such students may undertake their internship in a hospital or dispensary run by the Central or State Government or local bodies.

- a) The University shall issue a provisional passing certificate on passing the final B.H.M.S. Examination to all successful candidates.
- b) The State Boards of Homoeopathy or any other competent authority shall grant provisional registration to the candidates on production of provisional pass certificate from University. The provisional registration to a successful candidate of a degree course shall be for a period one year.  
Provided that in the event of shortage or unsatisfactory work the period of compulsory internship and the provisional registration may be suitably extended by the appropriate authorities.
- c) Permanent registration shall only be given by the State Board or any competent authority, on award of the degree certificate by the University after completion of compulsory internship and declaration that the candidate is eligible for it.

##### **2. Guidelines for Training:**

- a) Training of the internees during the internship shall be regulated by the Principal/ Superintendent of the hospital where an internee undertakes his internship in the hospital attached to the college, but where an internee is posted to a recognized dispensary, the training shall be regulated by a committee consisting of a representative of the College / University and the In-charge of the dispensary. Provided that after satisfactory completion of training, the certificate obtained from the head of the dispensary shall be countersigned by the Principal of the Homoeopathic College.
- b) The internee shall be entrusted with the clinical responsibilities and the Senior Medical Officer shall supervise this work.



- c) The internee shall maintain a record of work which is to be periodically verified by the Medical Officer under whom the internee is posted. The scrutiny of the record of work may be objectively viewed as regard to knowledge, skill, and aptitude towards the patient shown by the intern's work.
- d) The internship training shall include training in case-taking, analysis and evaluation of symptoms, reportorisation and management of common ailments through Homoeopathic treatment. Intern should be exposed to the training in medicine, surgery including ophthalmology and E.N.T. departments, obstetrics and gynecology departments, pediatrics, skin, family welfare and community medicine, if possible at the rural health training centre or at the P.H.C.  
In the department of Medicine, training in minor ward procedures should be given to interneers.
- e) Internee should be exposed to clinical pathology work to acquire skill to do independently some common procedures like routine blood examination, ESR, blood smear for parasites, sputum examination, urine, stool examination and such other. He should be given opportunities for active participation in interpretation of laboratory data in context to the clinical finding and arriving at a diagnosis and planning out of the Homoeopathic treatment.
- f) In the department of Surgery, he/she should acquire skill for management of minor emergencies, practical implementation of aseptic techniques and procedure including preparation of operation theatre, sterilization and such other. He should be involved in participation in pre-operative care and post operative care, and practical use of anesthetic techniques. He should also work in casualty departments. All this training should strictly be under expert supervision only.
- g) In the department of Obstetrics and Gynaecology the internee should be involved in antenatal care with particular reference to the nutritional status of mother, management of normal and abnormal labours; care of the new-born, postnatal care of mother and child.
- h) Training in Pediatric department, to understand pediatric problems and their management through Homoeopathy.
- i) In the department of Skin, the internee should be exposed to various skin lesion and their diagnosis including allergy, leprosy, leucoderma, etc and their management through Homoeopathy.
- j) He should be exposed to various community based health activities, health programmers, their implementation and organizational set up. He should also be involved in motivational programmes, health education, and nutrition, MCH, family welfare and other activities, control of communicable diseases like tuberculosis, leprosy and sexually transmitted diseases.

### **3. Medico- Legal**

Acquaintance with issue of various medical certificates like leave certificates on the grounds of sickness, fitness certificate, death certificate, birth certificate, medical examination, court procedures in police case like deaths by unnatural cause, accident etc, preservation of viscera in poisoning cases, postmortem, various Drugs Acts, Homoeopathy Central Council Act, Various State Homoeopathic Acts, Medical Termination of Pregnancy, Consumer Protection Act, Professional Conduct, Etiquette and ethics.

### **4. Drug -Proving**

It shall be compulsory for every internee to take part in Drug Proving Programme and the Internee shall prove at least one drug under the supervision of the guide during the period of internship. The four copies of the assignment should be submitted to the Principal duly signed by guide.

### **5. Rotation of intern students are as under:**

- a) Practice of Medicine 8 months: wherein internee will be rotated in each Psychology, Respiratory, Gastro Intestinal, Endocrinology, Skin and V.D, Loco-motor, Cardioogy, Paediatrics sections.
- b) Surgery: 1 month
- c) Obstetrics & Gynaecology : 2 months (1 month each including Reproductive & Child Health Care)
- d) Community Medicine (including PHC/CHC): 1 month

### **6. Maintenance of Records:**

- a) Each internee shall have to maintain detailed records of at least 25 acute cases and 15 chronic cases treated with Homoeopathic Medicine during his training in the medical department with due analysis, evaluation and justification.

Each internee shall have to maintain detailed records of at least 10 delivery cases attended by him in the Department of Obstetrics and Gynaecology, 15 Surgical cases assisted by him in the Department of Surgery.

- b) During this period, internee shall also have to carry out any elective assignment on any subject given to him/her by the physician in charge.

### **7. Attendance**

Minimum attendance of each internee shall not be less than 80% in respect of hospital posting as well as the same percentage in seminars, bedside clinics case conference / clinical meetings, electives, community services, and such other.

## **OC-18. 14 Migration or transfer of student from one college to another**

1. Migration from one college to another is not a right of a student.
2. Migration of student from the Homoeopathic College in India shall be considered by the Central Council of Homoeopathy only in exceptional case on extreme compassionate grounds, provided following criteria are fulfilled. Routine migrations on other grounds shall not be allowed.
3. Both the colleges, the one at which the student is studying at present and the one to which migration is sought, must be recognized as per provisions of Homoeopathy Central Council Act.

4. The applicant shall have passed first BHMS examination.
5. The applicant shall submit his application in the prescribed format for migration, complete in all respect, to the principal of the College within a period of one month of passing / declaration of result of the First Year Bachelor of Homoeopathy Medicine & Surgery (B.H.M.S) Examination.
6. The applicant shall submit an affidavit stating that he shall pursue twelve months of prescribed study before appearing at Second Year B.H.M.S Examination at the transferee College, which shall be duly certified by the Registrar of the concerned University in which he is seeking transfer and the transfer shall be effective only after receipt of the affidavit.
7. Migration during internship shall be allowed on extreme compassionate grounds, provided that such migration shall be allowed only with the mutual consent of the concerned Colleges, where both the Colleges, the one at which the student is studying at present and the one to which migration is sought are recognized as per provisions of Homoeopathy Central Council Act.  
Provided,
  - a) All applications for migration shall be referred to Central Council of Homoeopathy by college authorities. No Institute or University shall allow migration directly without the approval of the Central Council.
  - b) The Central Council of Homoeopathy reserves the right not to entertain any application except under the following compassionate grounds, namely:-
    - (i) Death of a supporting guardian.
    - (ii) Illness of candidate causing disability supported by Medical grounds certificate by a recognized hospital.
    - (iii) Disturbed condition as declared by the State Government in the area where the College is situated.
  - c) A student applying for transfer on compassionate ground shall apply in the prescribed format duly filled, with requisite documents.

**OC - 19                      Ordinance relating to the Post-graduate Degree in the Faculty of Medicine (Para Clinical, Pre Clinical and Clinical) (Under Section 24(1) of Goa University Act. 1984). (Effective from 7<sup>th</sup> July, 2011)**

**OC-19.1                      General**

This ordinance shall come into force from the beginning of such Academic Year as notified by the University. Once notified, this ordinance shall supersede all relevant existing Ordinances, Notifications and circulars relating to these courses. The ordinance shall apply to all the examinations leading to post-graduate degree in Para-clinical, Pre clinical and Clinical subjects.

**OC– 19.1.1                      Objectives**

a) To bring the postgraduate curriculum on par with model curriculum recommended by Medical Council of India. b) To impart quality post-graduate medical education to make it nationally comparable. c) To offer new, relevant and need-based post-graduate courses recognized by Medical Council of India. d) The goal of postgraduate medical education shall be to produce competent specialists and/or Medical teachers: i) who shall recognize the health needs of the community, and carry out professional obligations ethically and in keeping

with the objectives of the national health policy ii) who shall have mastered most of the competencies, pertaining to the specialty, that are required to be practiced at the secondary and the tertiary levels of the health care delivery system; iii) who shall be aware of the contemporary advances and developments in the discipline concerned; iv) who shall have acquired a spirit of scientific inquiry and is oriented to the principles of research methodology and epidemiology; and v) who shall have acquired the basic skills in teaching of the medical and paramedical professional;

#### **OC-19.1.2 Duration of Course**

**(effective from 20<sup>th</sup> September, 2014)** (i) Duration of Post Graduate Degree Course:

The duration of the Post Graduate Courses including examination period shall be three academic years comprising six academic terms. The academic term is a six month training period. The candidate shall be full time resident/post graduate student in the subject. Examinations for post graduate degree courses shall be held at end of third academic year. In the case of a student having a recognized two year Post Graduate Diploma in the same subject, the duration including the period of examination shall be two years.

#### **OC-19.1.3 Post graduate Degrees to be awarded:**

- 1) Doctor of Medicine (Pathology) (M.D)
  - 2) Doctor of Medicine (Microbiology) (M.D)
  - 3) Doctor of Medicine (Pharmacology) (M.D)
  - 4) Doctor of Medicine (Forensic Medicine & Toxicology) (M.D)
  - 5) Doctor of Medicine (Anatomy) (M.D.)
  - 6) Doctor of Medicine (Physiology) (M.D)
  - 7) Doctor of Medicine (Biochemistry) (M.D)
  - 8) Doctor of Medicine (General Medicine) (M.D)
  - 9) Doctor of Medicine (Paediatrics) (M.D)
  - 10) **(effective from 2<sup>nd</sup> March, 2015)** Doctor of Medicine (Pulmonary Medicine) (M.D)
  - 11) Doctor of Medicine (Psychiatry) (M.D)
  - 12) Doctor of Medicine (Radio-diagnosis) (M.D)
  - 13) Doctor of Medicine (Dermatology, Venerology and Leprosy) (M.D)
  - 14) **(effective from 20<sup>th</sup> September, 2014)** Doctor of Medicine (Social and Preventive Medicine) (M.D)
  - 15) Doctor of Medicine (Anesthesiology) (M.D)
  - 16) Master of Surgery (General Surgery) (M.S.)
  - 17) Master of Surgery (Obstetrics and Gynaecology) (M.S.)
  - 18) Master of Surgery (Ophthalmology) (M.S.)
  - 19) Master of Surgery (Orthopedics) (M.S.)
  - 20) Master of Surgery (Oto-Rhino-Laryngology) (M.S.)
- and such other subjects as may be introduced by Goa University and recognized by Medical Council of India.

#### **OC-19.1.4 Eligibility for admission for Post graduate Degree courses:**

i) A candidate seeking admission for MS/MD courses should have passed M.B.B.S. degree of Goa University or any other recognized institute. ii) The candidates

shall be selected according to the existing rules and regulations of Medical College/Institute affiliated to Goa University as notified by state government from time to time. The intake capacity shall be as laid down by MCI per academic year per course/programme.

**OC-19.2 Course structures:**

**OC-19.2.1 Course structure for post graduate degree courses:** The syllabi of the Courses for the post graduate degree shall be as recommended by the Board of Studies of concerned subject and revised from time to time in accordance with recommendation of Medical Council of India. The structures of three year post-graduate degrees course shall be:

**OC-19.2.1(i) Post-graduate degree course in Pre-Clinical Subjects:**

**(a) Post-graduate degree course in Anatomy:**

**Doctor of Medicine (Anatomy) (M.D.)**

Shall have 4 compulsory theory papers of 100 marks each with 400 marks in aggregate as stipulated below:

**M.D. ANAT-I:** Shall deal with General and Gross Anatomy, General Anatomy Gross Anatomy of Head, Face & Neck and Thorax including applied anatomy, embryology and histology related to the parts.

**M.D. ANAT-II:** Shall deal with Gross Anatomy of Abdomen, Pelvis and Perineum, Superior and Inferior Extremities including Applied Anatomy, Ebyology & Histology related to the parts.

**M.D. ANAT-III:** Shall deal with Neuro-anatomy. Neuro-anatomy including Applied Anatomy, Embryology and Histology related to the parts.

**M.D. ANAT-IV:** shall deal with Genetics, Embryology, Radiological Anatomy and Recent Advances, Genetics, Embryology, Histology including Imaging and Radiological Anatomy.

**M.D. ANAT-V:** Shall deal with practicals, which shall carry 400 marks including viva-voce. Minimum passing shall be 200 marks in aggregate.

**(b) Post-graduate Degree course in Physiology :**

**Doctor of Medicine ( Physiology) (M.D.)**

Shall have 4 compulsory theory papers of 100 marks each with 400 marks in aggregate as stipulated below:

**M.D. PHY I:** Shall deal with History of Physiology ,General Physiology, Comparative, Space and Environmental Physiology

**M.D. PHY II:** Shall deal with Systemic Physiology including Biophysics (CVS, RS, Kidney and Special Senses)

**M.D. PHY III:** Shall deal with Systemic Physiology, (Nervous System, Endocrines, GIT, Reproduction and Blood); Physiological Chemistry and Nutrition.

**M.D. PHY IV:** Shall deal with Applied Physiology.

**M.D. PHY V:** Shall deal with practicals, which shall carry 400 marks including viva-voce. Minimum passing shall be 200 marks in aggregate.

**(c) Post-graduate Degree course in Biochemistry :**

**Doctor of Medicine (Biochemistry) (M.D.)**

Shall have 4 compulsory theory papers of 100 marks each with 400 marks in aggregate as stipulated below:

**M.D. BIO I:** Shall deal with Biophysical and Bio-organic chemistry, Biochemical Techniques.

**M.D. BIO II:** Shall deal with Fundamental Biochemistry, Intermediary metabolism and Biochemistry of special tissues.

**M.D. BIO III:** Shall deal with Cell Biology, Membrane Biochemistry Molecule Biology, Metabolism of Aging Cancer, Neurochemistry, Immunology

**M.D. BIO IV:** Shall deal with Clinical Biochemistry, Nutrition, Hormones, Occupational (Hazards & Recent Advances.)

**M.D. BIO V:** Shall deal with practicals, which shall carry 400 marks including viva voce. Minimum passing shall be 200 marks in aggregate.

**OC-19.2.1(ii) Post-graduate Degree course in Para-Clinical Subjects:**

**(a) Post-graduate degree course in Pathology:**

**Doctor of Medicine (Pathology) (MD.)**

Shall have 4 compulsory theory papers of 100 marks each with 400 marks in aggregate as stipulated below:

**M.D. PATH I:** Shall deal with General Pathology, Pathophysiology, Immunopathology

**M.D. PATH II:** Shall deal with Systemic Pathology.

**M.D. PATH III:** Shall deal with Haematology, Transfusion Medicine (Blood Banking) and Laboratory Medicine

**M.D. PATH IV:** Shall deal with Recent advances & applied aspects & Microbiology & Cytopathology

**M.D. PATH V:** Shall deal with practicals which shall carry 400 marks including viva-voce. Minimum passing shall be 200 marks in aggregate.

**(b) Post graduate Degree course in Microbiology:**

**Doctor of Medicine (Microbiology) (M.D.)**

Shall have 4 compulsory theory papers of 100 marks each with 400 marks in aggregate as stipulated below:

**M.D. MICRO I-** Shall deal with General Bacteriology including Immunology.

**M.D. MICRO II-** Shall deal with Systematic Bacteriology.

**M.D. MICRO III-** Shall deal with Parasitology and Mycology.

**M.D. MICRO IV-** Shall deal with Virology, Recent Advances and Applied Aspects.

**M.D. MICRO V-** Shall deal with practicals which shall carry 400 marks including viva-voce. Minimum passing shall be 200 marks in aggregate.

**(c) Post graduate Degree course in Pharmacology:**

### **Doctor of Medicine (Pharmacology) (M.D.)**

Shall have 4 compulsory theory papers of 100 marks each with 400 marks in aggregate as stipulated below:

**M.D. PHARM I:** Shall deal with Experimental Pharmacology, screening of drugs, Basic and General Pharmacology, Clinical Pharmacology and statistics.

**M.D. PHARM II:** Shall deal with Systemic Pharmacology and therapeutics. (Central Nervous System, Cardiovascular system, Respiratory system, Gastrointestinal system, Kidneys, Inflammation, Autonomic Nervous system, Blood Autacoids).

**M.D. PHARM III:** Shall deal with Systematic Pharmacology and Therapeutics II. (Hormones, uterus, antimicrobialagents, parasiticinfections, Immunomodulators, Pediatric and geriatric pharmacology, Ocular Pharmacology, Chemotherapy, Anticancer drugs and immunopharmacology, Toxicology, Miscellaneous).

**M.D. PHARM IV:** Shall deal with Clinical Pharmacology and recent advances in pharmacology and therapeutics.

**M.D. PHARM V:** Shall deal with practicals which shall carry 400 marks including viva-voce. Minimum passing shall be 200 marks in aggregate.

#### **(d) Post-graduate Degree course in Forensic Medicine and Toxicology:**

### **Doctor of Medicine (Forensic Medicine and Toxicology) (M.D.)**

Shall have 4 compulsory theory papers of 100 marks each with 400 marks in aggregate as stipulated below:

**M.D. FMT I** - Shall deal with Basic Medical Sciences in relation to Forensic Medicine and Toxicology.

**M.D. FMT II** – Shall deal with Clinical Forensic Medicine and Toxicology including Psychiatry.

**M.D. FMT III** – Shall deal with Criminology, Criminal Law, Forensic Science and Forensic Medicine.

**M.D. FMT IV** – Shall deal with Medicine Law and Ethics, Modern Trends in Forensic Medicine and Toxicology.

**M.D. FMT V** – Shall deal with practicals which shall carry 400 marks including viva-voce. Minimum passing shall be 200 marks in aggregate.

#### **OC-19.2.1 (iii) Post-graduate Degree course in clinical subjects:**

##### **(a) Post-graduate Degree course in General Medicine:**

### **Doctor of Medicine (General Medicine) (M.D.)**

Shall have 4 compulsory theory papers of 100 marks each with 400 marks in aggregate as stipulated below:

**M.D. MED I** - Shall deal with Basic Medical Sciences in relation to General Medicine

**M.D. MED II** - Shall deal with Disorders with cardio-vascular system, Haemopoetic system, Respiratory system including Tuberculosis, Gastrointestinal system including Hepatobilliary system, Nutritional disorder, Genetics, Psychiatry and Dermatology.

**M.D. MED III** - Shall deal with Endocrine disorders, Renal disorders, collagen disorders and Rheumatology, Metabolic disorder, Central Nervous system disorders, Infectious and tropical disease.

**M.D. MED IV**- Shall deal with Recent advances in General Medicine..

**M.D. MED V**- Shall deal with practicals which shall carry 400 marks including viva-voce. Minimum passing shall be 200 marks in aggregate.

**(b) Post-graduate Degree course in Pediatrics:**

**Doctor of Medicine (Pediatrics) (M.D.)**

Shall have 4 compulsory theory papers of 100 marks each with 400 marks in aggregate as stipulated below:

**M.D. PAED I**- Shall deal with Basic Medical Sciences in relation to Paediatrics.

**M.D. PAED II**- ) Shall deal with Neonatotomy and

**M.D. PAED III** ) Community Paediatrics plus General

**M.D. PAED IV** ) Paediatrics.

**M.D. PAED V**- Shall deal with practicals which shall carry 400 marks including viva-voce. Minimum passing shall be 200 marks in aggregate.

**(c) (effective from 2<sup>nd</sup> March, 2015) Post-graduate Degree course in Pulmonary Medicine (M.D.)**

**Doctor of Medicine (Pulmonary Medicine)(M.D.)**

The Course shall have 4 compulsory theory papers of 100 marks each, with 400 marks in aggregate, as stipulated below:

**M.D. PM I**-shall deal with Basic Sciences related to Pulmonary Medicine.

**M.D. PM II**-shall deal with medical, surgical and public aspects of Tuberculosis.

**M.D. PM III**- shall deal with General Medicine.

**M.D. PM IV**- shall deal with recent trends in Pulmonary Medicine.

**M.D. PM V**-shall deal with practicals which shall carry 400 marks including viva-voce. Minimum passing shall be 200 marks in aggregate.

**(d) Post-graduate Degree course in Radio-diagnosis:**

**Doctor of Medicine (Radio-diagnosis) (M.D.)**

Shall have 4 compulsory theory papers of 100 marks each with 400 marks in aggregate as stipulated below:

**M.D. RD I**- Shall deal with physics applied to Radiology and radiographic clinical radiology.

**M.D. RD II**- Shall deal with radiology as applied to clinical medicine.

**M.D. RD III**- Shall deal with radiology as applied to clinical medicine.



**M.D. RD IV-** Shall deal with Clinical Radiology and recent advances.

**M.D. RD V-** shall deal with practicals which shall carry 400 marks including viva-voce. Minimum passing shall be 200 marks in aggregate.

**(e) Post-graduate Degree course in Dermatology, Venerology and Leprosy:**

**Doctor of Medicine (Dermatology, Venerology and Leprosy) (M.D.)**

Shall have 4 compulsory theory papers of 100 marks each with 400 marks in aggregate as stipulated below:

**M.D. DVL I-** Shall deal with Basic Sciences related to Dermatology, Venerology and Leprosy.

**M.D. DVL II-** Shall deal with Dermatology and theurapeutics.

**M.D. DVL III-** Shall deal with Sexually transmitted diseases and Leprosy.

**M.D. DVL IV-** Shall deal with Recent trends in Respiratory Medicine.

**M.D. DVL V-** Shall deal with practicals which shall carry 400 marks including viva-voce. Minimum passing shall be 200 marks in aggregate.

**(f) Post-graduate Degree course in Community Medicine:**

**Doctor of Medicine (Community Medicine) (M.D.)**

Shall have 4 compulsory theory papers of 100 marks each with 400 marks in aggregate as stipulated below:.

**M.D. PSM I-** Shall deal with Basic Sciences related to Community Medicine related subjects.

**M.D. PSM II-** Shall deal with Ecology and human Health, Occupational Health, Genetics and Health, Mental Health, Human Nutrition and Health, Demography, Family Planning and Family Welfare, School Health, Preventive Medicine in Obstetrics, Pediatrica and Geriatrics.

**M.D. PSM III** - Shall deal with Health Planning and Management, Health care of the Community, National Health Programme in India, Evaluation of Health services, International Health, Health Economics, Health Insurance, Health Manpower Planning, Disaster Management.

**M.D. PSM IV:** Shall deal with Recent trends in Respiratory Medicine

**M.D. PSM V-** Shall deal with practicals which shall carry 400 marks including viva-voce. Minimum passing shall be 200 marks in aggregate.

**(g) Post-graduate Degree course in Anesthesiology:**

**Doctor of Medicine (Anesthesiology) (M.D.)**

Shall have 4 compulsory theory papers of 100 marks each with 400 marks in aggregate as stipulated below:

**M.D. ANES I-** Shall deal with Basic Medical Sciences in relation to Anesthesiology.

**M.D. ANES II-** Shall deal with Theory, Principal and Practice of Anesthesiology.

**M.D. ANES III-** Shall deal with Clinical Sciences in relation to Anesthesiology.

**M.D. ANES IV-** Shall deal with recent advances in Anesthesiology and critical care.

**M.D. ANES V-** Shall deal with practicals which shall carry 400 marks including viva-voce. Minimum passing shall be 200 marks in aggregate.

**(h) (effective from 20<sup>th</sup> September, 2014) Post Graduate Degree Course in Psychiatry.**

Doctor of Medicine (Psychiatry)(M.D.)

Shall have 4 compulsory theory papers of 100 marks each, with 400 marks in aggregate, as stipulated below:

**M.D. Psych I** – Shall deal with Basic Medical Sciences in relation to Psychiatry.

**M.D. Psych II** – Shall deal with Clinical Psychiatry.

**M.D. Psych III** – Shall deal with Specialties in Psychiatry.

**M.D. Psych IV** – Shall deal with recent advances in Psychiatry.

**M.D. Psych V** - Shall deal with Practicals which shall carry 400 marks including Viva-Voce. Minimum passing shall be 200 marks in aggregate.

**OC-19.2.1(iv) Post-graduate Degree courses in Surgical Subjects:**

**(a) Post-graduate Degree course in General Surgery:**

**Master of Surgery ( General Surgery) (M.S.)**

Shall have 4 compulsory theory papers of 100 marks each with 400 marks in aggregate as stipulated below:

**M.S. SUR I-** Shall deal with Basic Medical Sciences in relation to General Surgery.

**M.S. SUR II-** Shall deal with General Surgery.

**M.S. SUR III-** Shall deal with General Surgery.

**M.S. SUR IV-** Shall deal with recent advances in General Surgery.

**M.S. SUR V-** Shall deal with practicals which shall carry 400 marks including viva-voce. Minimum passing shall be 200 marks in aggregate.,

**(b) Post-graduate Degree course in Obstetrics and Gynaecology:**

**Master of Surgery (Obstetrics and Gynaecology) (M.S.)**

Shall have 4 compulsory theory papers of 100 marks each with 400 marks in aggregate as stipulated below:

**M.S. OBG I-** Shall deal with Obstetrics and diseases of New born.

**M.S. OBG II-** Shall deal with Gynaecology.

**M.S. OBG III-** Shall deal with Medical and Surgical disorder associated with pregnancy, Pharmacology basis for drugs used and Pathology encountered in Obst. and Gynaecology.

**M.S. OBG IV-** Shall deal with Trends in Obst. and Gynaecology, Family Welfare and Maternal and Child Health Services.

**M.S. OBG V-** Shall deal with practicals which shall carry 400 marks including viva voce. Minimum passing shall be 200 marks in aggregate.

**(c) Post-graduate Degree course in Ophthalmology:**

**Master of Surgery ( Ophthalmology) (M.S.)**

Shall have 4 compulsory theory papers of 100 marks each with 400 marks in aggregate as stipulated below:

**M.S. OPH I**- Shall deal with Basic Medical Sciences in relation to Ophthalmology.

**M.S. OPH II**- Shall deal with Clinical Ophthalmology.

**M.S. OPH III**- Shall deal with Clinical Ophthalmology.

**M.S. OPH IV**- Shall deal with recent advances in Ophthalmology.

**M.S. OPH V**- Shall deal with practicals which shall carry 400 marks including viva-voce. Minimum passing shall be 200 marks in aggregate.

**(d) Post-graduate Degree course in Orthopedics:**

**Master of Surgery ( Orthopedics) (M.S.)**

Shall have 4 compulsory theory papers of 100 marks each with 400 marks in aggregate as stipulated below:

**M.S. ORTHO I**- Shall deal with Basic Science as applied to Orthopaedics and Traumatology

**M.S. ORTHO II**- Shall deal with Traumatology.

**M.S. ORTHO III**- Shall deal with Orthopaedics including Operative Surgery.

**M.S. ORTHO IV**- Shall deal with General Surgery as related to Traumatology, Orthopaedics, Recent Advances and Rehabilitation.

**M.S. ORTHO V**- Shall deal with practicals which shall carry 400 marks including viva-voce. Minimum passing shall be 200 marks in aggregate.

**(e) Post-graduate Degree course in Oto-Rhino-Laryngology :**

**Master of Surgery ( Oto-Rhino-Laryngology) (M.S.)**

Shall have 4 compulsory theory papers of 100 marks each with 400 marks in aggregate as stipulated below:

**M.S. ENT I**- Shall deal with Basic Science as applied to Oto-Rhino-Laryngology.

**M.S. ENT II**- Shall deal with Rhinology with recent advances.

**M.S. ENT III**- Shall deal with Otology with recent advances.

**M.S. ENT IV**- Shall deal with Laryngology and Head, Face, Neck Surgery.

**M.S. ENT V**- Shall deal with practicals which shall carry 400 marks including viva-voce. Minimum passing shall be 200 marks in aggregate.

**OC-19.3**

**(Effective from 4<sup>th</sup> February, 2019)** *All candidates joining the Post Graduate course/programme shall work as full time post graduate student/residents during the period of course/programme attending not less than 80% (Eighty percent) of the course during Academic Term of 6 months, and shall give full time responsibility, assignments and participation in all facet of the educational process*

**OC-19.4**

**Pattern of Evaluation:**

**OC -19.4.1**

**Standard of Passing:** The examinations shall be conducted by the University. To pass in an examination a candidate shall obtain a minimum of 50% marks in theory as well as practical including viva-voce separately.

- OC-19.4.2** Evaluation of the examination shall be done by examiners appointed by the University according to the guidelines of the Medical Council of India from time to time.
- OC-19.4.3** All the Post Graduate Examiners shall be recognized Post Graduate Teachers holding recognized Post Graduate qualifications in the subject concerned.
- OC-19.4.4** For all Post Graduate Examinations, the minimum number of Examiners shall be four, out of which at least two (50%) shall be External Examiners, who shall be invited from other recognized universities from outside the State.
- OC-19.4.5** Under exceptional circumstances, examinations may be held with 3 (three) examiners provided two of them are external and Medical Council of India is intimated the justification of such action prior to the publication of result for its approval. Under no circumstances, result shall be published in such cases without the approval of Medical Council of India.
- OC-19.4.6** In the event of there being more than one centre in one city, the external examiners at all the centres in that city shall be the same. Where there is more than one centre of examination, the University shall appoint a Supervisor to coordinate the examination on its behalf.
- OC-19.4.7** Guidelines for appointing examiners: Appointment of internal as well as external examiners shall be as per the guidelines laid down by Medical Council of India, from time to time.
- OC-19.4.8** There shall be no provision for exemption or carry forward marks.
- OC-19.4.9** The University shall conduct not more than two examinations in a year, for any subject, with an interval of not less than 4 and not more than 6 months between the two examinations. An examinee whose dissertation has been approved but who is not successful at the remaining part of the examination shall be eligible for admission to that part and subsequent examination on payment of full fresh fee, but no exemptions shall be allowed except for submission of dissertation provided it is accepted by the examiners in previous examination.
- OC-19.4.10** *(Effective from 24<sup>th</sup> May, 2019) (i) Submission and acceptance of dissertation shall be mandatory for a candidate to become eligible for University examination in all Postgraduate degree courses. The candidate shall secure not less than 50% marks into each head of passing which shall include (1) Theory (2) Practical including clinical and viva voce examination.*
- (ii) A postgraduate student pursuing a Postgraduate Degree Programme in broad specialties/super specialties shall be required to present one poster presentation, read one paper at a national /state conference and present one research paper which should be published/accepted for publication/sent for publication during the period of her/his postgraduate studies to be eligible to appear at the postgraduate degree examination.*
- OC-19.4.11** Successful examinee shall be awarded a post graduate degree in the concern specialty/subject in the prescribed form signed by the Vice-Chancellor.

- OC-19.4.12** There shall be no provision for improvement of class.
- OC-19.4.13** **Dissertations:** The submission of dissertation shall be mandatory for the candidates of postgraduate degree courses for all subjects.
- (i) Every candidate shall carry out work on an assigned research project under the guidance of a recognized Post Graduate Teacher, the result of which shall be written up and submitted in the form of a Thesis.
  - (ii) Work for writing the dissertation is aimed at contributing to the development of a spirit of enquiry, besides exposing the candidate to the techniques of research, critical analysis, acquaintance with the latest advances in medical science and the manner of identifying and consulting available literature. A Candidate shall submit his dissertation through his supervisor and the Head of the College at least six months before the theory examination.
  - (iii) The thesis shall be examined by a minimum of three examiners, one internal and two external examiners, who shall not be the examiners for Theory and Clinical; and on the acceptance of the thesis by two examiners, the candidate shall appear for the final examination.
  - (iv) Provided that a candidate may by special permission of Vice-Chancellor be permitted to take examination in remaining part in case of report on the dissertation submitted by the candidate is not received before commencement of written examination. In such case the result of this examination shall not be declared until report on dissertation is received.
- OC-19.4.14** Each medical college shall have College Department Committee, College Department Unfair Means Committee and College Grievance Committee as per the guideline by the Medical Council of India (if any).
- OC-19.4.15** All the training department shall maintain minimum standards laid down by Medical Council of India for postgraduate degree of all subjects.
- OC-19.5** **Field training/work at the course of the study:**
- OC-19.5.1** The training given with due care to the Post Graduate students in the recognized institutions for the award of various post graduate medical degrees shall determine the expertise of the specialist and/or medical teachers produced as a result of the educational programme during the period of stay in the institution.
- OC-19.5.2** All candidates joining the Post Graduate training programme shall work as full time residents during the period of training, attending not less than 80% (Eighty percent) of the training during each calendar year, and given full time responsibility, assignments and participation in all facets of the educational process.
- OC-19.5.3** Every Institution undertaking Post Graduate training programme shall set up an Academic cell or a curriculum committee, under the chairmanship of a senior faculty member, which shall work out the details of the training programme in

each speciality in consultation with other department faculty staff and also coordinate and monitor the implementation of these training programmes.

- OC-19.5.4** The training programmes shall be updated as and when required. The structured training programme shall be written up and strictly followed to enable the examiners to determine the training undergone by the candidates and the Medical Council of India inspectors to assess the same at the time of inspection.
- OC-19.5.5** Post Graduates students shall maintain a record (log) book of the work carried out by them and the training programme undergone during the period of training including details of surgical operations assisted or done independently by M.S./M.D. candidates. The record books shall be checked and assessed by the faculty members imparting the training.
- OC-19.5.6** During the training for Degree to be awarded in clinical disciplines, there shall be proper training in basic medical sciences related to the disciplines concerned, during the training for the degree to be awarded in basic medical sciences, there shall be training in applied aspects of the subject; and there shall be training in allied subjects related to the disciplines concerned. In all Post Graduate training programmes, both clinical and basic medical sciences, emphasis is to be laid on preventive and social aspects and emergency care facilities for autopsies, biopsies, cytopsies, endoscopic and imaging etc, also be made available for training purposes.
- OC-19.5.7** The Post Graduate students shall be required to participate in the teaching and training programme of undergraduate students and interns.
- OC-19.5.8** Training in Medical Audit, Management, Health Economics, Health Information System, basics of statistics, exposure to human behaviour studies, knowledge of pharmaco-economics and introduction to non-linear mathematics shall be imparted to the Post Graduate students.

**OC-20 Ordinance relating to the M.D./M.S. Examination.** (Under Section 24(1) of the Goa University Act, 1984), **stands repealed in view of the provisions covered in the amendment to Ordinance OC-19 relating to the Post Graduate Degree in Faculty of Medicine. (Effective from 7<sup>th</sup> July, 2011)**

**OC-21 Ordinance relating to the Degree of Bachelor of Ayurvedic Medicine and Surgery, B.A.M.S. course.**

- OC-21 (effective from 2<sup>nd</sup> August, 2013) Ordinance relating to the Degree of Ayurvedacharya (Bachelor of Ayurvedic Medicine and Surgery-B.A.M.S.) Course** (Under Section 24(1) of the Goa University Act, 1984).

**Nomenclature of the degree**

The nomenclature of the degree awarded by the Goa University shall be Ayurvedacharya (Bachelor of Ayurvedic Medicine and Surgery)

- OC-21.1 (effective from 2<sup>nd</sup> August, 2013) Aims and Objectives**  
The Bachelor of Ayurveda Education will aim at producing graduates, having profound knowledge Of Ashtanga Ayurveda supplemented with knowledge of

scientific advances in modern medicine along with extensive practical training who will become efficient physicians and surgeons fully competent to serve the health care services.

**OC-21.2.1 (effective from 2<sup>nd</sup> August, 2013) Admission Qualification**  
Higher Secondary School Certificate (HSSC) Examination or equivalent with science recognized by the Government of Goa, provided the candidates passes the examination with 50% aggregate in the subject Physics, Chemistry and Biology.

**OC-21.2.2** Wherever provision and facilities for teaching Sanskrit as optional subject are not available at Intermediate/XII Std. (Biology-Science Group) the students with intermediate/XII Std. (Biology-Science Group) be admitted and Sanskrit be taught in main course **OR**

Uttar Madhyama of Sampurnan and Sanskrit Vishwavidyalaya with Science and English **OR**

Any other equivalent qualification recognised by State Govts. and State Educational Boards concerned with the examination.

**OC-21.3 (effective from 22<sup>nd</sup> June 2006) Minimum Age for Admission:**

17 years as on 31<sup>st</sup> December in the year of admission.

**OC-21.3.1 (effective from 22<sup>nd</sup> June 2006) Mode of Admission:**

Admission for BAMS (Ayurvedacharya) Degree programme shall be made strictly according to the merit. The merit shall be based on the percentage of marks obtained in the respective qualifying examinations in Physics, Chemistry, Biology.

Reservation of admission to 1<sup>st</sup> year BAMS Ayurvedacharya for SC/ST/OBC students will be as notified by the University.

**OC-21.4.1 (effective from 2<sup>nd</sup> August, 2013) Duration of Program:**

The academic session shall commence as per Goa University calendar.

The duration of the Program is 5-1/2 years, i.e.

- |                                   |             |
|-----------------------------------|-------------|
| a) First B.A.M.S.                 | - 12 months |
| b) Second B.A.M.S.                | - 12 months |
| c) Third B.A.M.S.                 | - 12 months |
| d) Final B.A.M.S.                 | - 18 months |
| e) Compulsory Rotatory Internship | - 12 months |

**OC-21.4.2 (effective from 2<sup>nd</sup> August, 2013) Eligibility for admission to the subsequent academic years.**

There will be two academic terms, each of six months duration for 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> B.A.M.S and three academic terms each of six months for final B.A.M.S. Only those students who have passed in at least three subjects out of five subjects in theory and practicals separately in the 1<sup>st</sup> B.A.M.S. Examination held by University shall be admitted to 2<sup>nd</sup> B.A.M.S.

Those students who have passed 1<sup>st</sup> B.A.M.S. and in at least two subjects out of four subjects in theory and practicals separately in the 2<sup>nd</sup> B.A.M.S. Examination held by the University shall be admitted to 3<sup>rd</sup> B.A.M.S. Those students who have passed 2<sup>nd</sup> B.A.M.S. and in at least three subjects out of five subjects in theory and practicals separately in the 3<sup>rd</sup> B.A.M.S. examination held by the university shall be admitted to Final B.A.M.S.

**OC-21.5 (effective from 2<sup>nd</sup> August, 2013) Degree to be Awarded:**

Ayurvedacharya (Bachelor of Ayurvedic Medicine and Surgery)

The candidate shall be awarded Ayurvedacharya (Bachelor of Ayurvedic Medicine and Surgery) degree after completion of prescribed course of study extending over the prescribed period and passing the final examination and thereafter satisfactorily completing the compulsory rotatory internship of twelve months duration.

**OC-21.6 (effective from 22<sup>nd</sup> June 2006) Medium of Instruction and Examination:**

Medium of Instruction and examination shall be English. However the use of Devanagari Script may be permitted for quoting references and for technical terms.

**OC-21.7 (effective from 22<sup>nd</sup> June 2006) The number of students to be admitted:**

The admission should be made strictly in accordance with teacher student ratio approved by CCIM from time to time.

**OC-21.7.1 (effective from 22<sup>nd</sup> June 2006) Attendance**

A candidate shall be eligible to appear for the University examination only if the candidate has 75% attendance in theory and practical separately in each of the subject for every professional year.

**OC -21.8.1 (effective from 2<sup>nd</sup> August, 2013) Course of Study**

The first B.A.M.S. examination shall be held in the following subjects:-

1. Padarth Vigyan evam Ayurved Itihas
2. Sanskrit
3. Kriya Sharir (Physiology)
4. Rachana Sharir ( Anatomy)
5. Maulik Siddhant evam ashtanga Hridaya (Sutra Sthan).

**FIRST B.A.M.S. EXAMINATION:**

i)The first B.A.M.S. examination shall be held at the end of the academic year in the following subjects:-

1. Padarth Vigyan evam Ayurved Itihas
2. Sanskrit
3. Kriya Sharir (Physiology)
4. Rachana Sharir ( Anatomy)
5. Maulik Siddhant evam ashtanga Hridaya (Sutra Sthan).

The First B.A.M.S. examination shall be ordinarily held and completed by the end of the month of May/June every year after completion of one year of First B.A.M.S. session.



ii) A student failing in not more than two subjects of first B.A.M.S. examination shall be eligible to keep terms for second B.A.M.S. However he/she will not be allowed to appear for the second B.A.M.S. examination unless he/she passes in all the subjects of the first B.A.M.S.

#### **OC- 21.8.2**

#### **(Effective from 29<sup>th</sup> September, 2017) Second B.A.M.S. Examination:**

- i) The second B.A.M.S. examination shall be held at the end of the academic year in the following subjects:-
1. Dravyaguna Vigyan (pharmacology and Materia Medica)
  2. Rasashastra and Bhaishajya Kalpana (Pharmaceutical Science)
  3. Rog Nidan evam Vikruti Vigyan (Diagnostic Procedure & Pathology)
  4. Charak Samhita- Purvardh.

The Second B.A.M.S. examination shall be ordinarily held and completed by the end of the month of May/ June every year after completion of one year of Second B.A.M.S. session.

ii) A student failing in not more than two subjects of second B.A.M.S. examination shall be eligible to keep terms for the third B.A.M.S. examination unless he/she passes in all the subjects of second B.A.M.S. examination.

#### **OC- 21.8.3**

#### **(Effective from 29<sup>th</sup> September, 2017) Third B.A.M.S. Examination:**

- i) The third B.A.M.S. examination shall be held at the end of the academic year in the following subjects:-
- 1) Agad tantra Vyavhar Ayurved evam Vidhi Vaidyaka (Toxicology and Medical Jurisprudence).
  - 2) Charak Samhita-Uttarardh.
  - 3) Swastha Vritta and Yoga (Preventive and Social Medicine and Yoga)
  - 4) Prasuti tantra and Striroga (Gynaecology and Obstetrics)
  - 5) Bal Roga (Peadiatrics)

The Third B.A.M.S. examination shall be ordinarily held and completed by the end of the month of May/ June every year after completion of one year of third B.A.M.S. session.

ii) A student failing in not more than two subjects shall be held eligible to keep the terms for the final professional examination, however he/she will not be allowed to appear for final professional examination unless he/she passes in all the subjects of Third B.A.M.S. examination.

#### **Third B.A.M.S. Examination:**

- i) The third B.A.M.S. examination shall be held at the end of the academic year in the following subjects:-
- 1) Agad tantra Vyavhar Ayurved evam Vidhi Vaidyaka (Toxicology and Medical Jurisprudence).
  - 2) Charak Samhita-Uttarardh.
  - 3) Swastha Vritta and Yoga (Preventive and Social Medicine and Yoga)
  - 4) Prasuti tantra and Striroga (Gynaecology and Obstetrics)
  - 5) Bal Roga (Peadiatrics)

The Third B.A.M.S. examination shall be ordinarily held and completed by the end of the month of May/ June every year after completion of one year of third B.A.M.S. session.

ii) A student failing in not more than two subjects shall be held eligible to keep the terms for the final professional examination, however he/she will not be allowed to appear for final professional examination unless he/she passes in all the subjects of Third B.A.M.S. examination.

**OC - 21.8.3(A) (effective from 2<sup>nd</sup> August, 2013) Final B.A.M.S. Examination:-**

i) The final B.A.M.S session shall be of 18 months duration and start every year, in the month following completion of the Third B.A.M.S Examination.

ii) Final B.A.M.S examination shall comprise of the following subjects:-

1. Shalya Tantra (General Surgery)
2. Shalakya Tantra (Diseases of Head and Neck including Ophthalmology, ENT and Dentistry)
3. Kayachikitsa (Internal Medicine including Manas Roga, Rasayan and Vajikarana)
4. Panchakarma
5. Research Methodology and Medical-statistics.

The final B.A.M.S examination shall be ordinarily held and completed by the end of October/November every year, after completion of 18 months of final B.A.M.S.

**OC- 21.8.4 (A) (effective from 2<sup>nd</sup> August, 2013) EVALUATION**

**1. Internal Assessment**

There shall be internal assessment of maximum of 10% marks in each of theory subjects of the B.A.M.S. program.

The internal assessment comprising of two unit tests of 50 marks each shall be conducted by the concerned subject teacher after prior announcement of at least one week. He /She shall notify the marks obtained by students after evaluation. The teacher shall obtain the signature of the student against the marks allotted. If a student is unable to appear for internal examination on medical grounds a repeat internal test will be conducted.

There shall be minimum of two tests for each subject. The effective marks shall be average of the 2 tests. These marks shall be communicated to the University before the commencement of the university Examination. The internal assessment marks, communicated to the University shall be retained and carried forward.

**2. University examination**

In the theory examination there shall be a weightage of 40% of short answer questions and remaining 60% of long explanatory questions. The question paper shall consist of two sections of 45 marks each. These questions shall cover the entire syllabus of the subject.

- i. A candidate obtaining 75% marks in the subject shall be awarded distinction in the subject.
- ii. The minimum marks required for passing the examination shall be 50% in theory and practical separately in each subject.
- iii. The unsuccessful students shall be eligible to appear at the supplementary examination which will be held after six months of the regular examination.
- iv. Minimum 75% attendance in each subject separately in theory and practical shall be essential for appearing in the examination. In this regard a class attendance card shall be maintained for each student for each subject. The Principal shall arrange to obtain the signature of the students and teachers at the end of each course of lectures and practical instructions and send the cards to each head of

the Department for final completion before the commencement of each examination.

v. In case a student is unable to appear at the regular examination for cognitive reasons, his/her appearance at the supplementary examination will be treated as that of a regular student and not as a repeater. Such student after passing the said examination will be eligible to continue alongwith regular students and be eligible to appear at the next examination after completion of the required period of study.

vi. **(Effective from 29<sup>th</sup> September, 2017)** The following facts are to be taken into consideration while determining class work in the subject:-

- a) Regularity in attendance
- b) Periodical tests
- c) Practical records

vii. There shall be double evaluation of the entire answer scripts of the theory papers by the internal and external examiners. There shall be no re-evaluation of the theory papers.

viii. There shall be two examiners, one internal and one external for all practical examinations. Consolidated marksheet signed by both the examiners shall be submitted to the University.

**OC-21.8.4 B** **(effective from 22<sup>nd</sup> June 2006)** Revaluation and general gracing shall be as per the existing University Ordinance.  
Maximum duration to complete the course shall be not more than double the minimum prescribed period.

**OC-21.8.4 (C)** **(effective from 2<sup>nd</sup> August, 2013) Standard of passing**

1) To pass the First, second, third and final B.A.M.S. examination (Ayurvedacharya), a candidate shall obtain a minimum of 50% of the total marks assigned to each theory and practical component separately.

2) An unsuccessful candidate who obtains a minimum of 50% of the marks assigned to the written examination / practical in a subject at his option be exempted from appearing in the written examination /practical in that subject.

3) The marks secured in the written examination /practical of a subject in which he has secured exemption shall be carried forward for his reappearance at the subsequent examination in that subject, but the candidate shall not be eligible for a class.

**OC-21.8.4(D)** **(effective from 2<sup>nd</sup> August, 2013) Award of class**

i) Class/distinction will be awarded based on the percentage of marks scored in aggregate, as shown below:

75% and above – distinction

60% and above but below 75% – First Class

50% and above but below 60% – Second Class

In order to obtain distinction in any of the subjects of the examination, a candidate shall obtain 75% and above (without any grace marks) of the maximum marks allotted to the subject.

(ii) Only those candidates who have passed the examination in first attempt shall be considered for class or distinction.

### OC-21.9.1

#### **(effective from 2<sup>nd</sup> August, 2013) Compulsory Rotatory Internship :**

There shall be a compulsory rotatory internship of a duration of 12 months. The students will join the compulsory internship programme after passing the final B.A.M.S. examination. The internship programme will start after the declaration of the result of final B.A.M.S. examination.

A) Internship Programme and time distribution will be as follows:-

1. The interns will receive an orientation regarding details of internship programme along with the rules and regulations, in an orientation workshop, which will be organized during the first three days of the internship programme. The intern shall maintain the details of day to day activities undertaken by him/her during his/her internship.
2. Every intern will provisionally register himself with the concerned State Board/Council and obtain a certificate to this effect before joining the internship programme.
3. Daily working hours of intern shall not be less than eight hours.
4. Ordinarily the internship programme of Clinical training will be divided into six months in the Ayurvedic Hospital attached to the college and six months in PHC/CHC/Rural Hospital/District Hospital/Civil Hospital or any Government Hospital of modern Medicine.

Where there is no provision for allowing a graduate of Ayurveda in the hospital/Dispensary of modern medicine, the twelve months internship will be completed in the Hospital of Ayurveda College.

Clinical Training of six/twelve months as the case may be in the Ayurvedic Hospital attached to the college will be conducted as follows:-

Departments	Distribution of six months	Distribution of twelve months
1. Kayachikitsa	2 Months	4 Months
2. Shalya	1 Month	2 Months
3. Shalakya	1 Month	2 Months
4. Prasuti tantra and Striroga	1 Month	2 Months
5. Kaumarabhritya	15 days	1 Month
6. Panchakarma	15 days	1 Month

- B) The six months training of interns outside the parent college is to be carried out with an objective to orient and acquaint the intern with National health programmes. The interns will have to join one of the following institutes for undertaking such training, provided they are approved by Goa University, upon recommendation made by the concerned Ayurved College.
- (a) Primary Health Centre
  - (b) Community Health Centre/District Hospital/Rural Hospital
  - (c) Any Hospital of Modern Medicine.
  - (d) Any Ayurved Hospital or Dispensary.

- OC-21.9.2** **(effective from 22<sup>nd</sup> June 2006)** The compulsory Rotatory internship shall be done in the respective teaching hospital / Ayurvedic Hospitals / dispensary as permitted by University for the period of 12 months after passing the final examination. In this period, at least a period of six months of internship shall be devoted in the Clinical departments of the teaching hospital.
- OC-21.10.1** **(effective from 22<sup>nd</sup> June 2006)** On completion of the Internship as certified by the Principal on the recommendations of the authorities under whom the training was done, the candidate shall be eligible for the award of Ayurvedacharya (Bachelor of Ayurvedic Medicine and Surgery) Degree.
- OC-21.10.2** **(effective from 22<sup>nd</sup> June 2006)** For the purpose of recommendation of completion of internship of candidate, the Principal shall take in to consideration the following factors.
- i) Class work in the subject
  - ii) Regularity in Attendance
  - iii) Laboratory record, Notebook and Clinical History sheets.
- OC-21.10.3** The card must contain a statement that the student has attended not less than  $\frac{3}{4}$  of the theory lectures and practical classes and not less than 85% of clinical instructions of which the course consists. This card shall be submitted to the examiners as required.
- OC-21.11** **(effective from 2<sup>nd</sup> August, 2013) General**
- (1) After passing the final B.A.M.S. examination, every student shall be required to undergo the compulsory internship to the satisfaction of the Head of the Institution.
  - (2) A student passing final B.A.M.S. examination shall not be entitled to receive the degree without completion of the Internship.
  - (3) The internship programme of interns shall be regulated by the Principal and the Superintendent of the Hospital where an intern undertakes his internship.
  - (4) (a) Internship should preferably be carried out in the hospital of the college from where the student has passed his final examination. Authorities of the Institution should make all possible efforts to accommodate such students in the hospital of the college.
    - (b) If it is not possible to accommodate all the students, internship may be permitted to carry out in the hospital/dispensary run by the State/Central Government, or Local bodies or in the hospital/dispensary recognized by the University for the purpose. In such cases the training shall be regulated by the In-charge of the hospital/dispensary and the concerned Principal.
    - (c) A student may be permitted to carry out internship in any hospital of the Ayurvedic College if permitted by the Principal of that college.
    - (d) All the postings should be made by the Principal on merit and first come, first serve basis.
  - 5) After the declaration of results of final B.A.M.S. examination the successful candidates should submit their application in prescribed forms to the Principal of college.

6) Applications for transfer of Internship to another hospital shall not ordinarily be entertained. In extraordinary circumstances the Principal and authority of the Hospital may consider such a transfer.

7) Intern bed ratio shall be as approved by CCIM from time to time.

8) Attendance: - Minimum attendance of each intern shall not be less than 80% in each department independently.

9) Working hours: - Not less than 8 hours suitably arranged by Superintendent or In-Charge of the Hospital. Interns may be given shift rotation including night duties.

10) A muster roll must be kept for the attendance by the Superintendent / In-charge of the Hospital and should be forwarded to the Principal every month.

11) Every intern shall be under administrative and disciplinary control of the hospital where he/she is appointed.

12) Interns shall obey the rules, regulations, conventions and practices of the hospital in force and those laid down from time to time.

13) No Intern shall remain absent from his / her hospital duties without prior permission from the authorities of the hospital.

14) For internship of 12 months duration – total 15 days of casual leave is admissible.

15) Stipend shall be paid to the students in coordination with the management.

16) Any leave or absence from the work in excess of the above shall be treated as absence and the intern shall make up for the absence period without any stipend or remuneration.

17) Completion Certificate: On satisfactory completion of the internship the Principal/Head of the institution shall forward to the University, a certificate to the effect that the intern has satisfactorily completed his internship. The University in turn shall issue the final completion certificate to the Interns.

18) The internship training shall be supervised and controlled by the Dean of the Faculty in consultation with the concerned Principal.

### **Detailed Guidelines for Programme:**

The intern will undertake following activities in respective department as shown below:-

#### **1. Kayachikitsa:**

- i. All routine work such as case taking, investigations, diagnosis and management of common diseases by Ayurvedic Medicine.
- ii. Routine clinical pathological work such as Haemoglobin estimation, complete haemogram, urine analysis, microscopic examination of blood parasites, sputum examination, stool examination, Mutra evam Mala pariksha by Ayurvedic method. Interpretation of laboratory data, clinical findings and arriving at a diagnosis.

- iii. Training in routine ward procedures and supervision of patient in respect of their diet, habits and verification of medicine schedule.

**2. Panchakarma:**

- i. Panchakarma Procedures and techniques regarding poorva karma, pradhan karma and paschat Karma.

**3. Shalya:**

- i. Diagnosis and management of common surgical disorders according to Ayurvedic Principles.
- ii. Management of certain surgical emergencies such as fractures and dislocations, Acute Abdomen etc.
- iii. Practical training of aseptic and antiseptic techniques, sterilization etc.
- iv. Pre-operative management.
- v. Practical use of anesthetic drugs.
- vi. Radiological procedures such as clinical interpretation of X-rays, IVP, Barium meal, sonography.
- vii. Surgical Procedures and routine techniques such as suturing of fresh injuries, dressing of wounds, burns and ulcers, incision of cysts, venesection and application of ksharasutra in ano-rectal diseases.

**4. Shalakya:**

- i. Diagnosis and management of common surgical disorders according to Ayurvedic Principles.
- ii. Pre-operative management.
- iii. Surgical procedures in Ear, Nose, Throat, Dental problems and ophthalmic problems.
- iv. Examination of Eye, Ear, Nose, Throat and Refractive Error with the supportive instruments in OPD.
- v. Procedures such as Anjana Karma, Nasya, Raktamokshan, Shirodhara, Put pak, kawal, Gandush at OPD level.

**5. Prasuti tantra and Striroga:**

- i. Antenatal and post-natal problems and their remedies, Antenatal and Post-natal care.
- ii. Management of normal and abnormal labour.
- iii. Minor and major obstetric surgical procedures.

**6. Balroga:**

- A.**
- i. Antenatal and Post-natal problems and their remedies, antenatal and Post-natal care also by Ayurvedic Principles and medicine.
  - ii. Antenatal and Post-natal emergencies.
  - iii. Care of new born child along with immunization programme.
  - iv. Important pediatric problems and their Ayurvedic managements.
- B. PHC/Rural Hospital/District Hospital/Civil Hospital or any Government Hospital of modern medicine.**

Guidelines for conducting six months internship training in primary Health Centre,

Community Health Centre/District Hospital/ Any hospital of modern medicine/ any Ayurved hospital or Dispensary.

Intern should be trained to acquaint with:

- i. Routine of the PHC and maintenance of their records.
- ii. Routine working of the medical/ non-medical staff of PHC.
- iii. Work of maintaining the register e.g. daily patient register, family planning register, surgical register.
- iv. Different National Health Programmes of Government of the State/District.

### **C. Casualty:**

Identification of casualty and trauma cases, their first aid treatment and procedure for referring such cases to identified hospitals.

### **D. Rural Ayurvedic Dispensary/ Hospital**

Diseases more prevalent in rural and remote areas and their management. Teaching of health care methods to rural population and also various immunization programmes.

### **7. Granting of completion of Internship:**

After completing the assignment in various sections, the interns will have to obtain a certificate from the head of the Section in respect of their work in the section concerned and finally submit the same to the Principal/Head of the Institute, to enable granting of successful completion of internship.

**8. Migration of Internship:** Migration of internship will be only with the consent of both, the College and the University. In the case of migration to another College in the University, the same will be done upon the approval of the University, based on production of character certificate and No Objection Certificate from both the Colleges. In case of migration to a College under another University, such migration will be with the consent of both colleges and the University(s). Any migration will be permissible only if the concerned Institution is recognized by CCIM.

**MIGRATION:** A student may be allowed to take the migration to continue his/her study to another college after passing the first B.A.M.S. examination. However, students who have failed are not permitted to migrate and mid-term migration is also not allowed. For migration, the student shall have to obtain the consent of both colleges and Universities and will be against the vacant seat after obtaining NOC from CCIM.

### **Maintenance of Records**

(1) Each intern shall have to maintain a detailed record of minimum of ten cases in each department during his internship duly signed by the Medical Officer concerned. The record shall be complete in all respects such as case-taking, clinical examination and investigations, evaluation of symptomatology and samprapati vighyan, treatments and follow-ups.

**OC-21.12**

**Clinical training of the students will start from third B.A.M.S. onwards.**



**OC-21.12.1**

The clinical training of the students in the hospital attached to the college shall be as follows:-

**i) Kayachikitsa** (In-patient and Out-patient departments) 18 months

- |                                  |           |
|----------------------------------|-----------|
| a) Kayachikitsa (Samanya)        | 06 months |
| b) Manas roga                    | 03 months |
| c) Rasayan and Vajikaran         | 03 months |
| d) Panchakarma                   | 03 months |
| e) Rog Vigyan and Vikruti Vigyan | 03 months |

**ii) Shalya** (In-patient and Out-patient departments) 09 Months

- |   |           |
|---|-----------|
| a) Shalya (Samanya)<br>(at least one month in Operation Theatre)                  | 03 months |
| b) Shalya (Kshar & Anushastra Karma)<br>(at least one month in Operation Theatre) | 03 months |
| c) Ksharsutra   | 02 months |
| d) Anaesthesia  | 15 days   |
| e) Radiology  | 15 days   |

**iii) Shalakya Tantra** (In-patient and Out-patient departments) 04 months  
(at least one month in Operation Theatre)

**iv) Prasuti Tantra and Striroga** 03 months  
(In-patient and Out-patient departments)

**v) Balroga** (In-patient and Out-patient departments) 01 month

**vi) Atyayik** (casualty) 02 months

**OC-21.13.1. A**

**COURSE STRUCTURE OF THE PROGRAMME:  
NUMBER OF CONTACT HOURS**

Name of the subject	Number of hours of teaching		
	Theory	Practical	Total
<b>1<sup>st</sup> B.A.M.S.</b>			
1. Padarth Vigyan avam Ayurved ka Itihas	100	----	100
2. Sanskrit	200	----	200
3. Kriya Sharir	200	200	400
4. Rachana Sharir	300	200	500

5. Maulik Siddhant avam ashtanga Hridaya (Sutra Sthan).	150	----	150
<b>2<sup>nd</sup> B.A.M.S.</b>			
1. Dravyaguna Vigyan	200	200	400
2. Agad tantra Vyavhar Ayurved evam Vidhi Vaidyaka	200	100	300
3. Rasashastra Evam Bhaishjya Kalpana	200	200	400
4. Charak Samhita- Purvardh.	200	---	200
<b>3<sup>rd</sup> B.A.M.S.</b>			
1. Roga Vigyan and Vikriti Vigyan	200	100	300
2. Swastha Vritta and Yoga	200	100	300
3. Prasuti Tantra and Striroga	200	100	300
4. Bal Roga (Peadiatrics)	100	100	200
5. Charak Samhita-Uttarardh	200	----	200
<b>Final B.A.M.S.</b>			
1. Kayachikitsa	300	200	500
2. Panchakarma	100	200	300
3. Shalya Tantra	200	150	350
4. Shalakya Tantra	200	150	350
5. Research Methodology & Medical-statistics	50	---	50

**OC-21.13.1. B**

**DETAILS OF MARKS ALLOTTED FOR THEORY AND PRACTICALS**

Name of the subject	Details of maximum marks			
	Numbers of papers	Theory	Practical	Total
<b>1<sup>st</sup> B.A.M.S.</b>				
1. Padarth Vigyan evam Ayurved ka Itihas	Two	200	----	200
2. Sanskrit	One	100	----	100
3. Kriya Sharir	Two	200	100	300
4. Rachana Sharir	Two	200	100	300
5. Maulik Siddhant evam ashtanga Hridaya (Sutra Sthan). (Effective from 27 <sup>th</sup> June 2018)	One	100	50	150
<b>2<sup>nd</sup> B.A.M.S.</b>				
1. Dravyaguna Vigyan	Two	200	200	400
2. Agad tantra Vyavhar Ayurveda evam Vidhi Vaidyaka	One	100	50	150
3. Rasashastra Evam Bhaishjya Kalpana	Two	200	200	400

4.	Charak Samhita-Purvardh. (Effective from 27 <sup>th</sup> June 2018)	One	100	50	150
<b>3<sup>rd</sup> B.A.M.S.</b>					
1.	Roga Vigyan and Vikriti Vigyan	Two(01-Pathology 01 Ayurveda)	200	100	300
2.	Swastha Vritta and Yoga	Two	200	100	300
3.	Prasuti Tantra and Striroga	Two	200	100	300
4.	Bal Roga (Peadiatrics)	One	100	50	150
5.	Charak Samhita-Uttarardh(Effective from 27 <sup>th</sup> June 2018)	One	100	50	150
<b>Final B.A.M.S.</b>					
1.	Kayachikitsa	Two	200	100	300
2.	Panchakarma	One	100	50	150
3.	Shalya Tantra	Two	200	100	300
4.	Shalakya Tantra	Two	200	100	300
5.	Research Methodology & Medical statistics	One	50	--	50

NOTE: The period of theory and practical shall not be less than 60 minutes (one hour). The duration of the practical of clinical subjects and Rachna Sharir (Dissection) shall be of at least one hundred and twenty minutes (two hours).

### OC-21.13.1.C Break up of marks for practical examination for 1<sup>st</sup> B.A.M.S.

Sr. No.	Subject	Total marks	B R E A K U P								
1.	Rachana Sharir	100	Vicchedita Sharir Darshan	Komal Avayav	Spotting	X- ray	Surface Anatomy	Maukhik Gen-viva	Journal	Asthi sharir	Marma
			10 marks	10 marks	20 marks	05 marks	05 marks	20 marks	10 marks	10 marks	10 marks
2.	Kriya Sharir	100	Prakriti, Agni, Koshta, Sarata	Experiment	Instrument	Spotting	Gen – Viva	Journal			
			20 marks	20 marks	10	20	20	10			

3.	Sanskrit												
4.	Padarth Vigyan evam Ayurved Ka Itihas												
5	Maulik Siddhant evam Ashtanga Hridaya (Sutra Sthan). <b>(Effective from 27<sup>th</sup> June 2018)</b>	50	Practical or Viva- voce										
			50										

**OC-21.13.1.D Break up of marks for practical examination for 2<sup>nd</sup> B.A.M.S.**

Sr. No.	Subject	Total marks		Gen - Viva.	Drug identification	Journal	Compilation	Herbarium	Practical diary
1.	Dravyaguna vidnyan	200	<b>B R E A K U P</b>	80	40	20	20	20	20
2.	Agad tantra Vyavhar evam Vidhi Vaidyaka	50		Practical journal		Spotting	Gen- Viva		
				10		15	25		
3.	Rasashastra Bhaisajya Kalpana	200		Medicine Preparation (Practical)	Identification of drug	Journal	Gen- Viva	Spotting	
				70	20	20	50	40	
4.		50		Practical or Viva-voce					


	Charak Samhita (P) <b>(Effective from 27<sup>th</sup> June 2018)</b>			50					
--	---	--	--	----	--	--	--	--	--

**OC-21.13.1.E Break up of marks for practical examination for 3<sup>rd</sup> B.A.M.S.**

Sr. No.	Subject	Total marks	B R E A K U P						
1.	Rogvagvyan & Vikruti Vidnyan	100	Clinical case taking (long case)	Clinical case taking (short case)	Instrument	Experiment	Gen- Viva	Compilation	Journal
			15	10	10	20	25	10	10
2.	Swasthvruta & Yoga	100	Vaiyaktik Swasthvruta	Sarvajanik & Samajik Swasthvruta	Yoga & naturopathy (Demonstration)	Primary health care, Family planning & national prog.	Journal		
			20	30	20	20	10		
3.	Prasuti Tantra & Streerog	100	Clinical Exam (long case) with Oral	Clinical Exam (Shot case) with oral	Instruments	X-Ray & model	Kalpa	Journal	Gen-Viva
			30	20	10	10	10	10	10
4.	Balroga	50	Journal & Daily work		Viva-Voce		Clinical Exam		
			10		20		20		
5.	Charak Samhita- (Uttarardh) <b>(Effective from 27<sup>th</sup> June 2018)</b>	50	Practical or Viva-voce						
			50						

**OC-21.13.1.F Break up of marks for practical examination for Final B.A.M.S.**

Sr. No.	Subject	Total marks	B R E A K U P						
1.	Kayachikitsa	100	Daily work	Journal	Gen- Viva	Clinical Exam			
			10	10	30	50			
2.	Shalya Tantra <b>(Effective from 27<sup>th</sup> June 2018)</b>	100	Clinical Exam (long case) with Oral	Clinical Exam (Shot case) with oral	Instruments	Daily Records	Viva Voce		
			20	10	20	10	40		

3.	Shalaky Tantra <b>(Effective from 27<sup>th</sup> June 2018)</b>	100		Clinical Exam (long case) with Oral	Clinical Exam (Shot case) with oral	Instrumen ts	Daily Records	Viva Voce		
				30	20	10	10	30		
4.	Panchakarma	50		Practical Records		Procedure		Viva- voce		
				10	15	25				
5.	Research Methodology & Medical- statistics	-----								

**OC-21.14.1 (Effective from 2<sup>nd</sup> August, 2013) -Deleted-**

**OC-21.14.2 (Effective from 2<sup>nd</sup> August, 2013) -Deleted-**

**OC-21.15 (Effective from 2<sup>nd</sup> August, 2013) -Deleted-**

**OC-22 (Effective from 15<sup>th</sup> January, 2008) Ordinance relating to Examination Scheme for Bachelor of Science (Naval Science) Course** (Under Section 24(1) of the Goa University Act, 1984).

**OC-22.1 Applicability**

This Ordinance shall be applicable to the Bachelor of Science (Naval Science) course. It shall come into force from the date notified by Goa University. Once notified, the ordinance shall supersede all existing Ordinances, Notifications and Circulars relating to this course. For matters provided under this ordinance, the other general ordinances shall not be applicable.

**OC-22.2 Institution**

The course shall be conducted at Naval Academy, Indian Navy.

**OC-22.3 Eligibility**

Candidates of the course are required to fulfill all the following criteria:-

- (a) They must be 10+2-qualified.
- (b) They must have cleared the interview by the all-India Services Selection Board, Indian Navy.
- (c) They must have been selected by the Integrated Headquarters (Navy), Ministry of Defence.
- (d) They must have joined Naval Academy as cadets of the 10+2 Executive Course.

**OC-22.4 Registration**

All eligible candidates as specified in OC-22.3 are required to be registered with Goa University during their first year for the award of BSc (Naval Science) degree.

**OC-22.5 Duration**

- (a) The total duration of the course shall be three years only.
- (b) The course shall consist of six semesters of twenty weeks each except for the First Semester which shall be of eighteen weeks only.

**OC-22.6 Periodicity**

The course shall be conducted twice a year with the semesters commencing in June / July and in December / January every year.

**OC-22.7 Syllabus**

The syllabus, including the titles of different papers and the number of lectures for each, shall be as recommended by the Board of Studies in Naval Science and approved by the Academic Council of Goa University.

**OC-22.8 Examinations**

(a) The total marks for each paper shall be 100 only, the breakdown of which is as follows:-

- (i) There shall be a Snap Test in each paper for 15 marks.
- (ii) There shall be a Mid-Term Test in each paper for 25 marks.
- (iii) There shall be a Terminal Test in each paper for 60 marks, out of which 10 marks shall be allotted to practical examinations wherever applicable.

(b) All examinations shall be conducted by Lecturers of Naval Academy who would set question papers and evaluate answer papers in their respective subjects.

**OC-22.9 Staff**

Teaching and administrative staff for the course shall be appointed by the Naval Academy.

**OC-22.10 Attendance**

Only candidates who have attended a minimum of 75% of the total lectures delivered in the respective semester shall be permitted to appear in Terminal Test except for absence on medical grounds.

**OC-22.11 Rounding Off**

The total marks scored in each paper shall be rounded off to the nearest integer.

**OC-22.12 Pass Criteria**

- (a) Only candidates scoring a minimum of 40% marks of the aggregate of Snap, Mid-Term and Terminal Tests shall pass the respective paper.
- (b) Only candidates passing every paper of the respective semester shall be promoted to the next semester.
- (c) A maximum of 5 grace marks may be awarded to a candidate to enable him to pass the semester, subject to a maximum of 3 grace marks in any one paper.

**OC-22.13 Mis-muster Tests for Absentees**

- (a) There shall be mis-muster tests for absentees in Snap Test only once prior to Mid-Term Tests.
- (b) There shall be mis-muster tests for absentees in Mid-Term Tests if the absence is due to medical grounds or naval duty. Such tests shall be completed by the thirteenth (13<sup>th</sup>) week of the semester.
- (c) There shall be mis-muster tests for absentees in Terminal Tests if the absence is due to medical grounds or naval duty. Such tests shall be completed within six (06) weeks of the main tests.

**OC-22.14 Supplementary Tests for Failures**

- (a) Supplementary tests shall be held within six/eight weeks of the Terminal Tests for candidates failing in a maximum of two papers.
- (b) Candidates qualifying by passing supplementary tests shall not be eligible for award of any class on graduation.
- (c) Candidates failing in any supplementary paper shall repeat the same semester.



### **OC-22.15 Relegation Criteria**

- (a) Candidates absent in more than 25% of the total lectures delivered in the respective semester shall be relegated by one semester.
- (b) Candidates failing in three or more papers in the same semester shall repeat the same semester.
- (c) Candidates failing in any supplementary paper shall repeat the same semester.
- (d) Candidates resorting to unfair means in examinations shall be penalised to repeat the same semester.
- (e) Candidates failing in physical tests or in observing discipline shall also repeat the same semester.

### **OC-22.16 Performance Classification**

- (a) Classes will be awarded only to those candidates who have passed all the six semesters as specified in OC-22.12 without appearing in any supplementary test.
- (b) Candidates relegated on academic grounds shall be awarded Second Class by Goa University irrespective of their actual aggregates.
- (c) Candidates not relegated on academic or disciplinary grounds shall be classified by Goa University according to the following criteria:-
  - (i) Candidates scoring 40% or more but less than 60% in the final aggregate shall be awarded Second Class.
  - (ii) Candidates scoring 60% or more but less than 70% in the final aggregate shall be awarded First Class.
  - (iii) Candidates scoring 70% or more in the final aggregate shall be awarded Distinction.

### **OC-22.17 Certification**

- (a) A Goa University Certificate of Marks shall be issued to every candidate passing the course.
- (b) A Goa University Degree Certificate shall be issued during Convocation to every candidate passing the course

### **OC-23 Ordinance relating to award of Bachelor of Science in Nursing.**

(Under Section 24(1) of the Goa University Act, 1984).

**OC-23.1 Nomenclature of the Degree:** The nomenclature of the degree awarded by the Goa University shall be Bachelor of Science in Nursing (Post Basic).

**OC-23.2 Minimum Duration of the Course:** The Post Basic B.Sc. in Nursing Course shall be of two academic years. Each academic year shall be from June to April.

**OC-23.3 Minimum Duration of the Year:** The minimum duration of the year shall be of at least 40 weeks.

**OC-23.4 Eligibility for Award of Degree:** A candidate admitted for the Post Basic B.Sc. in Nursing Course shall have to pass all examination to be eligible for award of degree.

**OC-23.5 Attendance:** A candidate should have attended 75% of lectures and 100% of Clinical work to be eligible to appear for examination. In case of illness certified with a Medical Certificate

from a Government Institute a candidate may be allowed to appear for the examination provided he has attended 75% of Clinical Work. Such a candidate shall be required to make up the loss of 25% attendance in clinical work during vacations.

**OC-23.6 Standard of passing:** To pass the examination the candidate shall obtain in Theory (1) 35% marks in the aggregate of internal & external assessment in each of the subsidiary subjects. (2) 50% marks in the aggregate of internal and external assessment in each of the Principal subjects. PRACTICAL (1) 50% marks in the aggregate of internal & external assessment in each subject.

**OC-23.7 ATKT Rules:** (a) A candidate who fails in not more than two Principal subjects shall be permitted to enter upon the course for the next year examination and shall be allowed to appear for both year examinations simultaneously. However, a candidate who fails in any number of subsidiary subjects shall be permitted to enter upon the course for the next year.

**OC-23.8 Number of attempts:** There shall be maximum of four attempts in 1<sup>st</sup> year examination and a maximum of three attempts in the second year examination.

**OC-23.9 Discontinuation:** A candidate shall not be allowed to continue the course if (a) He/she does not clear the first year examination in 4 attempts **OR** (b) He/she does not clear the Second year examination in 3 attempts **OR** (c) He does not complete the course within a period of four years from the date of admission to the course.

**OC-23.10 Maximum duration of the course:** The candidate must clear both the examinations within a period of four years from date of admission to the course.

**OC-23.11 Obtaining a Class:** (a) Those of the successful candidates who obtain less than 50% in the aggregate of all the subjects in both the year examination having passed each yearly examination in one and the same sitting shall be considered to have passed in the pass class.  
(b) Those of the successful candidates who obtain above 50% of the total on the aggregate of all the subjects of both the yearly examinations and having passed each examination at one and the same sitting shall be considered to have passed the examination in the Second Class.  
(c) Those of the successful candidates who obtain 60% and above of the total on the aggregate of all the subjects of both the yearly examinations and having passed each examination at one and the same sitting shall be considered to have passed the examination in the First Class.  
(d) Those of the successful candidates who obtain 70% and above of the total on the aggregate of all the subjects of both the yearly examinations having passed each examination at one and the same sitting shall be considered to have passed the examination with Distinction.

(e) A candidate who fails in any of the subjects of the examination in accordance with the provision mentioned in OC-23.6 may at the candidates option, be allowed to appear only in the said subjects at a subsequent examination.

(f) Such a candidate when he passes the examination in compartments will not be eligible for any class. The remarks against his results shall be 'Passes'.

**OC-23.12 Supplementary Examination:** Candidates who fail in any of the subjects of the examination in accordance with provision mentioned in OC-23.6 may be allowed to appear at a subsequent examination which shall be held six weeks from the date of declaration of results. Such candidates may be permitted to continue the next term until the results of the supplementary examinations are declared. ~~(Those of the successful candidates who obtain above 70% of the total on the aggregate of all subjects of the four semesters having passed each semester exam at one and the same sitting shall be considered to have passed the examination with Distinction)~~ (deleted vide corrigendum dt. 10<sup>th</sup> June, 2002).

**OC-23.13** ~~(A candidate who passes in any of the subjects of the examination in accordance with the provision mentioned in Ordinance OC-23.6, may at the candidates option, be exempted~~

from appearing in the subject at a subsequent examination. Such a candidate when he passes in the subject at a subsequent examination in accordance with the provision mentioned above will be declared to have passed the examination in the Pass class, irrespective of the percentage obtained. Candidates passing the examination in compartments shall not be eligible for a class, prize or Scholarship) (deleted vide corrigendum dt. 10<sup>th</sup> June, 2002).

Scheme of Examinations and scheme of hours offered.

Sr. No	Subject	Hours			Internal Marks		External Marks		Total Marks	Duration of External Theory Paper
		T	P	T	T	P	T	P		
1.	<b>First Year</b> Community Health Nursing I (P)	60	115	175	25	--	50	--	75	1 ½ hours
2.	Biochemistry & Biophysics (S)	60	--	60	25	--	50	--	75	1 ½ hours
3.	Psychology(S)	65	15	80	25	--	50	--	75	1 ½ hours
4.	Maternal Nursing (P)	60	240	300	50	50	100	100	450	3 hours
5.	Child Health Nursing (P)	60	240	300	50	--	100	--	--	3 hours
6.	Microbiology (P)	60	30	90	25	--	50	--	75	1 ½ hours
7.	Medical Surgical Nursing (P)	60	140	200	25	--	50	--	75	1 ½ hours
8.	English (S)	60	--	60	25	--	50	--	75	1 ½ hours
9.	Sociology (S)	60	--	60	25	--	50	--	75	1 ½ hours
		<b>1325 hours</b>					<b>975 marks</b>			

1.	<b>Second Year</b> Community Health Nursing II(P)	60	170	230	50	50	100		450	3 hours
2.	Mental Health Nursing (P)	60	240	300	50	--	100	--	--	3 hours
3.	Nursing Education	60	100	160	25	--	75	--	100	2 hours
4.	Nursing Administration (P)	65	180	245	25	--	75	100	100	2 hours
5.	Medical Surgical Nursing ii (P)	50	130	180	50	50	100	-	300	3 hours
6.	Trends, Issues & Research in nursing (S)	65	120	185	50	--	--	--	50	--
7.	Educational Tour	--	40	40						

Note: P = principal  
S= Subsidiary

**(EFFECTIVE FROM 2006-2007) Amendment to Ordinance OC-24 relating to the BBA (Bachelor of Business Administration) program.**

**OC-24.1 Objective of the Programme**

To build competence in students to effectively undertake entry-level managerial employment in organizations.

**OC-24.2 Duration of the Program**

Three-year full time program. Each year shall consist of three Terms with an additional summer Term of six weeks in the first and second years. Each Term shall be of 3 months duration inclusive of vacations.

**OC-24.3 Admission and Eligibility for Admission**

A candidate, who has passed XII standard, is eligible for admission to BBA. Admission shall be made based on an admissions test. An Admissions Committee consisting of the Principals or Course Directors of the Colleges conducting the programme, the Dean of the Faculty of Management Studies and one of the faculty members of the Department of Management Studies; all appointed by the Vice Chancellor of the University shall decide the nature of the particular admissions test and procedures for admission. One of the Principals or the Dean of the Faculty of Management Studies shall be nominated as the Chairperson by the Vice Chancellor.

**OC-24.4 Structure of the Programme****OC-24.4.1 Term wise Programme Structure<sup>1</sup>****TERM 1**

Code	Subject	Credits	Hours per week
101	IT <sup>2</sup> Skills	2	2
102	Management Process	2	2
103	Marketing Management I	3	3
104	Human Resource Management 1	3	3
105	Managerial Economics 1	2	2
106	Case Analysis 1	2	2
107	Soft Skills Training <sup>1</sup>	2	2
108	PBE <sup>3</sup> 1	2	2
Total		18	18

**TERM 2**

Code	Subject	Credits	Hours per week
201	IT Skills 2	2	2
202	Marketing Management 2	3	3
203	Human Resource Management 2	3	3
204	Managerial Economics 2	2	2
205	Production Operations Management 1	2	2
206	Case Analysis 2	2	2
207	Soft Skills Training 2	2	2
208	PBE 2	2	2
Total		18	18

**TERM 3**

Code	Subject	Credits	Hours per week
301	Strategic Management	2	2
302	Financial Statement Analysis for Decisions	3	3
303	Production Operations Management 2	2	2
304	Business Research Methods	3	3
305	Organizational Behavior 1	2	2
306	Case Analysis 3	2	2
307	Soft Skills Training 3	2	2

<sup>1</sup> Not amenable for 3 column format as 14 Terms of the Mini Semester system have been converted into 11 Terms in the Trimester system.

<sup>2</sup> Information Technology

<sup>3</sup> Perspectives Building Electives from already approved subjects under Humanities, Social Sciences, and Science and Technology.

308	PBE 3	2	2
Total		18	18

#### TERM 4

Code	Subject	Credits	
401	Summer Placement Report	2	6 weeks
402	Summer Placement Seminar	2	1 hour per student

#### TERM 5

Code	Subject	Credits	Hours per week
501	Organizational Behavior 2	2	2
502	Macroeconomics 1	2	2
503	Financial Accounting for Decisions	3	3
504	Statistics for Business	2	2
505	Management Information Systems	3	3
506	Case Analysis 4	2	2
507	Soft Skills Training 4	2	2
508	PBE 4	2	2
Total		18	18

#### TERM 6

Code	Subject	Credits	Hours per week
601	Business Mathematics	3	3
602	Macroeconomics 2	2	2
603	Financial Management 1	2	2
604	Management Accounting 1	3	3
605	Business Law	2	2
606	Case Analysis 5	2	2
607	Soft Skills Training 5	2	2
608	PBE 5	2	2
Total		18	18

#### Term 7

Code	Subject	Credits	Hours per week
701	Economic Environment	3	3
702	Management Accounting 2	3	3
703	Financial Management 2	2	2
704	Labor Law	2	2
705	Operations Research	3	3
706	Case Analysis 6	2	2
707	Soft Skills Training 6	2	2
708	PBE 6	2	2
Total		19	19

#### TERM 8

Code	Subject	Credits	
801	Summer Placement Report	2	6 weeks
802	Summer Placement Seminar	2	1 hour per student

#### TERM 9

Code	Subject	Credits	Hours per week
901 to 902	Electives 1 to 2	2 each	2 hours per elective
903	Entrepreneurial Project	2	2

904	Environmental Management 1	2	2
905	Interactions with Entrepreneurs	1	2 hours per fortnight
906	Mock Interviews by Executives	1	30 minutes per student for the Term
907	Seminars on General Topics	1	3 hours per week
908	Case Analysis 7	2	2
909	Soft Skills Training 7	2	2
910	PBE 7	2	2
Total		17	18

### TERM 10

Code	Subject	Credits	Hours per week
1001 to 1003	Electives 3 to 5	2 each	2 hours per elective
1004	Environmental Management 2	2	2
1005	Interactions with Executives	1	2 hours per fortnight
1006	Mock Interviews by Executives	1	30 minutes per student for the Term
1007	Seminars on General Topics	1	3 hours per week
1008	Case Analysis 8	2	2
1009	Soft Skills Training 8	2	2
1010	PBE 8	2	2
Total		17	18

### TERM 11

Code	Subject	Credits	Hours per week
1101 to 1102	Electives 6 to 7	2 each	2 hours per elective
1103	Project Report and Seminar	8 (6 and 2)	4 weeks
1104	Interactions with Executives	1	2 hours per fortnight
1105	Mock Interviews by Executives	1	30 minutes per student for the Term
1106	Seminars on General Topics	1	3 hours per week
1107	Case Analysis 8	2	2
1108	Soft Skills Training 8	2	2
1109	PBE 9	2	2
Total		19	14

- OC-24.4.2** Subject 401 and 801 Summer Placement Report shall be undertaken in an established organization.
- OC-24.4.3** For subject 903 students in groups of six shall undertake a mini entrepreneurial activity.
- OC-24.4.4** Subject 1103 comprises a Project undertaken in an established firm under the guidance of a regular, contributory or guest teacher.
- OC-24.4.5** For the subject Case Analysis for each Term, a maximum of 9 cases shall be discussed in addition to one real life case written by the students.
- OC-24.4.6** For the subjects Soft Skills Training and Perspective Building Electives (PBE) in each Term, the institution shall offer subjects from the already approved subjects.
- OC-24.4.7** Subjects 907, 1007, and 1106 shall be done in groups of 6 students and on contemporary topics.

- OC-24.4.8** For subjects 905, 1005 and 1104, an entrepreneur / executive from industry with minimum two years experience shall be invited for interactions.
- OC-24.4.9** For subjects 906, 1006, and 1105, an executive from industry with minimum two years experience shall be invited for conducting the Interviews and grading the students.
- OC-24.4.10** Subject allocations to Terms are only indicative. The Institution shall have the freedom to reallocate courses across Terms with the approval of the Board of Studies in Management Studies.
- OC-24.4.11** For each Subject, detailed course outlines shall be obtained from the teachers before the commencement of teaching. Only the Board of Studies in Management Studies shall make exceptions to this with valid reasons.

The Course Outlines shall include objectives in terms of competencies to be developed, broad outline of topics to be covered, pedagogical and evaluation methods to be used and minimum reading stipulated. The format for the Course Outline shall include session by session topics to be covered, reference of essential reading for each session, session by session assignments, components of evaluation, rationale for each component of evaluation and weights for each component of evaluation. Formats as given in Schedule I and Schedule II shall be used for the above purpose.

Every session shall have preparatory reading materials and shall have either an exercise or case study as a background for class discussion or class work by the students. Lecture by Instructor, as a method of training, shall not be used in any session.

**OC-24.5 Registration for electives**

- OC-24.5.1** Each elective opted for shall be a distinct subject.
- OC-24.5.2** The institution shall decide the minimum number of students required for offering an elective.
- OC-24.5.3** Electives 1 to 7 offered in the 9<sup>th</sup> 10<sup>th</sup> and 11<sup>th</sup> Terms shall be of 2 credits each and shall be from areas such as Marketing, Human Resources Management, Production Operations Management, Systems, Economics, etc.
- OC-24.5.4** Every year, before the end of February, the Course Director shall obtain the syllabi for the electives giving objectives and broad outline from regular and visiting teachers such as teachers from other Institutions and institutions outside Goa University as well as professionals and managers from industry. The syllabi shall include objectives in terms of competencies to be developed, broad outline of topics to be covered, pedagogical and evaluation methods to be used and minimum reading stipulated.
  - OC-24.5.4.1** Electives approved by the Board of Studies in Management Studies shall be announced to the 2nd year BBA students and provisional registrations shall be obtained. Based on the registrations and availability of faculty resources, the Institution shall finalize the electives to be offered in the subsequent academic year.
  - OC-24.5.4.2 (Effective from 14<sup>th</sup> September, 2009)** For such approved electives, detailed course outlines shall be obtained from the teachers and the same shall be submitted to the Course Director of the institution for approval and

implementation. The Course Outlines shall include objectives in terms of competencies to be developed, broad outline of topics to be covered, pedagogical and evaluation methods to be used and minimum reading stipulated. The format for the Course Outline shall include session by session topics to be covered, reference of essential reading for each session, session by session assignments, components of evaluation, rationale for each component of evaluation and weights for each component of evaluation. Formats as given in Schedule I and Schedule II shall be used for the above purpose.

Every session shall have preparatory reading materials and shall have either an exercise or case study as a background for class discussion or class work by the students. Lecture as a method of training shall not be used in any session.

Final registrations for electives shall be obtained before end June of the academic year.

**OC-24.5.5** In Terms 9 to 11 put together, in lieu of 2 credits worth of Electives, the student may opt for a Project Course (PC) / Fieldwork Course (FC) under an approved guide (a regular faculty member of the Institution / University or a Contributory / Guest teacher).

**OC-24.5.6 Registration for Non Credit Subjects**

The Institution, with the help of its regular, contributory or guest faculty, shall periodically offer non-credit subjects in various areas of management / non-management disciplines and especially in newly emerging areas. Once a student registers for such a subject, it becomes a compulsory subject for the student. In exceptional circumstances, the Course Director may allow a student to withdraw registration, if it is convinced about the genuineness of the reasons. There shall be no evaluation in non-credit subjects. The Institution shall issue a Certificate to the student mentioning the names and number of credits of each such subject attended by the student.

**OC-24.6 Evaluation, Grading and Pass Requirements**

**OC-24.6.1** Each subject shall have certain number of credits as given in 4.1 above. The number of credits is approximately the number of minimum contact hours divided by 10.

**OC-24.6.1.1** No component of evaluation shall exceed 40% weight in the total evaluation of the subject. The method as well as the content of evaluation of Summer Placement Report, Summer Placement Seminar, Project Work, Project Seminar and Project / Fieldwork Courses shall be decided by the concerned guide with the consent of a Committee of all full time teachers of the Institution chaired by the Course Director. The respective teacher or the guide shall do the assessment as well as grading.

**OC-24.6.1.2** All examinations shall be open book examinations. The student while answering the examinations can use the prescribed texts distributed to the students by the Institution and other hand-written notes of the student. No other resource other than ordinary (non-scientific) calculators shall be allowed.

**OC-24.6.1.3** The teacher shall submit at the end of every month, the details of the Grades awarded to each student as well as the percentage of attendance till that point of time to enable the student to benefit from timely feedback.



**OC-24.6.1.4** Summer Placement Seminar and Project Seminar shall be evaluated by a panel of an internal faculty and an executive from industry with minimum two years experience.

Summer Placement Seminar and Project Seminar shall be organized as public seminars, where anybody from the audience may ask questions, unless the organization on which the work was done requires the results to be kept confidential. In the latter case, only the examiners shall be present during the Seminar.

**OC-24.6.2** The manner in which classes are conducted and the method as well as the content of evaluation of each subject of each Term shall be reviewed by Academic Audit Committee, appointed by the Vice Chancellor from a panel of experts prepared by the Board of Studies in Management Studies. The committee shall consist of at least three members, of which preferably at least two shall be from outside the Institution. At least one of the members shall preferably be from the corporate sector. If the work for a committee is on the higher side, more than one committee may be appointed. The Committee shall meet twice in a year after the completion of two consecutive Terms.

All course-outlines, answer sheets, assignments, project reports and mark lists shall be maintained and made available for the scrutiny of the committee. The results of the Term are finalized after the approval of the committee with suitable modifications suggested by it. The reports shall be prepared as per the procedures and formats laid out in Schedule III.

The Academic Audit Committee shall also be the Grievance Committee for all grievances related to evaluation and grading.

The Grades approved by the Committee shall be signed by the Chairman of the Academic Audit Committee and handed over to the Examinations Department in Tabulated Grade Sheet form after Term 11.

**OC-24.6.3** **(Effective from 14<sup>th</sup> September, 2009)** After evaluation, each student shall be graded for each subject, as per the following scheme of grades and grade points.

Grade  
A: Excellent 8.00 upwards  
B: Good 6 to < 8  
C: Satisfactory 5.5 to < 6  
D: Low Pass 5 to < 5.5  
F: Failed 0 to < 5

Teachers shall use the following grades (and not Grade Points) with equivalent grade points for individual items of evaluation such as answers to individual questions in a question paper.

A+: 10, A: 9, A-: 8, B+:7.5, B:6.75, B-:6, C+:5.9, C:5.7,  
C-:5.5, D+: 5, D:3.4, D-: 1.7, F:0

The grade points awarded for a subject shall be rounded off to two decimals for determining grades for the subject.

**OC-24.6.4** To obtain a pass in BBA, the student should have obtained a weighted average grade point (weighted by the number of credits of each subject) of 5.00 for the subjects of Terms 1 to 11 including the Summer Placement Work taken as a whole, should not have obtained F grades for more than three subjects and should have completed the requirements of the non-credit subjects, if any, the student had registered for.

The mark-list given to the student shall give grades and grade points for each subject of each Term, his/her rank in the class in the respective institution for each subject, the overall grade (weighted average weighted by the Credits of each subject) and grade points.

There shall not be any University wide ranking of the students.

**OC-24.6.5** A student who has not met the requirements for pass in BBA may reregister for necessary subjects by paying the appropriate fee and attempt to obtain a pass within a period of 6 years from the date of joining the BBA programme. The Institution may not be in a position to make changes in the Time Table of subjects to avoid clashes of sessions to accommodate such students.

**OC-24.6.6** A student has to register / reregister for a full subject and not a part there of, including those in case of reregistering for Project related subjects. If a student reregisters for the Summer Placement Report or Seminar, the Institution with the consent of the internal guide may decide whether the student should redo only the Report or the Seminar or both or whether he/she should repeat the summer work in another Term.

**OC-24.6.7** A student may cancel an elective subject and may register for another elective while reregistering.

**OC-24.6.8** A student who wants to improve grades in a subject or subjects may reregister for such a subject or subjects in subsequent years by paying the appropriate fee and attempt to obtain improved grades in such a subject or subjects within a period of 6 years from the date of joining the BBA programme. The Institution may not be in a position to make changes in the timetable to avoid clashes of sessions to accommodate all such students. This provision shall not be available for students after their receiving the BBA degree.

**OC-24.6.9** In all cases of re-registration, the grades obtained in the last registration by the student shall hold good.

**OC-24.7** Normally, grades or grade points shall not be converted to marks, class, distinctions, etc. In exceptional cases, where an employer or an entity insists on specifying equivalent marks or such classifications, the following scheme shall be used.

Equivalent Marks = Grade Point Average multiplied by 10.

A: Distinction

B: First Class

C and D: Second Class

F: Failed

**OC-24.8** The Board of Studies in Management Studies shall resolve any ambiguities and interpretation requirements arising from this Ordinance.

**(Effective from 6<sup>th</sup> February, 2009) Addendum to Ordinance OC-24 relating to BBA (Bachelor of Business Administration) programme inter-alia includes the scheme of evaluation as Schedule I**

**Schedule I Scheme of Evaluation**

Subject:

Instructor:

Term:

Year:

College / Institute:

<b>Objectives</b>
<b>At the end of the course, the students will have competence in:</b>

<b>Objective in Terms of Competence to be Developed</b>	<b>Learning Methodology Planned for each of the Competencies in Column 1: The Activities will Involve Case Discussions, Presentations, Project/s, Article Critiques, Problem Solving Sessions, Other Experiential Sessions, etc.</b>	<b>Implemented</b>	<b>Reasons for Deviations</b>

**Schedule II Course Outline Form**

Items		Planned	Planned	Implemented	Implemented	Reasons for Deviations
Competence Assessed	Evaluation Methodology Planned	Group / Individual Evaluation	Weight: Total 100	Group / Individual Evaluation	Weight: Total 100	

**Term:**            **Subject:**            **Instructor:**            **Year:**            **College/ Institution:**

Item	Planned	Implemented
Session No <sup>1</sup>	Date:	
Objective		
Reading Material		
Learning Methodology		

Item	Planned	Implemented
Session No <sup>1</sup>	Date:	
Objective		
Reading Material		
Learning Methodology		

Item	Planned	Implemented
Session No <sup>1</sup>	Date:	
Objective		
Reading Material		
Learning Methodology		

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<sup>1</sup> One Table for each Session

### Schedule III

Form for AAC (Academic Audit Committee) Report on conduct of sessions and Evaluation<sup>1</sup>

Batch		Program	
Term		Institution	
Subject Code		Subject	
Credits		Instructor	

Documents required are in the footnote. <sup>2</sup> The process to be adopted is outlined in the footnote.

<sup>3</sup> The Comments and action plans, against each item below, are to be filled up based on these inputs.

No	Item	Comments/ Suggestions/ Decisions by AAC	Status of implementation for the Subsequent Batch
1	Whether the Evaluation Scheme clearly articulates the competencies to be developed in Behavioral Terms.		
2	Whether the Competencies to be developed are consistent with the objectives of the Syllabus.		
3	Whether the topics dealt with were adequate to develop the required competencies.		
4	Whether the Course Outline clearly articulates the competencies to be developed in Behavioral Terms for each Session.		
5	Whether each session had experiential (active rather than passive learning) exercises such as cases, problems, exercises etc. rather than pure theoretical / conceptual discussions.		

<sup>1</sup> Original to be filled in the AAC File of the Batch, one copy for the subject file, one copy for the instructor, one copy for the Board of Studies, one copy for the AAC Chairperson.

<sup>2</sup> Documents required (These are to be submitted through a File or Files numbered Volume I, II, III etc.):

1. Syllabus
2. Course Outline with Implemented Column filled up
3. Evaluation Scheme with implemented Column filled up
4. Hard / Soft copies of materials discussed other than Text Books prescribed
5. Attendance Sheet with number of Hours Engaged with % Attendance for each students
6. Grade Sheet with item wise and Overall Grades
7. Question Papers for Assignments and Tests
8. Answer Sheets of Assignments (soft / Hard) Tests
9. Feedback Rating by students and Qualitative Comments

<sup>3</sup> Process to be adopted:

1. Perusal of above Documents
2. Discussions with the Batch Coordinator, Instructor and Students
3. Random check of Sample Answer Sheets
4. Random check of Grade Sheets, etc.

6	Whether the exercises were spelt out in specific terms (such as Problem, Numbers, Case, Title, etc.) in the Course Outline.		
7	Whether these exercises were reality or practice Oriented rather than purely conceptual of theoretical.		
8	Whether these exercises were adequate to develop the envisaged competencies.		
9	Whether reading materials for each session for prior reading were given with page numbers specified in the course outline.		

10	Whether executives were invited for some of the Sessions as per the ordinance, whether applicable.		
11	Was the workload for the realistic?		
12	If a textbook other than the one recommended is followed, whether it is appropriate for the subject.		
13	Whether the measures of evaluation chosen to assess the competencies were appropriate.		
14	Whether the assessment was evenly spread during the Term.		
15	Whether weight for any item of Evaluation exceeds limits (except for 1 Credit Subjects with prior permission) given by the Ordinance		
16	Whether the questions were appropriate for open book examinations.		
17	Whether the Assignments were appropriate for Developing the required competencies (In contrast to those were cut and paste and copping could be adopted)		
18	Whether qualitative comments were given in answer Sheets / Assignments		
19	Whether grades rather than marks were adopted for individual items of evaluation.		
20	Whether Grades are available against each Competency.		
21	Whether the full spectrum of grades was used. (Was grading too liberal or too conservative?)		
22	Whether grading was fair (based on sample check of answer sheets and grievances expressed, if any, by the students).		
23	Whether AAC Recommends any change in grades awarded. (Give reasons)		
24	On the whole, does the Committee feel the instructor succeeded in developing the required competence on the part of the students?		
25	Overall comments and instructions to instructor for further action.		
26	Action required at the level of the institution		
27	Action required at the level of the University.		

Names and signatures of AAC Members with date

**OC-25 Ordinance relating to the Post Graduate Diploma in Management (PGDM).**

(Under Section 24(1) of the Goa University Act, 1984).

**OC-25.1 Objective of the Programme:** To build managerial competence and professionalism in candidates who are already employed as supervisors/executives in organizations in the State of Goa.

**OC-25.2 Duration of the Programme:** One and a quarter year part time programme consisting of 4 terms. Each term will be of 11 weeks effective duration with ten weeks for sessions and one week for taking care of sessions devoted for tests/evaluations.

**OC-25.3** The contact hours shall be around 12 per week and shall be arranged during evenings/week-ends to suit the needs of majority of the students.

**OC-25.4 (effective from 18<sup>th</sup> May, 2005) Admission and Eligibility for Admission :**

Graduates in any subject is eligible for admission to PGDM. Admission to a particular batch will be based on merit in the admissions test. The nature of the particular admissions test and procedures for admission will be decided by an Admissions Committee appointed by the Vice-Chancellor of the University for the particular batch. Work experience, though not mandatory, will be one of the criteria for admission.

**Structure of the Programme**

**OC-25.5.1 Term wise Programme Structure**

**Term 1**

Code	Subject	Units	Minimum Contact Hours
101	Organisational Behaviour	3	20
102	Management Processes	1	10
103	Computer Applications and Information Management	4	30
104	Management Accounting	4	30
105	Production/Operations Management	4	30

**Term 2**

Code	Subject	Units	Minimum Contact Hours
201	Marketing Management	4	30
202	Finance Management	4	30
203	Micro Economics	2	15
204	Macro Economics	2	15
205	Human Resource Management	4	30

**Term 3**

Code	Subject	Units	Minimum Contact Hours
301	Strategic Management	2	15
302	Legal Aspect of Business	2	15
303 onwards	Electives	12 to 15 units	7.5 hrs. per unit

**Term 4**

Code	Subject/component of Evaluation	Units	Minimum Contact Hours
401	Dissertation Work	4	120
402	Dissertation Seminar	1	1 hour per student
303	Electives	12 to 15	7.5 hrs. per unit

onwards		units	
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**OC-25.4.2** Subjects 401 and 402 comprise of a single Dissertation spread over two heads and shall be undertaken under the guidance of a regular, contributory or guest teacher. The Dissertation shall preferably address a problem faced by the organization in which the student is working and the student is expected to do the Dissertation in a rigorous and professional manner thereby demonstrating the value addition due to the PGDM.

**OC-25.4.3** Subject allocations to Terms are only indicative. The Institute offering the PGDM shall have the freedom to reallocate courses across Terms.

**OC-25.4.4** All assignments, term papers, projects, etc. done as part of any of the subjects of any of the terms should preferably address problems faced by the organization in which the student works.

**OC-25.4.5** Before the commencement of each term, the Course Outline giving session by session reading assignments, case studies, exercises, unit-wise evaluation plan, etc. for each subject shall be submitted to the Faculty of Management Studies for approval. The approved course outline with modifications suggested (if any) by the Faculty shall be followed for the Term.

### **Registration for electives**

**OC-25.5.1(effective from 1<sup>st</sup> October, 2009)** Each elective opted for should be a distinct subject.

**OC-25.5.2** Electives offered in the 3<sup>rd</sup> term could range in units from 1 to 4.

**OC-25.5.3** Every year, before the end of 2<sup>nd</sup> Term, the syllabi for the electives along with tentative course outlines shall be submitted to the Faculty of Management Studies.

The format of the Syllabus shall include objectives in terms of competencies to be developed, broad outline of topics to be covered, pedagogical and evaluation methods to be used and minimum reading stipulated. The format for the Course Outline shall include session by session topics to be covered, reference of essential reading for each session, session by session assignments, components of evaluation, rationale for each component of evaluation, weights for each component of evaluation, etc.

The details of the electives approved by the Faculty shall be announced to the students for registration.

**OC-25.5.4** Each student shall opt for a minimum of 12 units and a maximum of 15 units of electives.

**OC-25.5.5** The student may opt for a Project Course (PC) under an approved guide (a regular faculty member of the Institution/University or a Contributory/Guest teacher) in lieu of 4 units of electives. The project should be relevant to the student's area of specialisation selected vide 5.1 above.

### **OC-25.6 Registration for Non Credit Subjects**

The Institution, with the help of its regular, contributory or guest faculty, shall periodically offer non credit subjects in various areas of management and specially in newly emerging areas. Once a student registers for such a subject, it becomes a compulsory subject for the student. In exceptional circumstances, the Institution may allow a student to withdraw registration, if it is convinced about the genuineness of the reasons. There shall be no evaluation in non credit



subjects. The Institution shall issue a Certificate to the student mentioning the names and number of units of each such subject attended by the student.

### **OC-25.7 Evaluation, Grading and Pass Requirements**

**OC-25.7.1** Each subject or component of evaluation is split into certain number of units as given in OC-25.4.1 above. The number of units shall be approximately the number of minimum contact hours divided by 7.5. The teacher teaching the subject, with the consent of the Faculty of Management Studies of Goa University, shall decide the method as well as the content of evaluation of each unit of each subject. The method as well as the content of evaluation of each unit of Dissertation work shall be decided by the concerned guide with the consent of the Head of the Institute. The respective teacher or the guide of the unit shall do the assessment as well as grading.

No component of evaluation shall exceed 60% weightage in the total evaluation of the subject.

**OC-25.7.2** The method as well as the content of evaluation of each subject of each term shall be reviewed by a committee of examiners appointed by the Vice-Chancellor from a panel of approved examiners. The committee shall consist of at least three examiners, of which preferably two shall be from outside the Institute and at least one from the Faculty of Management Studies of Goa University. At least one of the examiners should preferably be from the corporate sector. If the work for a committee is on the higher side, more than one committee may be appointed.

All answer sheets, assignments, project reports, mark lists, etc. shall be available for the scrutiny of the committee. The results of the term are finalized after the approval of the committee with suitable modifications suggested by them. The committee for Term 4 shall also be the committee for evaluating Dissertation Seminar.

Dissertation Seminar shall be organized as public seminar, where anybody from the audience can ask questions, unless the organization on which the work was done requires the results to be kept confidential. In the latter case, only the examiners shall be present during the Seminar.

**OC-25.7.3** (effective from 18<sup>th</sup> May, 2005) After evaluation each student will be graded for each subject, as per the following scheme of grades and grade points.

**Grade**

A: Excellent 8.00 upwards

B: Good 6 to < 8

C: Satisfactory 5.5 to < 6

D: Low Pass 5 to < 5.5

F: Failed 0 to < 5

Teachers will use the following grades (and not grade points) with equivalent grade points for individual components of evaluation.

A+: 10, A: 9, A-:8, B+:7.5, B:6.75, B-:6, C+:5.9, C:5.7, C-:5.5, D:5, F:0

The grade points awarded for a subject will be rounded off to two decimals for determining grades for the subject.

Normally, grades or grade points need not be converted to marks, class, etc. However, if required to do so the grade point is to be multiplied by 10 to obtain the marks equivalent and the equivalent class will be as follows:

A: Distinction

B: First Class

C and D: Second Class

F: Failed

**OC-25.7.4** In case a student wants to improve grades in any subject of any Term, the student shall have the option of re-registering for the subject in the subsequent academic years by paying the appropriate fee.

**OC-25.6.5 (Effective from 14<sup>th</sup> November, 2009)** To obtain a pass in PGDM, the student should have obtained a weighted average grade point (weighted by the number of units of each subject) of 4.00 for the subject of Terms 1 to 4 taken as a whole, should not have obtained F grades for more than two subjects and should have completed the requirements of the non-credit subjects the student had registered for OR should have obtained average grade point of 3.95 for the subjects in Terms 1 to 4 taken as a whole, should not have obtained F grade in any subject and should have completed the requirements of the non-credits subjects the student had registered.

If all the electives opted for are in one area of specialization such as Tourism Management, Event Management, Marketing, Finance etc., then the diploma issued by the University shall mention that the candidate has been awarded PGDM with specialization in Tourism Management, Event Management, etc.

**OC-25.6.5.1** The student should obtain a pass within a period of 3 years from the date of joining the PGDM programme.

**OC-25.6.5.2** A student has to register/reregister for a full subject and not a part thereof. A student reregistering for Dissertation related subject should reregister for both 401 and 402.

**OC-25.6.5.3** A student may cancel an elective subject and may register for another elective while reregistering.

**OC-25.6.5.4** A student who wants to improve grades in a subject or subjects may reregister for such a subject or subjects in subsequent years, by paying the appropriate fee and attempt to obtain improved grades in such a subject or subjects within a period of 3 years from the date of

joining the PGDM programme. This provision shall not be available for students after their - receiving the PGDM.

**OC-25.6.5.5** In all cases of registration, the grades obtained in the last registration by the student will hold good.

**OC-25.7** Ambiguities and interpretation requirements arising from this Ordinance shall be resolved by the Faculty of Management Studies of Goa University.

**Amendment to Ordinance OC-26 relating to the Degree of Bachelor of Education (B.Ed.) course of Goa University** (Applicable from the academic year 2014-2015).

**OC-26** **Ordinance relating to the Bachelor of Education (B.Ed.) Programme of Goa University** (Applicable from the academic year 2014-2015).

**OC-26.1 Admission to the B. Ed. Programme**

Any candidate who has obtained a Graduate/Post Graduate Degree with a minimum of 50% from Goa University or from any other statutory body recognized by University Grants Commission is eligible for admission for B.Ed. Degree Programme. Further, candidates must have at Graduation/Post graduation at least one subject that is taught at school/higher secondary level and provided that such subjects are available as subject pedagogies in the institution in which the candidate seeks admission.

**OC –26.2 Duration of the Programme:**

B.Ed. is a full-time Programme of one-year duration. A candidate admitted to the B.Ed. Programme will not be permitted to hold any appointment whatsoever whether full-time or part-time duration. Further a candidate will not be permitted to enroll for any other degree, diploma or certificate programme conducted by any statutory body.

**OC-26.3 The B.Ed. Curriculum:**

The Programme of Studies shall consist of:

**Part A: Theory**

EDU I: Foundations of Education

EDU II: Learner and Learning

EDU III: Teaching: Approaches and Strategies

EDU IV: Learning Resources

EDU V: Assessment and Evaluation

EDU VI: Capacity Development

EDU VII-VIII Subject Pedagogies: (any TWO)

Methodology of Teaching English  
Methodology of Teaching Hindi  
Methodology of Teaching Marathi  
Methodology of Teaching Konkani  
Methodology of Teaching Mathematics  
Methodology of Teaching Science  
Methodology of Teaching Geography  
Methodology of Teaching History  
Methodology of Teaching Commerce and Economics  
Methodology of Teaching ICT in Education  
Methodology of Teaching Social Science

### **Part B: Practice Teaching**

- a) Micro Teaching
- b) 40 Practice Teaching Lessons inclusive of Peer Teaching (50% to be supervised by the College Lecturers.)

### **Part C: Practical Work**

- a) Work with the Community and Work Experience (20 hours)
- b) Internship comprising school based activities, including Construction of Units/classroom tests in each Subject Pedagogy followed by administration and assessment.
- c) Co-curricular Activities:
  - i) Organisation and participation in Literary and Cultural Activities.
  - ii) Participation in Games and Sports Activities.
- d) Other requirements, not to be evaluated in terms of marks:
  - i) Health and Fitness Education
  - ii) Training in First Aid
  - iii) Observation of 15 lessons of which 5 are in the subject pedagogies including demonstration lessons.

## **OC-26.4**

### **Records to be maintained in the College**

The Head of the Institution/Principal shall maintain the following records of:

- a) Project work/Assignments in each of the Theory Papers.
- b) Observation of the 15 lessons.
- c) Lesson plans/notes of the 40 lessons.
- d) The school based activities conducted during Internship
- e) All practical work under Parts A, B and C mentioned above.

The Principal of the College shall forward a statement of internal assessment to the University at the end of the academic year.

**OC-26.5****Eligibility for the Examination:**

A candidate to be eligible for the Bachelor of Education Examination shall have:

- a) kept two terms, the first and the second (separated over the maximum period of 2 consecutive academic years) in a College of Education with a minimum of 75% attendance of the total working days.
- b) completed all internal assessment in Part A and practical work requirements (as detailed in Parts B and C) extending over two academic terms.

**OC -26.6****Scheme of Examination:**

The examination of degree of B.Ed. shall consist of Theory in Part A, Practice Teaching in Part B and Practical Work in Part C. The total marks allotted are as follows:

Part A -	800	Marks
Part B -	300	Marks
Part C -	100	Marks
<b>Total -</b>	<b>1200</b>	<b>marks</b>

**1. PART A**

EDU I to V Courses shall have external and internal assessment. The external assessment shall be a Written Examination of 2 hours duration. These Courses shall be assessed for 100 Marks each, of which the external component shall be of 65 Marks and the Internal component shall be of 35 Marks.

EDU VI shall have internal assessment for a total of 100 marks.

EDU VII and VIII Courses shall have external and internal assessment. The external assessment shall be a written examination of 1½ hours duration. Each of these Courses shall be assessed for 100 marks, of which both, the external and the internal components shall be of 50 marks each.

**2. PART B - Practice Teaching (Internal Assessment): 300 Marks**

\* For Planning and execution of 20 credited lessons

**3. PART C- Other Practical Work (Internal Assessment): 100 Marks**

* Work with the Community & Work Experience	20	Marks
* School based activities during Internship	50	Marks
* Co-curricular activities	30	Marks

**The allotment of marks for the final B.Ed Examination will be shown as in the table below:**

Framework of Marks											
	Papers	EDU I	EDU II	EDU III	EDU IV	EDU V	EDU VI	EDU VII	EDU VIII	Total	
A	EXTERNAL	65	65	65	65	65	--	50	50	425	
A	INTERNAL	35	35	35	35	35	100	50	50	375	
									Total	800	
B	Practice Teaching – Internal										
						Method I	Method II				
						150	150				
C	Other Practical Work – Internal									100	
	(1) Working with the Community and Work Experience (20)										
	(2) Internship comprising school based activities (50)										
	(3) Co-curricular Activities (30)										
Grand Total										<b>1200</b>	

### OC-26.7

#### Standard of Passing

- I) To pass the Examination in part A, a candidate must obtain a minimum of 40% marks in the Courses EDU I to V, VII and VIII in external and internal components separately and an aggregate of 50% marks in each Course. In Course EDU VI a candidate must obtain a minimum of 50% marks.
- II) To pass the Examination in Part B, a candidate must obtain a minimum of 50% marks on the aggregate.
- III) To pass the Examination in Part C, a candidate must obtain a minimum of 50% marks on the aggregate of the components.

### OC-26.7.1

**Class /Division shall be assigned after adding marks of Parts A, B and C as follows:**

Range of Marks	Class/ Division
70% & above	Distinction
60 to <70%	First class
50 to <60%	Second Class
Below 50%	Fail

### OC-26.8

#### Exemptions

### OC-26.8.1

In the case of a candidate who has completed Part B and Part C but has not completed Part A, he/she shall be permitted to complete Part A within two subsequent academic years from the year of registration

### OC-26.8.2

A candidate who fails in Part B shall give 10 additional lessons in each of the Subject Methods, within a period of two academic years from the year of registration. Similarly, a candidate who fails in Part C shall be required to redo the relevant activities.

- OC-26.8.3** A failed candidate appearing at a subsequent attempt at Part A, at his /her option, shall be permitted to claim exemption in Courses where he/she has obtained a minimum of 50% marks.
- OC-26.8.4** A candidate who has failed the B.Ed. Final written examination shall be allowed to re-appear only at two examinations. Further, if modifications are effected in the syllabi or in the question paper pattern, the candidate shall answer the question papers set for the current year.
- OC-26.8.5** A candidate shall not continue to be registered for the B.Ed Programme beyond a period of three academic years from and including the year of initial registration.
- OC-26.8.6** (i) A candidate who passes the B.Ed. Examinations by re-appearing with exemptions shall be declared 'pass class' irrespective of the aggregate marks obtained in the programme.
- (ii) Repeater candidate at B.Ed. Examinations shall be eligible for the award of class only if the candidate appears for all papers in one sitting, i.e. without exemptions.
- OC-26.8.7** Grace marks to candidates shall be determined by the common Ordinance of the University.
- OC-26.9** **The Question Paper Pattern**
- The pattern of the question papers for the University examination shall be determined by the BOS and communicated to the students at the beginning of the academic session.
- OC - 27** **(effective from 29<sup>th</sup> January, 2015) Ordinance relating to Master of Pharmacy (M. PHARM.) Degree Examination** (Under Section 24(1) of the Goa University Act, 1984).
- OC-27.1** **(effective from 22<sup>nd</sup> April, 2016)** A candidate who has passed the B. Pharm. Examination of Goa University or an examination of any other Indian University recognized as equivalent, with at least 55% marks in aggregate as per merit, or, with cut-off percentage as notified by the Statutory Councils and notified by the University from time to time, and having successfully cleared Graduate Pharmacy Aptitude Test (GPAT), shall be eligible for admission to the M.Pharm. However, if candidates with GPAT are not available, then the vacant seats shall be filled by admitting candidates without GPAT, based on the marks obtained at Final year B.Pharm. and/or merit obtained at the entrance examination conducted by competent authorities as approved by Government of Goa.
- OC-27.2** **(i) Registration:**  
Registration as a post-graduate candidate shall be done after admission to the Programme.  
All fees and deposits shall be as prescribed by the State Government / Goa University from time to time.
- The candidate shall not be permitted to register his name simultaneously for Diploma or Degree Programme of Goa University or any other University / Board / Private Management or any other college / institution.

**(ii) Duration:**

The M. Pharm. Programme shall be of four semesters duration, each having 90 instructional days.

**(iii) Attendance:**

Attendance of a candidate shall be governed by provisions specified under General Ordinance OA-17, to be eligible to appear for the examinations.



**Scheme of Examination****(1) The Examination for the degree of M.Pharm. shall consist of:**

- (i) Four Theory and two Practical examinations in each of Semesters I and II which shall comprise internal and external University examinations.
  - (a) The University examination shall be held at the end of the instructional period in Semesters I and II.
  - (b) The University theory examinations shall be of three hours duration and the practical examinations of four to six hours duration.
- (ii) A seminar evaluation, including journal club presentation, on the topics allotted, during Semesters I and II. The candidate shall submit soft copies of the seminar for evaluation.
- (iii) A candidate shall be required to undergo professional training of four weeks in any industry/research centre/hospital /community pharmacy and submit a completion certificate along with a report for evaluation.
- (iv) A dissertation to be submitted in the specialization in which the candidate has registered at the end of Semester IV. A Viva-Voce examination shall be conducted based on the research project and dissertation work submitted.

**(2) Pattern of Examination**

The pattern of examination for M. Pharm Programme shall be as per the tables shown below.

For each of Semesters I and II:

Paper No.	Theory (T)/ Practical (P)	Evaluation (Marks)	
		Internal	University
I	T	30	70
II	T	30	70
III	T	30	70
IV	T	30	70
V	P	30	70
VI	P	30	70
VII	T	50	--
VIII	T	50	--

For Semesters III & IV (Combined):

COURSE NO.	SUBJECTS / PAPER	EVALUATION Marks
	Professional Training	50
	Dissertation	200
	Viva-Voce	50
	Total	300

**(3) Internal Assessment**

- (i) There shall be an internal assessment for 30% marks in each subject separately for theory and practicals. The Theory examination shall be of one and half hour duration in each subject, of each semester. The Practical examination shall be of 4 to 6 hours duration.

(ii) Any candidate remaining absent for the internal tests shall be treated as 'Not Appeared' for the test and shall be treated at par with other candidates who have appeared for all the tests. However, candidates absent on genuine grounds shall be permitted to appear for the internal test which shall be decided by the Head of the Institution/College.

**(4) Standard of Passing**

(a) A candidate shall obtain at least 50% marks in the Internal Assessment and Semester Examination combined, in each Course of theory and of practical to pass the University examination.

(b) A candidate who fails Semester I examination(s) shall be permitted to reappear for the same examination on a subsequent occasion, on a new application with prescribed fees. Such a candidate shall be allowed to keep terms and appear for examination of Semester II.

(c) A candidate who fails Semesters I and II shall be permitted to keep terms for Semesters III and IV, and reappear for the examination(s) on a subsequent occasion.

He/She shall be permitted to carry out the research work and submit the dissertation for the degree. However, the result of the dissertation shall not be declared until he/she has cleared Semesters I and II examinations.

**(5) Dissertation:**

(a) The topic of Research shall be given by the Guide, a recognized post-graduate teacher, within one month from the beginning of the second Semester, which shall be communicated to the University.

(b) If the subject of dissertation entails collaboration with other departments or specialities of same / other Institutes, there shall be a co-guide from the respective Institute, designated by the Principal of the College/Institute. In such cases, the information shall be communicated to the University.

(c) Every candidate shall be required to submit three copies of the dissertation, to the Principal, duly certified by the Guide, and co-guide (if any), one month prior to the end of Semester IV. One copy shall be submitted to the college library, and two copies shall be submitted to the University, for submission to two examiners.

(d) The Principal of the concerned college/institution shall forward the dissertation copies to the University. A candidate who is unable to submit the dissertation in the stipulated time, shall be permitted by the Head of Institute, on the recommendation of the Guide, to submit the dissertation upto the end of the following academic year.

(e) The dissertation shall be examined by the guide, co-guide (if any), and the external examiner either from Pharmaceutical/Allied industry or from Pharmacy Institutions, from the panel of examiners as recommended by the BoS and approved by the Academic Council.

(f) A candidate who is declared unsuccessful in the dissertation evaluation and Viva-Voce, shall have to incorporate necessary modifications and resubmit the dissertation on payment of fresh fee, and appear for the Viva-Voce after six months.

(g) The candidate may be permitted to request for a change of guide/title of the dissertation with permission of the Principal/Head of the Institution and intimation to the University. In such a case, he/she shall be required to carry out the work for Semesters III and IV, and submit the dissertation on payment of fresh fee.

(h) In the event of transfer/ termination/ demise of the Guide, the College shall assign an alternate Guide in the subject of specialisation in the same/other institution affiliated to Goa University, and shall intimate the change to the University.

(i) A soft copy of the evaluated successful dissertation shall also be submitted for uploading on the University website.

- (i) The degree of Master of Pharmacy shall be awarded to the candidates who have passed all the four semesters.
- (ii) Class shall be awarded to the candidates on the basis of total marks obtained in semester I, II & IV independently in one and the same sitting, as under:
  - 75% and above - Distinction
  - 60% and above but below 75% - First Class
  - 50% and above but below 60% - Second Class
- (iii) A student who does not clear all the papers of the examination in one and the same sitting is not eligible for any Class/Distinction/Honours. The remark against his/her result shall be "Passes".

## **OC-27A ORDINANCE RELATING TO THE MASTER OF PHARMACY (M.PHARM.) DEGREE**

### **OC-27A.1 General**

#### **OC-27A.1.1 Objectives of the Programme**

The Objective of the M.Pharm. Programme is to produce professionally competent specialists and/or Pharmacy teachers who will

- i. Be able to recognize the needs of the profession and community and carry out professional obligations ethically and in keeping with the objectives of the National Health Policy/National Drug Policy
- ii. Have mastered most of the competencies pertaining to the specialty that are required to be practised in the various facets of the Pharmacy profession
- iii. Be aware of contemporary advances and developments in the concerned specialty
- iv. Have acquired a spirit of scientific inquiry and be oriented to the principles of research, and
- v. Have acquired the basic skills in teaching Pharmacy and other health professionals

#### **Programme Outcomes**

At the end of postgraduate training in the concerned specialization, the M.Pharm. graduate will be able to

- i. Recognize the importance of the concerned specialty in the context of professional needs of the community and national priorities in the health and pharmacy sectors
- ii. Practise the profession ethically
- iii. Demonstrate sufficient understanding of the basic sciences relevant to the concerned specialty
- iv. Identify social, economic, environmental, biological and emotional determinants of the health/pharmacy sector in a given case, and take them into account while planning professional strategies
- v. Play her/his assigned role in the implementation of the National Health Policy, National Drug Policy, etc. effectively and responsibly.
- vi. Develop skills as a self-directed learner, recognize continuing education needs and select and use appropriate learning resources

- vii. Demonstrate competence in basic concepts of research methodology and critically analyze relevant published research literature
- viii. Develop skills in using educational methods and techniques as applicable to the teaching of pharmacy students and other health care professional workers, and
- ix. Function as an effective leader of a health team engaged in health care, manufacture of quality drugs & their formulations, research or training

### **OC-27A.1.2 Duration of the Programme**

The duration of the programme shall be 2 academic years

Each academic year shall comprise 2 semesters, each comprising not less than 100 working days.

The Odd Semesters shall be conducted from July/August to December/January and the Even Semesters shall be conducted from December/January to June/July every year

### **OC-27A.1.3 Degree to be awarded**

The nomenclature of the Postgraduate Degree in Pharmacy awarded by Goa University shall be **Master of Pharmacy (M.Pharm.)**

### **OC-27A.1.4 Eligibility for Admission**

1. A) A candidate who has passed the B.Pharm. Examination of Goa University or an examination of any other Indian University recognized as equivalent, with at least 55% of the maximum marks (aggregate of four years of B.Pharm.) is eligible to be admitted to Semester I of the M.Pharm. Programme

Provided that

- a. There shall be reservation of seats for students belonging to Scheduled Castes, Scheduled Tribes and Other Backward Classes in accordance with the instructions issued by the Govt. of Goa from time to time
  - b. For SC/ST candidates, the prescribed percentage of marks will be 50% of the maximum marks (aggregate of four years of B.Pharm.).
  - c. Every student selected for admission to the Programme, shall have obtained Registration with the State Pharmacy Council or shall obtain the same within one month from the date of her/his admission, failing which the admission of the candidate shall be cancelled.
- B) Students shall be selected for admission to the M.Pharm. programme strictly on the basis of their academic merit, which may be decided by adopting any one of the following procedures:
- i. On the basis of merit as determined by the competitive test conducted by the Government of Goa or by the competent authority appointed by the State Government or by Goa University.
  - ii. On the basis of merit at the Graduate Pharmacy Aptitude Test (GPAT)
  - iii. On the basis of the individual cumulative performance at the B.Pharm. examination, if such examination has been passed from Goa University, or
  - iv. Combination of (i) and (iii) OR Combination of (ii) and (iii)
2. Registration as a Post Graduate Student of Goa University shall be done after admission to the Programme. No candidate registered for this Programme shall be permitted to register her/his name simultaneously for any Diploma or Degree Programme of Goa University or any other University / Board / Private Management

or any other College / Institution.

3. A student admitted to Semester I is automatically admitted to Semesters II, III and IV.
4. A student shall not be permitted to submit the Dissertation at the end of Semester IV unless s/he passes in all courses of Semesters I, II and III, and passes in both Theory and Practical at a time together
5. Migration or transfer of students undergoing the M.Pharm. programme is not permitted and shall be governed by the policy of the Pharmacy Council of India in this regard.

#### **OC-27A.1.5 Number of Postgraduate Students to be admitted**

1. The ratio of recognized Postgraduate teacher to number of students to be admitted for the Postgraduate degree course shall be 1:15; in no circumstances shall more than 20 students be registered for the Post graduate degree in a department / specialization during one academic year.
2. Postgraduate seats left unfilled in an academic year shall not be carried forward to the next or subsequent academic year.

#### **OC-27A.1.6 Fees**

All fees and deposits shall be as prescribed by the Government of Goa / Goa University from time to time.

#### **OC-27A.2. Programme structure**

##### **OC-27A.2.1.**

The M.Pharm. programme follows the Credit Based Semester system.

The minimum number of credits for award of the M.Pharm. degree is 95. These credits are to be earned from Theory courses, Practical courses, Seminars, Assignments, Research work, Discussions with the supervisor, Journal club and Co-Curricular activities over the duration of four semesters.

The credits are distributed semester-wise as shown in Table 1.

A student may earn a maximum of 100 credits, based on credits earned in Co-curricular activities.

**Table 1: Semester-wise Distribution of Credits**

<b>Semester</b>	<b>Credits</b>
I	26
II	26
III	21
IV	20
Co-curricular Activities (Attending Conferences, Scientific Presentations and Other Scholarly Activities)	Minimum = 02* Maximum = 07*
Total Credits	Minimum = 95 Maximum = 100

\*Credits for Co-curricular Activities

**OC-27A.2.2.** Courses under the M.Pharm. programme are broadly classified as Theory and Practical courses. Theory (T) Courses consist of Lectures (L) and Practical (P) courses consist of hours spent in the Laboratory.

**OC-27A.2.3.**

A Theory course having 4 Lectures per week throughout the Semester shall carry 4 credits. The contact hours of Journal Club, Research Work Presentations and Discussion with the Supervisor shall be treated as that of Theory Courses for the purpose of calculation of credits.

A Practical course having 4 laboratory hours per week throughout the Semester shall carry 2 credits. The contact hours of Seminars, Assignments and Research Work shall be treated as that of Practical Courses for the purpose of calculation of credits.

**OC-27A.2.4.** The M.Pharm. programme structure shall be as indicated in Tables 2-5 below:

**Table 2: Semester I (Common for All Specializations)**

<b>Course</b>	<b>Credit Hours</b>	<b>Credits</b>	<b>Hours/Week</b>	<b>Marks</b>
Course1: Theory	4	4	4	100
Course 2: Theory	4	4	4	100
Course 3: Theory	4	4	4	100
Course 4: Theory	4	4	4	100
Course 5: Practical	12	6	12	150
Seminar/Assignment	7	4	7	100
<b>TOTAL</b>	<b>35</b>	<b>26</b>	<b>35</b>	<b>650</b>

**Table 3: Semester II (Common for All Specializations)**

<b>Course</b>	<b>Credit Hours</b>	<b>Credits</b>	<b>Hours/Week</b>	<b>Marks</b>
Course 1: Theory	4	4	4	100
Course 2: Theory	4	4	4	100
Course 3: Theory	4	4	4	100
Course 4: Theory	4	4	4	100
Course 5: Practical	12	6	12	150
Seminar/Assignment	7	4	7	100
<b>TOTAL</b>	<b>35</b>	<b>26</b>	<b>35</b>	<b>650</b>

**Table 4: Semester III (Common for All Specializations)**

<b>Course</b>	<b>Credit Hours</b>	<b>Credits</b>	<b>Hours/Week</b>	<b>Marks</b>
---------------	---------------------	----------------	-------------------	--------------

Research Methodology & Biostatistics*	4	4	4	100
Journal Club	1	1	1	25
Discussion / Presentation (Proposal Presentation)	2	2	2	50
Research Work	28	14	28	350
<b>TOTAL</b>	<b>35</b>	<b>21</b>	<b>35</b>	<b>525</b>

\*Non-University Examination

**Table 5: Semester IV (Common for All Specializations)**

Course	Credit Hours	Credits	Hours/Week	Marks
Journal Club	1	1	1	25
Research Work and Colloquium	31	16	31	400
Discussion/Final Presentation	3	3	3	75
<b>TOTAL</b>	<b>35</b>	<b>20</b>	<b>35</b>	<b>500</b>

**Table 6: Guidelines for Awarding Credits for Co-Curricular Activities**

Name of the Activity	Maximum Credits per Activity
Participation in National Level Seminar/ Conference/ Workshop/ Symposium/ Training Programs (related to the specialization of the student)	01
Participation in international Level Seminar/ Conference/ Workshop/ Symposium/ Training Programs (related to the specialization of the student)	02
Academic Award/Research Award from State Level/National Agencies	01
Academic Award/Research Award from International Agencies	02
Research / Review Publication in National Journals (Indexed in Scopus / Web of Science)	01
Research / Review Publication in International Journals (Indexed in Scopus / Web of Science)	02

Note: International Conference: Held outside India  
International Journal: Editorial Board based outside India

\*The Credits assigned for Co-Curricular activities shall be given by the Principals of the Colleges and the same shall be submitted to the University.

### **OC-27A.3 Scheme of Examinations**



**OC-27A.3.1**

The Examination for the degree of M.Pharm. shall consist of two components: Internal Assessment and End Semester Examination.

The scheme of these examinations shall be as shown in Tables 7 and 8

**Table 7: Scheme of Examination for M. Pharm. Semester I and II  
(Common for All Specializations)**

Course	Internal Assessment			End-Semester Exams			Total Marks
	Conti n- uous Mode	Sessional Exam		Total	Marks	Dura- tion	
		Marks	Dura- tion				
<b>SEMESTER I</b>							
Course 1	10	15	1 Hr	25	75	3 Hrs	100
Course 2	10	15	1 Hr	25	75	3 Hrs	100
Course 3	10	15	1 Hr	25	75	3 Hrs	100
Course 4	10	15	1 Hr	25	75	3 Hrs	100
Practical	20	30	6 Hrs	50	100	6 Hrs	150
Seminar /Assignment	--	--	--	100	--	--	100
<b>TOTAL</b>							<b>650</b>
<b>SEMESTER II</b>							
Course 1	10	15	1 Hr	25	75	3 Hrs	100
Course 2	10	15	1 Hr	25	75	3 Hrs	100
Course 3	10	15	1 Hr	25	75	3 Hrs	100
Course 4	10	15	1 Hr	25	75	3 Hrs	100
Practical	20	30	6 Hrs	50	100	6 Hrs	150
Seminar /Assignment	--	--	--	100	--	--	100
<b>TOTAL</b>							<b>650</b>

**Table 8: Scheme of Examination for M. Pharm. Semester III and IV  
(Common for All Specializations)**

Course*	Internal Assessment			End-Semester Exams			Total Marks
	Conti n- uous Mode	Sessional Exam		Total	Marks	Dura- tion	
		Marks	Dura- tion				
<b>SEMESTER III</b>							

Research Methodology & Statistics*	10	15	1 Hr	25	75	3 Hrs	100
Journal Club	--	--	--	25	--	--	25
Discussion/Presentation (Proposal Presentation)	--	--	--	50	--	--	50
Research Work*	--	--	--	--	350	1 Hr	350
<b>TOTAL</b>							<b>525</b>
<b>SEMESTER IV</b>							
Journal Club	--	--	--	25	--		25
Discussion/Presentation (Proposal Presentation)				75			75
Dissertation Evaluation and Viva Voce				--	400	1Hr	400
<b>TOTAL</b>							<b>500</b>

\*Non-University Examination

### OC-27A.3.2 Internal Assessment

- Internal Assessment shall comprise Continuous mode and Sessional examinations
- Marks for Continuous mode shall be allocated as shown in Table 9

**Table 9: Scheme for awarding marks for Internal Assessment: Continuous Mode**

Criteria	Marks
<b>Theory</b>	
Attendance (Refer Table 10)	08
Student-Teacher Interaction	02
<b>Total</b>	<b>10</b>
<b>Practical</b>	
Attendance (Refer Table 10)	10
Based on Practical Records, Regular viva voce, etc.	10
<b>Total</b>	<b>20</b>

**Table 10: Guidelines for allotment of marks for attendance**

Percentage of Attendance	Theory	Practical
95-100	8	10
90-94	6	7.5
85-89	4	5.0
80-84	2	2.5
Less than 80	0	0

- Sessional Examinations: 2 Sessional Examinations shall be conducted for each Theory /Practical course as per the schedule fixed by the College(s). The average marks of the 2 Sessional Examinations shall be computed for Internal Assessment as shown in Tables 7 and 8.

- d) A student shall have only one opportunity to improve her/his performance in the Sessional examination component of the Internal Assessment. The re-conduct of the Sessional Examination shall be completed before the commencement of the next End-Semester examinations.

### **OC-27A.3.3 End-Semester Examinations**

- a. The End-Semester Examinations for each Theory and Practical course for Semester I to Semester IV shall be conducted by Goa University, except for the courses with asterisk symbol (\*) for which examinations shall be conducted by subject experts at the College level and the marks/grades shall be submitted to the University.
- b. The examinations shall be written and practical (including oral).
- c. Each theory paper shall be of 3 hours duration carrying 75 marks each.
- d. Each Practical paper shall be of 6 hours duration carrying 100 marks each.
- e. The Practical examination shall be conducted to test the knowledge and competence of the candidates for making valid and relevant observations based on the experimental/laboratory studies and her/his ability to perform such studies as are relevant to her/his subject.
- f. The Practical examination shall also consist of a viva voce (Oral) examination. The Oral examination shall be thorough and shall aim at assessing the candidate's knowledge and competence about the subject, investigative procedures, technique and other aspects of the specialty, which form a part of the examination
- g. The number of candidates to be examined in clinical / practical and oral on any day shall not exceed twenty.
- h. During Semesters III and IV, every student shall carry out work on an assigned research project in the specialization in which s/he has registered, under the guidance of a recognized Postgraduate Teacher, the result of which shall be written up and submitted in the form of a Dissertation.
- i. Dissertation
  - i. The topic of Research shall be given by the Guide, a recognized postgraduate teacher, within one month from the commencement of Semester II, which shall be communicated to the University.
  - ii. Work for writing the dissertation is aimed at contributing to the development of a spirit of enquiry, besides exposing the candidate to the techniques of research, critical analysis, and acquaintance with the latest advances in medical science / pharmaceutical science and the manner of identifying and consulting available literature. The dissertation shall be submitted at least one month before the examination.
  - iii. The dissertation shall be examined by a minimum of two examiners; one internal examiner and one external examiner.
  - iv. If the subject of dissertation entails collaboration with other departments or specialties of the same / other Institutes, there shall be a co-guide from the respective Institute, designated by the Principal of the College/Institute. In such cases, the information shall be communicated to the University.
  - v. Every candidate shall be required to submit three copies of the dissertation to the Principal, duly certified by the Guide, and co-guide (if any), one month prior to the end of Semester IV. One copy shall be submitted to the College Library, and two copies shall be submitted to the University, for submission

to two examiners.

- vi. The Principal of the concerned College/Institution shall forward the dissertation copies to the University. A candidate who is unable to submit the dissertation in the stipulated time, shall be permitted by the Head of Institution, on the recommendation of the Guide, to submit the dissertation before the end of the following academic year.
  - vii. The dissertation shall be examined by the guide, co-guide (if any), and the external examiner (either from Pharmaceutical/Allied industry or from Pharmacy Institutions), from the panel of examiners as recommended by the Board of Studies and approved by the Academic Council.
  - viii. A candidate who is declared unsuccessful in the dissertation evaluation and viva voce, shall have to incorporate necessary modifications and resubmit the dissertation on payment of fresh fee, and appear for the viva voce after six months.
  - ix. A candidate is permitted to request for a change of guide/title of the dissertation with permission of the Principal/Head of the Institution and intimation to the University. In such a case, s/he shall be required to carry out the work for Semesters III and IV, and submit the dissertation on payment of fresh fee.
  - x. In the event of transfer/ termination/ demise of the Guide, the College shall assign an alternate Guide in the subject of specialization in the same/other institution affiliated to Goa University, and shall intimate the change to the University.
  - xi. A soft copy of the evaluated successful dissertation shall also be submitted for uploading on the Institution's website.
- j. The End-Semester Examination for Semester IV shall be an evaluation of the Dissertation and Viva Voce by the Internal and External Examiners at the end of the Semester.
- k. The evaluation of Research work in Semester III (350 marks) and Dissertation in Semester IV (400 marks) shall be as per the criteria given in Table 11 below

**Table 11: Evaluation of Dissertation and Presentation**

<b>Semester III</b>		<b>Semester IV</b>	
<b>Evaluation of Synopsis</b>		<b>Evaluation of Dissertation</b>	
<b>Criteria</b>	<b>Marks</b>	<b>Criteria</b>	<b>Marks</b>
Objectives of the work done	25	Objectives of the work done	25
Methodology Adopted	100	Methodology Adopted	50
Results and Discussions	100	Results and Discussions	150
-	-	Conclusions and Outcomes	50
<b>TOTAL</b>	<b>225</b>	<b>TOTAL</b>	<b>275</b>
<b>Evaluation of Presentation</b>		<b>Evaluation of Presentation</b>	
<b>Criteria</b>	<b>Marks</b>	<b>Criteria</b>	<b>Marks</b>
Presentation of Work	50	Presentation of Work	50
Communication Skills	25	Communication Skills	25
Question and Answer Skills	50	Question and Answer Skills	50

<b>TOTAL</b>	<b>125</b>	<b>TOTAL</b>	<b>125</b>
<b>GRAND TOTAL</b>	<b>350</b>	<b>GRAND TOTAL</b>	<b>400</b>

- I. A regular record of both theory and practical class work and examinations conducted shall be maintained.

### **OC-27A.3.4 Eligibility for appearing at the End-Semester Examination**

- a) Only such students who produce a certificate from the Head of the institution, in proof of their having regularly and satisfactorily undergone the course of study by attending not less than 80% of the classes held both in theory and in practical separately in each course, shall be eligible to appear at the End-Semester examination for Semesters I, II and III.
- b) Only such students who have put in a minimum of 80% of attendance in M.Pharm. Semester IV shall be eligible to submit the dissertation and appear for the End-Semester Examination.
- c) A student pursuing the M.Pharm. programme shall study in the concerned department of the institution for the entire period as a full time student. The student shall not be permitted to work in any laboratory/ college/ industry/ pharmacy etc., while enrolled for the M.Pharm. Programme, except as a part of training.
- d) Each academic session shall be taken as a unit for the purpose of calculating attendance.
- e) Every student shall attend symposia, seminars, conferences, journal review meetings and lectures during each semester as prescribed, and not absent herself/himself without prior permission.
- f) Any student who fails to comply with the criteria stated above shall not be permitted to appear for the University examinations.

### **OC-27A.3.5**

- a. A student who fails in the theory or practical component of a Course shall reappear in both theory and practical components of the same Course.
- b. M.Pharm. examinations in any specialization shall consist of Theory Papers, Practical and viva voce examinations, and Dissertation.
- c. A student shall be required to undergo professional training of three weeks before the commencement of Semester III in any industry/research center/ hospital/ community pharmacy and submit a completion certificate along with a report.

### **OC-27A.3.6 Minimum Marks for Passing Examinations**

A student shall be declared PASS in a course, and eligible for getting a Grade in that Course, if s/he secures at least 50% marks in that course, including Internal Assessment

- a) In case a student fails to secure the minimum 50% in any Theory or Practical course as specified in a) above, s/he shall reappear for the End-Semester Examination of that course. However, her/his marks of the Internal Assessment shall be carried over and s/he shall be entitled for the Grade obtained by her/him, on passing the course.
- b) There is no provision for revaluation of the answer papers in any examination. However, a candidate may apply for retotaling by paying the prescribed fee.

### OC-27A.3.7 Schedule of End-Semester Examinations

The End-Semester Examination shall be conducted as per the schedule given below. The exact dates of examinations shall be notified from time to time.

**Table 12: Tentative Schedule of End-Semester Examination**

Semester	For Regular Candidates	For Repeat Candidates
I and III	December/January	June/July
II and IV	June/July	December/January

### OC-27A.3.7 Allowed to Keep Terms (ATKT):

A student shall be permitted to carry forward all the courses of Semesters I, II and III. However, s/he shall not be eligible to submit the dissertation at the end of Semester IV, unless all the courses of Semesters I, II and III are successfully completed.

A student shall be eligible to get her/his CGPA upon successful completion of the courses of Semesters I to IV within the stipulated time period as per the norms.

Note: Grade AB should be considered as failed and treated as one head for deciding ATKT. Such rules are also applicable for those students who fail to register for examination(s) of any course in any semester.

### OC-27A.4 Grading

#### OC-27A.4.1 Letter Grades and Grade Point allocation:

Based on the performance, a student shall be awarded a final letter grade at the end of the Semester for each course. The letter grades and their corresponding grade points are as given in Table 13.

**Table 13: Letter Grades and Grade Points**

Percentage of Marks obtained	Letter Grade	Grade Point	Performance
90-100	O	10	Outstanding
80-89.99	A	9	Excellent
70-79.99	B	8	Good
60-69.99	C	7	Fair
50-59.99	D	6	Average
Less than 50	F	0	Fail
Absent	AB	0	Fail

A student who remains absent for any End-Semester Examination shall be assigned a letter grade of AB and a corresponding grade point of zero. S/he shall reappear for the said evaluation/examination in due course.

#### OC-27A.4.2 Semester Grade Point Average (SGPA)

The performance of a student in a semester is indicated by a number called 'Semester Grade Point Average' (SGPA). The SGPA is the weighted average of the grade points obtained in all the courses by the student during the semester.

For example, if a student takes four courses (Theory/Practical) in a semester with credits C1, C2, C3 and C4 and the student's grade points in these courses are G1, G2, G3 and G4, respectively, the student's SGPA is computed as:

$$\text{SGPA} = \frac{C1G1 + C2G2 + C3G3 + C4G4}{C1 + C2 + C3 + C4}$$

The SGPA is calculated to two decimal points.

It should be noted that the SGPA for any Semester shall take into consideration the F and AB grade awarded in that semester. For example if a student has an F or AB grade in course 4, the SGPA shall then be computed as:

$$\text{SGPA} = \frac{C1G1 + C2G2 + C3G3 + C4*\text{zero}}{C1 + C2 + C3 + C4}$$

### **OC-27A.4.3 Cumulative Grade Point Average (CGPA)**

The CGPA is calculated with the SGPA of all the four semesters to two decimal points and is indicated in the final grade report card/final transcript showing the grades of all four semesters and their courses.

The CGPA shall reflect the failed status in case of F/AB grade(s), till the course(s) is/are passed. When the course(s) is/are passed by obtaining a pass grade on subsequent examination(s) the CGPA shall only reflect the new grade and not the fail grades earned earlier. The CGPA is calculated as:

$$\text{CGPA} = \frac{C1S1 + C2S2 + C3S3 + C4S4}{C1 + C2 + C3 + C4}$$

Where C1, C2, C3 and C4 are the total number of credits for Semesters I, II, III and IV, and S1, S2, S3 and S4 are the SGPA of Semesters I, II, III and IV

### **OC-27A.4.4 Declaration of Class**

The class shall be awarded on the basis of CGPA as follows:

First Class with Distinction	= CGPA of 7.50 and above
First Class	= CGPA of 6.00 to 7.49
Second Class	= CGPA of 5.00 to 5.99

### **OC-27A.5 Award of Ranks and Degree**

- (1) Ranks and Medals shall be awarded on the basis of final CGPA. However, candidates who fail in one or more courses during the M.Pharm. program shall not be eligible for award of ranks. Moreover, candidates should have completed the M.Pharm. program in the minimum prescribed number of years (two years) for the award of Ranks.
- (2) Candidates who fulfill the requirements mentioned above shall be eligible for award of degree during the ensuing convocation.
- (3) The duration for the completion of the program shall be fixed as double the actual duration of the program; students who do not complete the programme within the said period, shall obtain fresh Registration.

- (4) A candidate who seeks re-admission to the programme after a break shall obtain approval from Goa University by paying a condonation fee.

### **OC-27A.6 College Committees**

The following committees shall be constituted by the Principal of the College for the terms mentioned and shall work subject to control and supervision of the Principal.

- A. Programme Committee - 3 years
- B. College Examination Committee - 3 years
- C. College Unfair Means Inquiry Committee - 3 years
- D. College Grievance Committee - 3 years

#### **A. Programme Committee**

1. The M.Pharm. Programme shall have a Programme Committee constituted by the Head of the institution in consultation with all the Heads of the Departments.
2. The composition of the Programme Committee shall be as follows: A teacher at the cadre of Professor shall be the Chairperson, one Teacher from each M.Pharm. specialization and four student representatives (two from each academic year), nominated by the Head of the institution.
3. Duties of the Programme Committee:
  - i. Periodically reviewing the progress of the classes
  - ii. Discussing problems concerning the curriculum, syllabus and the conduct of classes.
  - iii. Discussing the nature and scope of assessment for the course with the course teachers and announcing the same to the students at the start of each semester.
  - iv. Communicating its recommendations to the Head of the Institution on academic matters.
4. The Programme Committee shall meet at least thrice in a Semester preferably at the end of each sessional examination and before the End Semester Examination.

#### **B. The College Examination Committee**

- a) The College Examination Committee shall consist of:
  - i) A senior teacher who shall be the Chairperson
  - ii) Two to four regular teachers (In addition to the Chairperson)
- b) There shall be no remission in work-load for this work
- c) This Committee shall be in charge of all matters pertaining to all the Semester Examinations in the College.
- d) The Committee shall prepare the examination time-table, arrange to get the question paper sets printed, answer books assessed, results tabulated and announced, and individual statement of marks prepared and issued to the candidates.

#### **C. The College Unfair Means Inquiry Committee (CUMIC)**

- a) The CUMIC shall be constituted with the following members:
  - i) Vice-Principal or a senior teacher as Chairperson
  - ii) Two members of the College Examination Committee



- b) This Committee shall investigate into the cases of unfair means and malpractices reported in the manner prescribed below and shall recommend to the Principal a course of action as prescribed in OA-5.14
- c) The following procedure shall be followed for investigating the cases of candidates alleged to have used unfair means at Semesters I to IV:
  - i) The candidate shall be served with a show cause notice and made aware of the charges/allegations reported against her/him so as to enable her/him to prepare her/his defence at the time of appearance before the CUMIC and informing her/him thereby of the proposed action to be taken in her/his case, with a request to bring a written reply at the hearing as to why the action proposed should not be taken against him/her.
  - ii) The reply received by the Committee from the candidate when s/he appears before it shall be considered by the Committee and the final recommendation in the matter be taken and reported to the Principal for his approval.
  - iii) The punishment finally awarded shall be equal to or less than what is mentioned in the show cause notice, but not more than what is mentioned therein.
  - iv) The CUMIC is a recommendatory body. The Principal shall exercise her/his power under Statute SB-13 (iv) of Goa University and issue a final order.
  - v) The category of malpractice and the quantum of punishment for each category thereof shall be as given in Ordinance OA-5.14.19.
  - vi) In addition to these guidelines, each case be examined in detail and punishment awarded on the merit of each case.

#### **D. College Grievance Committee (CGC)**

- a) The CGC shall be constituted as under:-
  - i) Vice-Principal/Senior member of teaching staff as Chairperson, provided that s/he is not the Chairperson of CUMIC.
  - ii) Two regular teachers, who are not members on CUMIC or the College Examination Committee.
- b) In case the grievance concerns any member of the Committee, the Principal shall reconstitute the Committee, excluding the concerned member.
- c) This Committee shall investigate into written complaints from the students referred to it by the Principal in the conduct of examinations in a manner as prescribed below, and recommend a course of action to the Principal as prescribed in OA-5.14.
  - i) The Committee shall consider the written complaint of a student on the conduct of examination provided that:
    - a) The complaint is submitted within 15 days after the declaration of results;
    - b) The complaint is accompanied by a prescribed fee of Rs. 200/- or as notified from time to time, which shall be refundable if the complaint is found to be genuine; and
    - c) The matter is referred to the Committee by the Principal.
  - ii) The Committee shall seek necessary explanation from the concerned party in connection with allegations made by the student.
  - iii) After considering the explanation from the concerned party, the Committee shall recommend a course of action in writing to the Principal.
- d) The Principal shall inform the student about the findings of the Committee and shall take appropriate action including reassessment of the said answer book. However, if the marks are reduced after revaluation of the said answer book the original marks shall be retained and the student informed that there is no change in her/his results.

- e) A minimum fine of Rs.200/- extending up to Rs.500/-, shall be imposed on the student complainant, if the said allegation(s) is/are found to be a deliberate attempt at casting aspersions on the teacher(s) concerned. If the allegations are found to be genuine and the same is recorded giving reasons, action shall be taken as provided under OA-5.2.6

**OC-28 Ordinance relating to the Bachelor of Music Degree Course in Hindustani Classical Music (approved from 17<sup>th</sup> July 2001.)**

**OC-28.1 Aims and Objectives of the Course:** - The basic aim of the course is to impart a full time professional training in Hindustani Classical Vocal Music & Instrumental Music such as Tabla, Sitar, Harmonium etc. leading to the degree of Bachelor of Music. It is aimed at providing specialised training to the Music students in all important aspects of Hindustani Music, with a special emphasis on developing his/her performing ability to professional standard, in the respective subject.

**OC-28.2 Nature of Education:** Music is a performing art and hence the nature of training is mainly performance oriented. A student will be given practical training in singing Ragas with an accent on proper application of voice, tunefulness and developing mastery of laya (rythem) and talas. In case of instrumental music, proper technique in playing the instrument will be taught and training given in various Ragas and talas. In addition to practical training the students will be given theoretical knowledge in the subject of aesthetics, Musicology, Voice-culture, Sound Recordings, Music History etc. Besides a student will be exposed to various live concerts of educational value as also recorded cassettes and performances recorded in commercial LPs, CD and Cassettes.

**OC-28.3 The Structure and Duration of the Course:** Duration of the course will be for all together Five years after S.S.C. Examination (i.e. 10+5). The first two years of the course will be concentrated in giving good foundational training in Music. And as such there will be minor subjects along with major subject in music. The next three years of the Course will lead to specialization in the major subject selected by a student at the time of admission to the course.

**OC-28.4 Admission and Eligibility :** Generally, the students having passed S.S.C. Examination and having Musical aptitude or background will be admitted for the Course. The rules of eligibility and exemptions for admission to the course will be as under:

(1) Students who have passed S.S.C. or above and having Musical background will be admitted to the Ist Year of the College after passing an aptitude test, conducted by the College.

(2) Students who have passed H.S.S.C.E./Polytechnic and who also passed Sangeet Madhyama or Higher Examinations or any other equivalent Diploma of the recognised Musical Institution or those having a training for minimum three years from a reputed Teacher/Guru will be admitted to the IIIrd year of the B.Music Course after passing the entrance test, conducted by the College.

(3) Students who have passed S.S.C.E. and having a Diploma "Sangeet Madhyama" or higher or its equivalent Diploma of the recognised musical institution or having completed basic training in Music will be admitted to IInd year directly after their passing entrance test Eleventh standard in Higher Secondary School or of First Year B. Music, which will be conducted by the College of Music at the time of admission.

(4) Students who have passed H.S.S.C. Examination or higher Examination will be exempted from appearing for language papers English and Hindi at the examination of First and Second year B. Music Course. The students who have failed in H.S.S.C. Examination but passed in language papers English and Hindi at the said examination will be also exempted from appearing for above language papers at the examination of First and Second Year of B. Music.

**OC-28.5 Seats available for admission to the Course:** The total number of seats for admission to the First year of the Course will be maximum 30 students in both the stream of Classical Vocal Music and Instrumental Music such as Tabla, Sitar and Harmonium.

**OC-28.6 Teaching programme for the Course:**

(i) Music being a performing art it is nature of training is mainly performance and practical oriented. As such the training in Music practicals will be imparted in batches. Each batch will consist of minimum 2 and maximum 5 students. In exceptional cases one more students will be included in a batch. As far as Vocal is concerned there will be separate batches for both male and female students as their pitch of voice is totally different from each other and as such they cannot be imparted practical training in the same pitch i.e. Swara at a time. Besides, in case of female students there will be even separate batches in case of more students and if there is a difference of pitch of voice and level amongst them. The lectures on theory and language will be conducted in group. There will be languages - English and Hindi for first two years of the course.

(ii) The distribution of number of lectures for teaching the various subjects during a week for different years will less as under considering the marks allotted and the actual requirement in each subject:

	<b>Subject</b>	<b>No. of lectures per week</b>
Ist Year and IIInd Year	English	3 Lectures
	Hindi	3 Lectures
	Theory (Music)	2 Lectures
	Practical	12 Lectures
	Elected	4 Lectures
IIIrd Year and IVth Year	Papers (Minor)	
	Theory (Music)	4 Lectures
	Practical	14 Lectures
	Knowledge of other Disciplines elected	3 Lectures
Vth Year	Papers (Minor)	
	Theory (Music)	6 Lectures
	Practical	18 Lectures

In addition there will also be the regular session on listening of recorded music, group discussions, students music programme and practice etc. for the students of all the classes as a part of teaching activity.

All the theory papers will be either in English, Hindi or Marathi.

**OC-28.7 The Scheme of Examination:** The candidate will be examined in the following subjects and the duration of papers and marks allocation will be as under :

<b>First &amp; Second Year Examination</b>	<b>Vocal &amp; Instrumental Music</b>	<b>Marks</b>	<b>Duration</b>
Paper No.1	English	100	3 hrs.
Paper No.2	Hindi	100	3 hrs
Paper No.3	Music Theory	100	3 hrs
Paper No.4	Practical-I (Major Music)	150	-----
Paper No.5	Practical-II (Minor Music)	150	(75+75 in two Elected subject)

<b>Third &amp; Fourth Year Examination</b>	<b>Vocal &amp; Instrumental Music</b>	<b>Marks</b>	<b>Duration</b>
Paper No.1	Musicology & History	100	3 hrs
Paper No.2	Performance study	100	3 hrs
Paper No.3	Practical-I (Major Music)	150	-----
Paper No.4	Practical-II (Major Music)	150	-----
Paper No.5	Practical-III (Minor Music)	100	(in one elected Paper)
<b>Fifth Year Examination</b>	<b>Vocal &amp; Instrumental Music</b>	<b>Marks</b>	<b>Duration</b>
Paper No.1	Musicology & History	100	3 hrs
Paper No.2	Performance study	100	3 hrs
Paper No.3	Practical-I (Major)	150	-----
Paper No.4	Practical-II (Major)	150	-----
Paper No.5	Practical-III (Major) (Manch Pradarshan)	100	-----

### **OC-28.8 Pattern of Examination :**

(i) Examination will be conducted annually. The IInd, IIIrd, IVth and Vth year examinations will be conducted by Goa University and Ist year examination will be Internal and conducted by the College on behalf of the University. The College will also conduct the Terminal Examination for the students of all the years.

**(ii) Eligibility for Annual Examination :** To qualify for appearing for annual examination a student will have to show attendance of at least 75% of the total during the academic year.

#### **(i) Standard of Passing :**

(a) To pass the examination, a candidate must obtain a minimum of 35% of the full marks in each paper both theory and practical for all the examinations i.e. 17 out of 50, 26 out of 75, 35 out of 100 and 53 out of 150 marks.

(b) Grace marks will be awarded as per the University rules.

(c) The passing certificates of all the University Examination will be issued by the University yearly and the final Degree Certificate by aggregating, the total marks of last three years i.e. Third, Fourth & Fifth Year.

The marksheet of the final year examination will include the marks of all the three years examinations and the percentage will be awarded on the basis of total marks secured in all the Papers during the last three examinations i.e. out of 1800 marks.

#### **(iv) Award of Classes :**

1) Class shall be awarded on the following basis to the successful candidate :

- A) Distinction---- 70% marks and above
- B) First Class ---- 60% marks and above but below 70%
- C) Second Class---- 50% and above but below 60%
- D) Pass Class--- Below 50%

2) The class will be awarded to the deserving students who pass the whole examination at first attempt only. They will also be placed on merit list if found eligible. The repeater students will not be entitled to class.

#### **(ii) Advancement to the next year :**

(1) No student shall be admitted to the next year unless he/she has passed the examination for which he/she has appeared. However a candidate passing in all heads of passing except one or

two at the examination shall be permitted to proceed for the next year and answer the remaining papers along with the next year examination. The result of the next year examination shall not be declared unless he/she has cleared the remaining papers of last year examination.

- (1) A student failing in Final year B. Music Examination shall be eligible to appear in the next examination as an external candidate and complete the course within a period of next three years.
- (2) A student who obtains minimum passing marks prescribed in each paper shall be exempted from appearing for that subject at the examination.

**OC.28.9** The syllabi for various subjects of the Course shall be subject to such revision, modification etc. as may be made by the Academic Council from time to time on the recommendations of the Board of Studies in the subject.

## **(Notified on 25<sup>th</sup> July, 2017) Ordinance OC-29 relating to the Degree Course of Master of Education (M.ED.)**

### **OC- 29.1 Preamble:**

The Master of Education (M.Ed.) Programme is a two year professional Programme in the field of Teacher Education which aims at preparing teacher educators and other education professionals including curriculum developers, educational policy analysts, planners, administrators, supervisors, school principals and researchers. The completion of the Programme shall lead to the M.Ed. Degree with specialisation either in elementary education (upto class VIII) or in secondary education (classes VI-XII).

### **OC-29.2 Degree to be awarded:**

The Degree to be awarded shall be 'Master of Education' (M.Ed.).

### **OC-29.3 Objectives of the M.Ed. Programme**

To enable students to:

- 1) Develop a multi-disciplinary perspective of education.
- 2) Acquire professional skills and competencies to function as a teacher educator at either elementary or secondary level of schooling.
- 3) Acquire professional skills and competencies needed for a professional in at least one thematic area of education

- 4) Understand how concepts theories/ issues drawn from disciplines cognate to Education, such as Psychology, Sociology, Philosophy, Economics and Management, could be used/ practiced suitably in the perspectives of teaching –learning in schools.
- 5) Appreciate the challenge of theorizing education and identify relationship between theory and practices;
- 6) Develop a rational conceptualization of educational research;
- 7) Integrate information and communication technology in teaching-learning and training transaction;
- 8) Equip themselves with different innovative modes of training transactions.

#### **OC-29.4 Duration and Working days**

##### **(i) Duration**

The M.Ed. Programme shall be full-time, of two academic years duration, or four Semesters. The Programme shall be offered under Choice Based Credit System, and shall include field attachment for a minimum of 4 weeks and research dissertation. Students shall be permitted to complete the Programme requirements of the two-year Programme within a maximum period of three years from the date of admission to the Programme. The summer vacation should be used for field work/practicum /other activities.

##### **(ii) Working Days**

There shall be minimum of two hundred working days each year, exclusive of the period of admission and inclusive of classroom transaction, practicum, field study and conduct of examination. The institution shall work for a minimum of thirty six hours in a week (five or six days) during which faculty and students shall be available for interaction, dialogue and consultation and mentoring.

The minimum attendance of students shall be 80% for Theory Courses and Practicum, and 90% for field attachment.

#### **OC-29.5 Eligibility, Intake, Admission Procedure and Fees.**

##### **(i) Eligibility**

(a) Candidates seeking admission to the M.Ed. should have obtained minimum of 50% marks or an equivalent Grade in the following Programmes:

(i) B.Ed.

(ii) B.A., B.Ed., B.Sc. B.Ed.

(iii) B.El.Ed.

(iv) D.El.Ed. with an undergraduate Degree  
(with minimum of 50% marks in each)

(b) Reservation and relaxation for SC/ ST/ OBC/ PWD and other applicable categories shall be as per the rules of the Central Government as applicable.

(ii) **Intake.**

The basic unit size for the Programme shall be 50. An institution shall be allowed only one unit. Additional unit shall be permitted only on the basis of quality of infrastructure, faculty and other resources, and after the Institution has offered the Programme for three years and has been awarded minimum B+ grade by NAAC or any other accreditation agency approved by National Council for Teacher Education (NCTE).

(iii) **Admission Procedure**

Admission shall be on the basis of merit of marks obtained in the qualifying examination and in the entrance examination or any other selection process as per the policy of the State Government.

(iv) **Fees**

The Institution shall charge only such fee as prescribed by the affiliating body/State Government concerned in accordance with provisions of NCTE, as amended from time to time, and shall not charge donations, capitation fee, and such other from the students.

**OC-29.6 PROGRAMME STRUCTURE**

- (i) For successful completion of the M.Ed. Course a student is required to complete a minimum of 80 credits, which shall comprise Core Courses which shall be Perspective Courses: PC1, PC2, PC3, PC4, PC5, PC6; Tool Courses: TC1, TC2, TC3, TC4, TC5, TEC1, TEC2; Teacher Education: TE- Internship, Optional Courses: CCS1, CCS2, TS1, TS2, TS3; Thematic Specialization: TS-Internship and Dissertation.
- (ii) A student may opt for a Course offered in any other thematic specialisation as a self-study course. He/she has to undertake all assignments and other modes of assessment in the same semester in which the Course is offered to other students. While selecting the number of self-study courses in a semester, it may be so done so as to ensure that the total credits for the semester shall not exceed 24 credits.
- (iii) One Credit of a Theory Course shall be equivalent to 15 contact hours of learning activities including lecture, group discussion, seminar, problem solving, tutorial, assessment and such others.

- (iv) The scheme of the Programme for the four semesters and the Inter-Semester Break of M.Ed. Programme shall be as under:

<b>Major components</b>	<b>Areas Covered</b>	<b>Description</b>	<b>Credit Allocation</b>
<b>Common Core</b> (Theory and Practicum included)	Perspective Courses (PC)	PC1,PC2,PC3,PC4, PC5,PC6	4 Credits for each paper
	Tool Courses (TC)	TC1 TC2 TC3 TC4 TC5	1 Credit 1 Credit 4 Credits 4 Credits 2 Credits
	Teacher Education Courses (TEC)	TEC1-Teacher Education I TEC2-Teacher Education II	4 Credits 4 Credits
<b>Specialisations</b> (Theory and Practicum included)	Core Course Specialization (CCS)	CCS1-Elementary / Secondary Education – I CCS2-Elementary / Secondary Education – II	4 Credits 4 Credits
	Thematic Specialization (TS) Any one cluster from the following such as: 1. Educational Management, Administration and Leadership 2. Curriculum, Pedagogy and Assessment 3. Educational Technology and ICT 4. Inclusive Education 5. Programme Planning, Implementation, Monitoring and Evaluation 6. Guidance and Counseling 7. Any other as decided by the Board of Studies and approved by the Academic Council.	TS1-Thematic Specialization –I TS2-Thematic Specialization –II TS3-Thematic Specialization –III	4 Credits 4 Credits 4 Credits
<b>Internship/Field Attachment</b>	- In Teacher Education (TE- Internship) - In Thematic Specialisation (TS- Internship)	Field internship/attachm ent in: 1. A Teacher Education Institution, and	8 Credits (4 Credits each)



		2. The area of specialisation	
<b>Research leading to Dissertation (TC- 6)</b>	Related to specialisation or Perspectives	Students (in close mentorship of a faculty Member) learns to plan and conduct a research, and write a dissertation.	8 Credits
			<b>80 Credits</b>

(v) Semester wise distribution of Courses

Semester-I	Cr	Semester-II	Cr	Semester-III	Cr	Semester-IV	Cr
<b>18</b>		<b>20</b>		<b>20</b>		<b>22</b>	
PC1	4	TC3	4	TC4	4	TC5	2
TEC1	4	TS1-Thematic Specialization -I	4	CCS2	4	PC5	4
PC2-	4	PC3	4	PC4	4	TEC2	4
CCS1-	4	TS2-Thematic Specialization- II	4	TS3-Thematic Specialization - III	4	PC6	4
TC1- TC2	1 1	TE – Internship*	4	TS Internship*	4	TC6- Dissertation#	8
<b>Credits</b>	<b>18</b>		<b>20</b>		<b>20</b>		<b>22</b>

\* The Course shall be organized through Field Visits / Practical mode.

# Dissertation work shall commence from semester II and shall be completed by the end of semester IV.

## (vi) Contact Hours

Description	Credits	Contact Hrs/week
<b>Semester I</b>		
PC1	4	3L + 2T = 5
TEC I	4	3L + 2T = 5
PC2	4	3L + 2T = 5
CCS1	4	3L + 2T = 5
TC1	1	1 Week Workshop
TC2	1	1 Week Workshop
<b>Semester II</b>		
TC3	4	3L + 2T = 5
TS1	4	3L + 2T = 5
PC3	4	3L + 2T = 5
TS2	4	3L + 2T = 5
TE - Internship	4	2 + 1 Weeks
<b>Semester III</b>		
TC4	4	3L + 2T = 5
CCS2	4	3L + 2T = 5
PC4	4	3L + 2T = 5
TS3	4	3L + 2T = 5
TS – Internship	4	2+1 Weeks
<b>Semester IV</b>		
TC5	2	2 Weeks Workshop
PC5	4	3L + 2T = 5
TEC2	4	3L + 2T = 5
PC6	4	3L + 2T = 5
TC6-Dissertation	8	2T + 2T

(vii) One Lecture shall be of one hour duration, a Tutorial shall be of two hours duration and a Practical shall be of two hours duration.

**OC-29.7 Scheme of Examination**

(i) There shall be a University Examination at the end of each semester.

- (ii) A semester assessment shall be divided into three components  $C_1$ ,  $C_2$  and  $C_3$ .

Component	Units covered	Weightage	Period of Continuous assessment
Mid-term assessment 1	1, 2	25%	End of 8 <sup>th</sup> week
Mid-term assessment 2	3, 4	25%	End of 16 <sup>th</sup> week
Semester end	1 - 4	50%	End of Semester

- (a) The evaluation of  $C_1$  shall be done for a weightage of 25% conducted during the first half of the semester on completion of the first 50% of the syllabus, consolidated during the 8<sup>th</sup> week of the semester.
- (b) The evaluation of the second component  $C_2$  shall be done for a weightage of 25% conducted during the second half of the semester on completion of the syllabus, consolidated during the 16<sup>th</sup> week of the semester.
- (c) In general  $C_1$  and  $C_2$  should be evaluated through Test/ seminar/ dissertation/ presentation/ assignment as suitable for a Course.
- (d)  $C_3$  or Semester End Assessment (SEA) shall be conducted by the University and this forms the third component of evaluation, with weightage of 50%.

- (iii) The distribution of marks shall be as follows:

Sem	Course No.	Subject	Sessional		Semester End $C_3$	Total
			$C_1$	$C_2$		
I	GUMED-PC1		25	25	50	100
	GUMED -PC2		25	25	50	100
	GUMED -TEC1		25	25	50	100
	GUMED –CCS-ELE1/ GUMED –CCS-SEC1		25	25	50	100
	GUMED -TC1			25		25
	GUMED -TC2				25	25
		<b>Total</b>				<b>450</b>
II	GUMED - PC3		25	25	50	100
	GUMED - TC3		25	25	50	100
	GUMED - TS-EMAL1		25	25	50	100
	GUMED - TS-CPA1		25	25	50	100
	GUMED - TS-ETICT1		25	25	50	100
	GUMED - TS-IE1		25	25	50	100
	GUMED - TS-PPIME1		25	25	50	100

	GUMED - TS-GC1		25	25	50	100
	GUMED - TS-EMAL2		25	25	50	100
	GUMED - TS-CPA2		25	25	50	100
	GUMED - TS-ETICT2					
	GUMED - TS-IE2		25	25	50	100
	GUMED - TS-PPIME2		25	25	50	100
	GUMED - TS-GC2		25	25	50	100
	GUMED -TE-INT					100
		<b>Total</b>				<b>500</b>
<b>III</b>	GUMED - PC4		25	25	50	100
	GUMED - TC4		25	25	50	100
	GUMED –CCS-ELE2/ GUMED –CCS-SEC2		25	25	50	100
	GUMED - TS-EMAL3		25	25	50	100
	GUMED - TS-CPA3		25	25	50	100
	GUMED - TS-ETICT3		25	25	50	100
	GUMED - TS-IE3		25	25	50	100
	GUMED - TS-PPIME3		25	25	50	100
	GUMED - TS-GC3		25	25	50	100
	GUMED -TS-INT					100
			<b>Total</b>			
<b>IV</b>	GUMED - PC5		25	25	50	100
	GUMED - PC6		25	25	50	100
	GUMED -TEC2		25	25	50	100
	GUMED -TC5			50		50
	GUMED -TC6	Dissertation	50	50	100	200
			<b>Total</b>			
		<b>GRAND TOTAL</b>				<b>2000</b>

(iv) One Credit shall be evaluated for 25 marks.

(v) Duration of semester end examination (C<sub>3</sub>) for all theory Courses shall be of 2 hours.

- (vi) Each theory paper shall comprise 5 questions of 10 marks each. There shall be one question on each of the four units with internal choice and the fifth question shall include topics from all four units with internal choice.
- (vii) **Question paper setting**  
 Question paper setting and evaluation.  
 (i) There shall be a Board of Examiners approved by the Goa University for preparing, scrutinising and approving the question papers and scheme of evaluation.  
 (ii) Question paper for the written tests in C<sub>1</sub>, C<sub>2</sub> and C<sub>3</sub> shall be prepared by the faculty teaching the Course. Goa University shall supply the question papers for C<sub>3</sub> theory examinations.

- (viii) **Revaluation:**  
 Revaluation facility shall be as per Goa University Ordinance OA-5.15.

**OC-29.8 Standard of Passing:-**

- (i) A candidate shall be required to score a minimum of 30% in C<sub>1</sub> and C<sub>2</sub> put together, to be eligible to appear for C<sub>3</sub>.
- (ii) The final marks of a Course M of C<sub>3</sub> shall be computed as per the following table:

	<i>Distribution</i>	<i>Formula</i>
1.	$L : T : P$	$M = ((L+T)*X + (P*Y)) / (L+T+P)$
2.	$L : T : P = 0$	$M = X$
3.	$L : T = 0 : P$	$M = (L*X + P*Y) / (L+P)$
4.	$L = 0 : T : P$	$M = Y$
5.	$L : T = 0 : P = 0$	$M = X$
6.	$L = 0 : T = 0 : P$	$M = Y$
7.	$L = 0 : T : P = 0$	$M = Z$

Where

X is the marks scored out of 50 in C<sub>3</sub> in Theory

Y is the marks scored out of 50 in C<sub>3</sub> in Practical

Z is the marks scored out of 50 in C<sub>3</sub> in Tutorial

The total marks in a Course is  $P = C_1 + C_2 + M$  (after rounding to nearest integer. The grade (G) and grade point (G.P) shall be calculated as follows where V is the credit value of the Course.

<b>P</b>	<b>G</b>	<b>GP = V × G</b>
90 – 100	10	$V \times 10$
80 – 89	9	$V \times 9$
70 – 79	8	$V \times 8$
60 – 69	7	$V \times 7$
50 – 59	6	$V \times 6$
40 – 49	5	$V \times 5$
30 – 39	4	$V \times 4$
0 -29	0	$V \times 0$

If a candidate scores in  $C_1 + C_2 \geq 30\%$ ,  $M \geq 30\%$  and  $G \geq 5$  in a Course, then he/she shall be considered to be successful in that Course.

**OC-29.9 Award of Class.**

- (i) Marks awarded in each Course shall be represented in the form of Grades in the grade sheet issued at the end of each semester. The Final result shall be declared as Cumulative Grade Point Average (CGPA).
- (ii) After successful completion of the required number of credits, the overall CGPA of a candidate shall be calculated using the formula:  

$$CGPA = \frac{\sum GP}{\text{Total number of credits}}$$
- (iii) The marks awarded in the Internal Semester Assessment (ISA) and Semester End Assessment (SEA) shall be added for awarding the grade for each Course, as indicated in the table below:

<b>Range of percentage scored</b>	<b>Grades</b>	<b>Grade Points</b>
<b>85 - 100</b>	<b>O (Outstanding)</b>	<b>10</b>
<b>75 - &lt; 85</b>	<b>A+ (Excellent)</b>	<b>9</b>
<b>65 - &lt; 75</b>	<b>A (Very Good)</b>	<b>8</b>
<b>55 - &lt; 65</b>	<b>B + (Good)</b>	<b>7</b>
<b>50 - &lt; 55</b>	<b>B (Above Average)</b>	<b>6</b>
<b>45 - &lt; 50</b>	<b>C (Average)</b>	<b>5</b>
<b>40 - &lt; 45</b>	<b>P (Pass)</b>	<b>4</b>
<b>0 - &lt;40</b>	<b>F (Fail)</b>	<b>0</b>
	<b>Ab (Absent)</b>	<b>--</b>

- (iv) Every student shall have to secure a minimum of 'P' grade to pass the Course.
- (v) Provisions for grace marks under OA 5.16 shall not be applicable.
- (vi) The CGPA shall be converted to the Final grade, as shown in the table below:

<b>CGPA</b>	<b>Grades</b>
<b>10.0</b>	<b>O (Outstanding)</b>
<b>9.0 - &lt; 10</b>	<b>A+ (Excellent)</b>
<b>8.0 - &lt; 9.0</b>	<b>A (Very Good)</b>
<b>7.0 - &lt; 8.0</b>	<b>B + (Good)</b>
<b>6.0 - &lt; 7.0</b>	<b>B (Above Average)</b>
<b>5.0 - &lt; 6.0</b>	<b>C (Average)</b>
<b>4.0 - &lt; 5.0</b>	<b>P (Pass)</b>
<b>&lt; Required credits for award of the Degree</b>	<b>F (Fail)</b>

- (vii) In the case where CGPA is higher than the indicated upper limit in the two decimal digits by a factor of  $\geq 0.005$ , then the higher grade shall be awarded. E.g. A candidate with CGPA  $\geq 4.995$  shall be awarded 'C' grade. A candidate, who has not earned required credits to be awarded the Degree, shall be given a final grade 'F' and be declared as 'Fail'.
- (viii) There shall not be any supplementary examinations for SEA. However, repeat examinations shall be conducted as per the allotted time frame for SEA in the academic calendar. In such cases, the  $C_1$  and  $C_2$  scores taken together, shall be carried forward. However, if the candidate is re-registering for a Course, neither the  $C_1$  and  $C_2$  scores, nor the attendance of the previous attempt shall be carried forward.
- (ix) **Dropping a Course:**
  - (a) A candidate shall be considered to have dropped a Course if the candidate:
    - 1) fails to put in 80% attendance in the Course,
    - 2) decides to discontinue/ withdraw to study the Course,
    - 3) scores less than 30% in  $C_1 + C_2$  together,
    - 4) scores in  $C_1 + C_2$  is  $\geq 30\%$  and  $M < 30\%$ .
  - (b) A candidate who has dropped a Course shall have to re-register for the Course when the Course is offered again.

#### **OC-29.10 Grievance Committee**

- (i) There shall be a Grievance Committee of maximum of four members comprising three Teachers and the Principal, to be constituted at the commencement of every academic year. The Principal shall be Chairperson of the Committee. No teacher against whom a grievance is made shall participate in the meetings of the Committee.
- (ii) The Grievance Committee shall examine and decide on the grievances relating to the marking of answer-scripts/evaluation of tests of the students. The Committee may also consider any other matter related to examination and evaluation.
- (iii) A student shall address his/her grievance(s) to the Principal, who shall place the same before the Grievance Committee for resolution. If the grievances are in the Course(s) taught by the Principal, the grievances shall be addressed to the Dean of the Faculty/ Vice-Chancellor.
- (iv) If the Grievance Committee finds that there is a prima facie case, it may refer the respective answer-scripts/ assignments, to an expert outside the Institution, for which the student shall have to pay the prescribed fee. The result of such an evaluation shall be final and binding.
- (v) The decision of the Grievance Committee shall be communicated to the student within one month of his/her filing of the grievance.

**OC-30 – Relating to Award of 4 Year Bachelor of Science Nursing Degree of Goa University (approved from 19<sup>th</sup> April, 2006 and notified vide No. GU/II/3-3/Amend-Ord/2004/424 dated 3<sup>rd</sup> May, 2006).**

**OC-30.1 (effective from 19<sup>th</sup> April, 2006) Nomenclature of the Degree:** The Degree awarded by Goa University in Nursing shall be "Bachelor of Science in Nursing".

**OC-30.2 (Effective from 8<sup>th</sup> August, 2013)**

**Admission Requirements:** A candidate admitted for the Bachelor of Science Nursing Course:

- (a) Should be not less than 17 years of age.
- (b) Should have passed the Higher Secondary School Examination (10+2) or its equivalent, with Physics, Chemistry, Biology and English (P.C.B.E.), with a minimum of 45% of aggregate marks in these subjects.

**OC-30.3 (effective from 19<sup>th</sup> April, 2006) Duration of the Bachelor of Science Nursing Course:** The course shall be for four academic years including internship.

**OC-30.4 (effective from 19<sup>th</sup> April, 2006) Minimum Duration of the Academic Year:** The minimum duration of the academic year will be of at least 45 weeks including study leave and examinations.

**OC-30.5 (effective from academic year 2008-09 onwards)**

**Eligibility for Award of Degree:**

To be eligible for the award of the degree of the Bachelor of Science in Nursing a candidate shall have to

- (a) pass the four annual examinations i.e. 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, & 4<sup>th</sup> Year.
- (b) complete the assigned project work.
- (c) complete the required hours of laboratory, practical work and internship.

**OC-30.6 (effective from 19<sup>th</sup> April, 2006)**

**Attendance:** A candidate should have attended 80% of theory and practical in each subject to be eligible to appear for the examination. However, a candidate shall be required to make up the shortfall in attendance of practical work and internship to attain 100% attendance as required for the award of the degree within a period of one year from the date of the 4<sup>th</sup> year examination. The college shall certify that the candidate has successfully completed the practical work and internship and shall submit the same to the University.

**OC-30.7 (Effective from 8<sup>th</sup> August, 2013)**

**Standard of Passing:**



- (a) To pass an examination the candidate shall be required to:
  - (i) pass both theory and practical components separately.
  - (ii) obtain a minimum of 50% marks in the internal and in the external assessments separately, in each of the subjects.
- (b) Candidates securing less than 50% marks in the internal assessment of both theory and practical components separately, shall not be allowed to appear for the external examination in that subject. However, he/she shall be permitted to appear for the external examination in other subjects.
- (c) Candidates failing to secure 50% marks in the internal assessment of theory and/or practical component shall have to repeat the subject with a minimum of 80% attendance and shall re-appear for the scheduled tests and scheduled assignments in the specific subject.
- (d) Candidates shall be required to pass in all the subjects in order to be promoted to the next year.
- (e) The candidate shall not be eligible to claim exemption in the component he/she passes. Such marks shall be shown along with the remark 'N.E.' (Not Exempted) on the result sheet.

**OC-30.8 (effective from 19<sup>th</sup> April, 2006) Supplementary Examination:**

- (a) Supplementary examination shall be held within six weeks from the date of declaration of the annual examination results.
- (b) A candidate who wishes to appear at the supplementary examination shall have to appear in all the subjects that he/she had failed in.
- (c) A candidate shall not be allowed to reappear if he/she has passed in the subject.
- (d) Only one supplementary examination shall be held every year.
- (e) A candidate who wishes to appear in the supplementary examination may be admitted provisionally to the next year. However, he/she shall have to give an undertaking that if he/she fails to pass all the subjects at the supplementary examination, she/he shall reappear for the examination at the next annual examination and that she/he shall rejoin the course only after she/he passes in all the subjects.
- (f) A candidate shall have to pass the previous year examination before being admitted to the subsequent higher examination.

**OC-30-9 (effective from 19<sup>th</sup> April, 2006) DELETED**

**OC-30.10 (effective from 19<sup>th</sup> April, 2006) DELETED**

**OC-30.11 (effective from 19<sup>th</sup> April, 2006) Number of attempts:**

- (a) **(effective from 4<sup>th</sup> February, 2013)** Maximum number of attempts permitted to pass an examination is five including the first attempt.
- (b) - Deleted -

**OC-30.12 (effective from 19<sup>th</sup> April, 2006) Maximum duration for completing the course:**

- (a) The candidate must pass all the examinations within a period of eight years from the date of admission to the course.

(b) The candidate must pass the first year examination within a period of three years from date of admission to the course.

**OC-30.13 (effective from 4<sup>th</sup> February, 2013) Discontinuation: Candidate shall not be allowed to continue the course if:**

- (a) the candidate does not pass any examination in five attempts OR
- (b) the candidate does not pass the first year examination within a period of three years from the date of admission to the course OR
- (c) the candidate does not pass all the examinations within a period of eight years from the date of admission to the course.

**OC-30.14 (effective from 19<sup>th</sup> April, 2006) Obtaining a Class:**

(a) Class shall be awarded at the final year reexamination on the basis of the marks obtained at all the four annual examinations.

(b) For the award of the degree the performance of the student at all the four annual examinations shall be considered.

(c) Second Class: Those of the successful candidates who obtain 50% or more marks but less than 60% marks in the total of all the subjects of all the examinations having passed each examination in one attempt shall be considered to have passed the examination in the 'Second Class'.

(d) First Class: Those of the successful candidates who obtain 60% or more marks but less than 70% marks of the total of all the subjects of all the examinations having passed each examination at one attempt shall be considered to have passed the examination in the 'First Class'.

(e) Distinction: Those of the successful candidates who obtain 70% or more marks of the total of all the subjects of all the examinations having passed each examination in one attempt shall be considered to have passed the examination in the Distinction.

(g) Passes: A candidate who passes any of the examinations of the course in more than one attempt shall not be eligible for any class. The remark against his/her results shall be 'Passes'.

**OC-30.15 (effective from academic year 2008-09 onwards)  
Conduct of examination:**

(a) Paper Setting: There shall be one internal and one external examiner for the conduct of the final examination. The internal examiner shall be the convener and the external shall be the co-examiner.

(b) Each examiner shall set three sets of question papers.

(c) Evaluation: There shall be one internal and one external examiner for the evaluation of the final examination.

(d) **(Effective from 20<sup>th</sup> May, 2020)** Theory papers shall be evaluated by two examiners separately and simultaneously as a double evaluation procedure. The average score shall be considered as the final mark. There shall be no revaluation.

(e) Practical Examinations: The practical examination shall be conducted jointly by the internal and the external examiner.

(f) Examiner: An examiner should have a Master's degree in the concerned subject and adequate teaching experience. To be eligible as an examiner in the subject of Nursing Foundations faculty having Master's degree in any Nursing specialty shall be considered.

(g) The scheme of examination and the break up of marks shall be as per the schedule.

(h) Appointment of external examiner shall be from teachers/guest faculty who have not taught the subject in the concerned college.

**(effective from 19<sup>th</sup> April, 2006) B.Sc. Nursing Scheme of Examination**

**First Year**

Subject	Assessment			
	Hours	Internal	External	Total
<b>Theory</b>				
1. Anatomy & Physiology	3	25	75	100
2. Nutrition and Biochemistry	3	25	75	100
3. Nursing Foundations	3	25	75	100
4. Psychology	3	25	75	100
5. Microbiology	3	25	75	100
6. English	3	25	75	100
7. Introduction to Computer		25	75	100
<b>Practical and Viva Voce</b>				
1. Nursing Foundations		100	100	200
<b>Second Year</b>				
<b>Theory</b>				
8. Sociology	3	25	75	100
9. Medical-Surgical Nursing – I	3	25	75	100
10. Pharmacology, Pathology, Genetics	3	25	75	100
11. Community Health Nursing - I	3	25	75	100
12. Communication and Educational Technology	3	25	75	100
<b>Practical and viva voce</b>				
2. Medical-Surgical Nursing-I		100	100	200
<b>(Effective from 09/10/2017) Third Year</b>				
<b>Theory</b>				
13. Medical-Surgical Nursing - II	3	25	75	100
14. Child Health Nursing	3	25	75	100
15. Mental Health Nursing	3	25	75	100
16. Nursing Research & Statistics	3	25	75*	100
<b>Practical and viva voce</b>				
3. Medical-Surgical Nursing II		50	50	100
4. Child Health Nursing		50	50	100
5. Mental Health Nursing		50	50	100
<b>(Effective from 09/10/2017) Fourth Year</b>				
<b>Theory</b>				
17. Midwifery and Obstetrical Nursing	3	25	75	100
18. Community Health Nursing II	3	25	75	100
19. Management of Nursing Services and Education	3	25	75	100
20. Environmental Studies **				

<b>Practical and viva voce</b>				
6. Midwifery and Obstetrical Nursing		50	50	100
7. Community Health Nursing		50	50	100

**(Effective from 09/10/2017) Note:**

1. Anatomy and Physiology question paper will consist of Section I – anatomy of 37 marks and Section –II Physiology of 38 marks.
2. Nutrition and Biochemistry question paper will consist of Section I- Nutrition of 45 marks and Section II – Biochemistry of 30 marks.
3. Introduction to Computer theory and practical final examination will be conducted as college examination and the marks will be sent to the University for inclusion in the mark sheet.
4. Pharmacology, Pathology, Genetics question papers will consist of Section I – Pharmacology with 38 marks, Section – II Pathology with 25 marks and Section III – Genetics of 12 marks.
5. \* Nursing Research & Statistics question papers will consist of Section I – Nursing Research of 50 marks and Section II – Statistics of 25 marks.
6. \*\* Environmental Studies will be conducted as a college examination.
7. **(Effective from 20<sup>th</sup> May, 2020)** The final Grade for the Environmental Studies component shall be sent to the University for inclusion in the Mark sheet. Students shall get a minimum of 'P' Grade to 'Pass' this component.

Grade	Range of percentage scored
O (Outstanding)	85 – 100
A+ (Excellent)	75 – <85
A (Very Good)	65 – <75
B+ (Good)	55 – <65
B (Above Average)	50 – <55
C (Average)	45 – <50
P (Pass)	40 – <45
F (Fail)	0 – <40

**OC-31 (effective from 29<sup>th</sup> October 2002 ) Ordinance relating to the Courses of Study & Examination for the B.F.A. Degree Course, commencing from the Year 2002-2003**

**OC.31.1 (effective from 29<sup>th</sup> October 2002 )** To be eligible for admission to the First Year B.F.A. Course for the degree of Bachelor of Fine Arts in Painting / Applied Art, a candidate must have:

- (i) Passed the XII (H.S.S.C) examination conducted by the Goa Board of Secondary and Higher Secondary Education or an examination of any other University or Body recognized as an equivalent thereto.
- (ii) Passed the Entrance Exam conducted by the college concerned.

**OC.31.1.2 (effective from 29<sup>th</sup> October 2002 )** Candidates studying for the Degree of Bachelor of Fine Arts in Painting / Applied Art will have to undergo a training in prescribed courses of study extending over four academic years-one year basic study and three years of advanced study and will have to pass the following examinations.

First Year	College Exam	700 marks	Group I and Group II Group III (Not for Examination).
Second Year	University Exam.	700 marks	Group I and Group II (major and compulsory subjects). Group II (supplementary subjects) (Not for Examination).
Third Year	College Exam.	500 marks	Group I and Group II.
Fourth Year	University Exam	600 marks	Group I and Group II.

**OC.31.2 (effective from 29<sup>th</sup> October 2002 )**A candidate admitted to the above courses (i.e. B. F. A. Painting / Applied Art) will have to complete the courses within a period of eight academic years from the date of his/her admission to the first year course.

**OC.31.2.1 (effective from 29<sup>th</sup> October 2002 )**After successfully passing the First Year B.F.A. examination, a candidate will be eligible for admission to the Second Year B.F.A., at which time he will have to opt for his chosen stream i.e. either Painting or Applied Art.

**OC.31.2.2 (effective from 29<sup>th</sup> October 2002 )**The seat allotment in each stream of specialization in the Second Year B.F.A. will be limited to the number of seats available in that stream. The candidate will be admitted to either stream strictly on the basis of merit, on the total aggregate marks obtained in the First Year B.F.A. Examination.

**OC.31.2.3 (effective from 29<sup>th</sup> October 2002 )**After successfully passing the Second Year B.F.A. Examination, a student will be eligible for admission to the Third Year B.F.A. in his/her chosen stream (i.e. Painting/Applied Art) wherein he will opt for any one of the specialization subjects offered in the course.

An equal number of seats will be available in each subject of specialization in both Painting as well as Applied Art. Admission to any subject of specialization in either stream will be strictly on the basis of total aggregate marks obtained in Group II – Major and Group II – Compulsory subjects, at the Second Year B.F.A. Examination, put together.

**OC.31.2.4 (effective from 29<sup>th</sup> October 2002 )**After successfully passing the Third Year B.F.A. Examination, a student will be eligible for admission to the Fourth Year B.F.A. Degree Course.

**OC.31.2.5 (effective from 29<sup>th</sup> October 2002 )**A. T. K. T. – A student who has passed in all the subjects in Group II with an aggregate of 40% is eligible for A. T. K. T.

**OC.31.2.6 (effective from 29<sup>th</sup> October 2002 )**The candidate has to clear the A. T. K. T. Examination two attempts i.e. First attempt examination and two consecutive attempts.

**OC.31.2.7 (effective from 29<sup>th</sup> October 2002 )**The provision for the award of grace marks at the First, Second, Third and Fourth Year B.F.A. Examinations shall be as per the general ordinance No.OA-5.16.

**OC.31.2.8 (effective from 29<sup>th</sup> October 2002 )**There shall be no re-evaluation of the answer books at the First, Second, Third and Fourth Year B.F.A. Examination.

**OC.31.3 (effective from 29<sup>th</sup> October 2002 )Course Objective**

**OC.31.3.1 (effective from 29<sup>th</sup> October 2002 )**The syllabus for the B.F.A. Degree course in the discipline of Painting and Applied Art has been planned to provide a gradual entry into the complexities of visual art beginning with the fundamentals and leading to the creation and usage of visual language and communication.

**OC.31.3.2 (effective from 29<sup>th</sup> October 2002 )**The First Year B.F.A. is to be treated as an intensive introductory programme to make students recognise and employ the wide variety of mediums (pencil, water based, oil, synthetic colours, dry pastels, inks, etc.), tools (including the hands and the variety of brushes specifically related to each medium of colouration), and the skills required for optimum results, through experiencing and experimentation.

**OC.31.3.3 (effective from 29<sup>th</sup> October 2002 )**After successfully passing the First Year Examination, the candidate will be eligible for admission to the Second Year Advance Course. The second year B.F.A. is to be treated as the year of consolidation of all practical experiences gained through study and usage of mediums, tools and skills at the foundation level. Students learn to express through the study of nature, natural and man made objects, use of imagination and mental resources to create meaningful/subjective/suggestive compositions based on a variety of themes/subjects/ situations.

**OC.31.3.4 (effective from 29<sup>th</sup> October 2002 )**This is also the year of selective involvement in the two streams offered at the degree level, namely, Painting and Applied Art. Through a study of various subjects, the students practical aptitude towards a specific specialisation is observed, identified and chosen for further study at the Third and Final Year graduation level.

**OC.31.3.5 (effective from 29<sup>th</sup> October 2002 )**In the Third Year B.F.A., the student decides on his subject of specialization in the chosen stream. Having familiarized himself with Visual Art through various subjects in the Second Year and having acquired the necessary skills, he is now best able to understand his own practical aptitude and preferences enough to select his subject of specialization in whichever the stream he has chosen.

Besides the specialization subject, the student will also have to continue with the mainstream subject of the course chosen – which is, Design (I & II) in the Applied Art Stream and Painting (I & II) in the Painting Stream. This combination of a primary subject and a specialization permits the student to focus on a specific medium of expression of his choice and at the same time allows him to explore the possibilities in his chosen field.

**OC.31.3.6 (effective from 29<sup>th</sup> October 2002 )**The Fourth Year B.F.A. is to be treated as an extension of the Third Year. The student undertakes intensive study in his chosen specialization and is allowed to freely express his individuality while doing so. It is also a year in which the student is exposed to the contemporary field/industry through field projects and interactive assignments. This not only gives him the necessary awareness and experience, it also instills in him the confidence to face the challenges in the field.

**OC.31.4. (effective from 29<sup>th</sup> October 2002 )NATURE OF COURSE**

**OC.31.4.1 (effective from 29<sup>th</sup> October 2002 )Medium of instruction / teaching: English.**

**Examination Pattern:**

For I year B. F. A. the examination pattern is divided into THREE Groups

- Group I-----(Theory)
- Group II-----(Practical)
- Group III----- (Not for Examination)

For II year B. F. A. the examination pattern is divided into TWO Groups

- Group I-----(Theory)
- Group II-----(Practical)

For III year B. F. A. the examination pattern is divided into TWO Groups

- Group I-----(Theory)
- Group II-----(Practical)

For IV year B. F. A. the examination pattern is divided into TWO Groups

- Group I-----(Theory)
- Group II-----(Practical)

### **FIRST YEAR EXAMINATION OF THE B. F. A. COURSE**

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**OC.31.5 (effective from 29<sup>th</sup> October 2002 )**The FIRST YEAR Examination will be conducted by the College, recognised by the Goa University and no candidate will be admitted to the examination unless he produces a certificate from the Head of the Institute:

1. Of having attended, in each term, at least three fourth of the total number of lectures in theory and at least three fourth of the total periods devoted to studio practice.
2. Of having completed and submitted the minimum number of units in theory and practicals as prescribed in the syllabus and of having secured a minimum of 35% in internal assessment in each subject, both in Theory (Group I) as well as in Practical (Group II).
3. Of having obtained a minimum of 35% marks in internal assessment in each subject under Group III.

#### **First Year Examination**

**OC.31.6 (effective from 29<sup>th</sup> October 2002 )**Candidates will be examined in the subjects as indicated in the following table.

<b>Subject</b>	<b>Internal Assessment marks</b>	<b>Annual Exam marks</b>	<b>Total marks</b>	<b>Duration of Exam. Paper</b>
<b>Group I (Theory)</b>				
1. Fundamentals of Art and Visual Communication	40	60	100	3 hours
2. History of Art	40	60	100	3 hours
<b>Group II (Practicals)</b>				
1. Drawing from Nature	40	60	100	5 hours
2. Drawing from Objects	40	60	100	5 hours
3. Drawing from Human	40	60	100	5 hours

Figure				
4. Design and Colour	40	60	100	10 hours
5. Design 3 D	40	60	100	10 hours
Grand Total of marks for the examination				700

**OC.31.6.1 (effective from 29<sup>th</sup> October 2002 )** The Board of examiners may go through the class work of the students in any particular case or cases whenever necessary during the assessment of the practical examination .

The following table indicates subjects and the number of assignments to be completed in the specified number of hours during the first academic year.

	<b>Subject</b>	<b>Hours</b>	<b>Assignments</b>
<b>Group I: (Theory)</b>			
1.	Fundamentals of Art and Visual Communication	60	06 Tutorials
2.	History of Art	120	10 Tutorials
<b>Group II: (Practicals)</b>			
1.	Drawing from Nature	100	10
2.	Drawing from Objects	070	07
3.	Drawing from Human Figure	090	08
4.	i) Design 2D	130	07
	ii) Colour	040	03
5.	Design 3D	090	06
<b>Group III: (Not for Examination)</b>			
1.	Drawing from Memory and Outdoor Sketching.	060	10
2.	Print Making	050	05
3.	Geometry and Perspective	050	04
4.	Calligraphy	050	04
5.	Library	050	-
	Total	960	80

Following are the details of the syllabus and the nature of studio practical in various subjects of the Examination:

**Group I: (Theory)**

**1. Fundamentals of Art and Visual Communication.**

Perception, learning to see and observe form and matter. Design in Nature. The sensibilities of the human being and his desire for expression. How an artist sees and expresses. Principles of Design and their application.

**2. History of Art.**

Development of Human expression:

- a) Prehistoric Period; rituals, superstitions, mysticism, beginning of tribal art.
- b) Religion and religious art.



- c) Art of the important civilizations of the world.
- d) Important landmarks in the medieval and post medieval period. (India and Europe)
- e) Important landmarks of Art from 13<sup>th</sup> to 19<sup>th</sup> Century in India and Europe.
- f) Brief introduction to 20<sup>th</sup> Century Art.

## **Group II: (Practicals)**

### **1. Drawing from Nature**

Study of forms from nature; plants, trees, birds and animals in line and tone and texture, in different medium like pencil, pen & ink, and various colour mediums. The study of light and shade (Chiarascuro) on these forms. Observations and study of the anatomical structure of various birds and animals.

### **2. Drawing from objects**

Understanding of mass; study of solid forms, formal (geometrically perfect) and informal (free), in line, tone and texture. Study of proportions. Drawing from man made objects in the environment such as machine made products, furniture, plaster casts, drapery and costume, isolated or in groups, under natural and arranged light in various rendering mediums, in monochrome and in colour.

### **3. Drawing from Human Figure**

Study of the Human form; full figure drawing in line and tone, with due understanding of mass and structural relations. Study of light and shade on the human figure and the immediate background.

Understanding and studying the human form as a specific and highly evolved form of nature.

### **4. Design and Colour**

Study of Point, Line, Planes, Shapes and Patterns. Organisation of Space and understanding of Form in relation to the Space. Exercises to understand basic shapes and textures. Application of the Fundamentals of Design. Designs based on studies from nature and objects.

Theory of Light, the knowledge of Primary, Secondary, Tertiary, Complimentary colours and their relationship. The Greyscale, High Key, Low Key, Colour Contrast, Monochromes and Polychromes. Colour Schemes to express different moods and feelings.

### **5. Design 3 D**

Study of basic 3 dimensional shapes and forms such as Cubes, Cones, Spheres and Cylinders, constructed or modelled in different types of material such as paper, card, soft clay, soap, plaster, plasticine, wire, etc. through the process of adding or subtracting. Construction of basic shapes in round and relief, creating of textures through experiments in modeling, blocking out, chopping, cutting and scraping.

## **Group III (not for examination)**

### **1. Drawing from Memory and Outdoor Sketching**

Developing a sense of observation and a capacity to retain, recognize and recall images for the purpose of producing a picture. Rapid Sketching and Drawing. Indoor and Outdoor Sketching. Use of various mediums for desired effects and enhancing of image. Maintaining a sketch book.

### **2. Print Making**

Print Making through impact and impression on surfaces. Observation of intrinsic texture of various surfaces and the texture of natural and man made things and the Print Making possibilities. Exercises in monoprint, rubbings and relief prints.

### 3. **Geometry and Perspective**

Principles of Solid Geometry, Parallel and angular perspective. Concept of the third dimension. Freehand exercises to develop a sense of Visual perspective.

### 4. **Calligraphy**

Study of basic letterform, Roman and Devnagiri. Application of basic discipline for beautiful handwriting. Brush or Pen Script based on Calligraphic exercises. Introduction to Calligraphic Tools.

## **Standard for passing the Examination**

**OC.31.7 (effective from 29<sup>th</sup> October 2002 )**To pass the examination, a candidate must obtain:

- (a) At least 35% of the full marks in (1) Internal Assessment (Term Work) and (2) the theory papers, separately, prescribed for each subject in Group I (Theory) and a minimum of 40% marks of the aggregate of group I (Theory)
- (b) At least 35% of the full marks in (1) Internal Assessment (Term Work) and (2) the practicals, separately, prescribed for each subject in Group II (Practicals) and a minimum of 40% marks of the aggregate of Group II (Practicals)

**OC.31.7.1 (effective from 29<sup>th</sup> October 2002 )**Those of the successful candidates who obtain less than 50% marks in Group I & II taken together at one and the same sitting shall be placed in Pass Class.

**OC.31.7.2 (effective from 29<sup>th</sup> October 2002 )**Those of the successful candidates who obtain 50% and above of the total marks in Group I and II taken together, at one and the same sitting, shall be placed in the Second Class.

**OC.31.7.3 (effective from 29<sup>th</sup> October 2002 )**Those of the successful candidates who obtain 60% and above of the total marks in Group I and II taken together, at one and the same sitting, shall be placed in the First Class.

**OC.31.7.4 (effective from 29<sup>th</sup> October 2002 )**Those of the successful candidates who obtain 70% and above of the total marks in Group I and II taken together, at one and the same sitting, shall be placed in the Distinction.

**OC.31.7.5 (effective from 29<sup>th</sup> October 2002 )**The successful candidate who is a repeaters shall be declared as 'Passes'.

**OC.31.8 (effective from 29<sup>th</sup> October 2002 )**A candidate who has passed in any one or more subject/s in Group I, securing a minimum 40% marks in each head, may at his option be exempted from appearing in that subjects at a subsequent examination and will be declared to have passed that whole examination when he has passed in the remaining subjects of the examination in accordance with the Rules.

**OC.31.8.1 (effective from 29<sup>th</sup> October 2002 )**A candidate who has passed in all the subject of Group II and who has obtained 40% of the total number of marks of the aggregate in Group II may, at his option, be exempted from appearing in that Group at a subsequent examination, and will be declared to have passed that whole examination when he has passed in the remaining subjects of the examination in accordance with the Rules.

**OC.31.8.2 (effective from 29<sup>th</sup> October 2002 )** Candidates passing the examination in this manner will not be eligible for a class or prize or scholarship to be awarded at the examination.

### **SECOND YEAR EXAMINATION OF THE B. F. A. COURSE**

**OC.31.9 (effective from 29<sup>th</sup> October 2002 )** The SECOND YEAR Examination will be conducted by the Goa University and no candidate will be admitted to this examination unless (a) he has kept two terms at a College of Art affiliated to the University, subsequent to his passing the First Year Examination leading to the degree of Bachelor of Fine Art and (b) unless he produces, from the Head of the Institute, a certificate:

1. Of having attended, in each term, at least three fourth of the total number of lectures in theory and at least three fourth of the total periods devoted to studio practice.
2. Of having completed and submitted the minimum number of units in theory and practicals as prescribed in the syllabus and of having secured a minimum of 35% marks, in internal assessment in each subject, both in Theory (Group I) as well as Practical (Group II – major and compulsory subjects).
3. Of having obtained a minimum of 35% marks in the internal assessment in each subject under Group II – supplementary subjects.

**OC.31.10 (effective from 29<sup>th</sup> October 2002 )** A CANDIDATE WHO HAS PASSED IN ALL THE SUBJECTS AT THE FIRST YEAR EXAMINATION LEADING TO THE DEGREE OF BACHELOR OF FINE ART EXCEPT IN THE THEORY SUBJECT/S UNDER GROUP I WILL BE ALLOWED TO KEEP TERMS AND APPEAR FOR THE SECOND YEAR EXAMINATION AFTER ATTENDING BOTH THE ACADEMIC TERMS IN THE SECOND YEAR B.F.A. CLASS. HOWEVER, HE WILL NOT BE DECLARED TO HAVE PASSED THE SECOND YEAR EXAMINATION FOR THE DEGREE OF BACHELOR OF FINE ART UNLESS HE HAS PASSED IN THE REMAINING SUBJECT/S OF GROUP I AT FIRST YEAR EXAMINATION.

**OC.31.10.1 (effective from 29<sup>th</sup> October 2002 )** For the purpose of deciding whether a candidate has passed the examination in the manner aforesaid, the marks obtained by him in Group II at the First Year Examination shall be carried over.

### **(EFFECTIVE FROM 9<sup>TH</sup> MAY, 2008)**

<b>OC-31.11</b>	<b>Second Year Examination</b>				
	Candidates will be examined in the subjects as indicated in the following table.				
	<b>Subject</b>	<b>Internal Assessment Marks</b>	<b>Annual Exam marks</b>	<b>Total marks</b>	<b>Duration of Exam. Papers.</b>
	<b>Group I(Theory)</b>				
	1. History of Art	40	60	100	3 hours
	2. Visual Communication	40	60	100	3 hours
	<b>Group II (Practicals)</b>				
	<b>A</b>				
	i) Graphic Design	40	60	100	10 hours
	ii) Lettering and Typography	40	60	100	10 hours
	iii) Photography	40	60	100	10 hours
	iv) Computer Graphics	40	60	100	10 hours
	v) Printing Techniques	40	60	100	10 hours
	<b>B</b>				
i) Pictorial Design	40	60	100	10 hours	
ii) Design 3D	40	60	100	10 hours	

	iii) Head Study	40	60	100	10 hours
	iv) Still Life	40	60	100	10 hours
	v) Print Making	40	60	100	<b>15 hours</b>
	<b>C</b>				
	i) Drawing	40	60	100	10 hours
	Grand Total of marks for the examination			800*	

**OC 31.11.1 (effective from 29<sup>th</sup> October 2002 )** The Board of examiners may go through the class work of the students in any particular case or cases whenever necessary during the assessment of the practical examination

\* The Grand Total of marks for the examination is the sum total of Group I (200 marks), Group II – A / B (500 marks) + C(100 marks).

The following table indicates subjects and the number of assignment to be completed in the specified number of hours during the second academic year.

<b>Subject</b>	<b>Hours</b>	<b>Assignments</b>
<b>Group I (Theory)</b>		
1. History of Art	090	06 Tutorials
2. Visual Communication	090	06 Tutorials
<b>Group II (Practicals)</b>		
<b>A</b>		
i) Graphic Design	090	09
ii) Lettering and Typography	090	09
iii) Photography	060	06
iv) Computer Graphics	060	06
v) Printing Techniques	060	06
<b>B</b>		
i) Pictorial Design	090	09
ii) Design 3D	090	09
iii) Head Study	060	06
iv) Still Life	060	06
v) Print Making	060	06
<b>C</b>		
i) Drawing	250	12
Library	050	--
Total	960	60

**OC.31.12 (effective from 29<sup>th</sup> October 2002 )** A student will opt for any one of the subject groups (A) and (B) under Group II as his major group (which will be

referred to as Group II – major) and the other will subsequently be his supplementary group (which will be referred to as **Group II – supplementary**). **Group II (C) is compulsory.**

**OC.31.13 (effective from 29<sup>th</sup> October 2002 )**A student will have to complete the total number of assignments prescribed in the syllabus in each of the subjects under **Group II – major** and in the subject of Drawing, under **Group II – C**, which is compulsory, and one third of the assignments in each of the subjects under **Group II – supplementary**.

**Following are the details of the syllabus and the nature of studio practicals in various subjects of the Examination.**

### **Group I (Theory)**

#### **1. History of Art**

Indian Art: a) Gupta and Post Gupta Period.  
b) Tradition of Mural Painting in India.  
c) The Art of Miniature Painting in India.

Western Art: Renaissance and Post Renaissance Period  
a) Baroque b) Roccoco c) Mannerism

#### **2. Visual Communication**

A) VISUAL COMMUNICATION AS SELF EXPRESSION (IMPLICIT\*)

B) VISUAL COMMUNICATION FOR MEDIA AND THE MASSES (EXPLICIT\*)

\*ALL THE FORMS OF VISUAL COMMUNICATION DO NOT HAVE THE SAME SOCIAL MANDATE. THERE IS VISUAL COMMUNICATION WHICH APPEALS TO FINER INDIVIDUAL SENSIBILITIES (IMPLICIT), AND THERE IS VISUAL COMMUNICATION WHICH IS DESIGNED FOR THE MASSES, WHICH HAS TO BE MORE EXPLICIT AND INTENTIONAL.

### **Group II: (Practicals)**

#### **A**

##### **i) Graphic Design**

Understanding the relationship between space, line and form and how they communicate visually.

The application of design principles in design for mass communication.

A study of the elements (headline, text, picture and background) used in various mass media and how they can be used to visually express and support the communication.

Simplification of form and its expressive qualities.

Exercises in layout; The Grid and its use in Graphic Design.

Preparing layouts for various media such as Newspaper, Magazine, Poster and other Miscellaneous Print Media.

##### **ii) Lettering and Typography**

understanding the functional aspects of type and its relationship to design.

A study of basic letter forms and their variations.

Identification of type faces and selecting type for graphic communication.

Typographic layout and the use of the Grid. Legibility, readability and idea association.

Adaptation and use of type for various communication media.

##### **iii) Photography**

A brief history of photography.

Equipment – parts of a camera, classification of cameras and their functions.

Types of film and paper. Basic darkroom equipment and requirements.

Types of chemicals, preparations and uses. Print processing.  
Simple exposing in natural light. Developing a film. Enlargement of prints.

**iii) Computer Graphics**

Understanding Computer Basics.

The computer as a design tool.

Design application. (Exercises in creating simple graphics for media).

Knowledge of design software.

**iv) Printing Techniques**

Letterpress Printing\*: History and development of printing.

Technical aspects of Type and its parts.

The Point System, classification and specification of Type.

Page layout.

Handling of material and equipment in a printing press.

Type setting and Printing.

Offset Printing\*: Introduction to Offset Printing

Introduction to Desktop Publishing and Book Design.

Technical aspects of the multicolour printing process.

Knowledge of paper and printing inks.

Screen Printing: History and development of Screen Printing.

Application of Screen Printing.

Equipment and accessories.

Different stenciling methods.

Types of inks and reducers.

Process of making an artwork and positives.

Multicolour Printing and cost estimation.

\* Maximum knowledge may be imparted through group demonstrations and field trips.

**B**

**i) Pictorial Design**

Organisation of Pictorial space; Division of two dimensional surface with line, form, mass and tone. Incorporation of colour scheme and texture and understanding of

the relationship between form and space. Developing pictorial qualities in 2D Design.

Compositions based on representational as well as non representational forms.

Exploration of the various schools of traditional Indian painting. Gradual development of pictorial design to cover emotive content.

**STUDY OF THE DECORATIVE ELEMENTS WITH REFERENCE TO RELIEF SURFACES AND A MULTI MEDIUM APPROACH.**

**ii) Design 3D**

Studies in modeling, carving, construction and collage.

Exploration of relief surfaces and the possibilities for collage through the incorporation of external materials and objects.

Study of complex objects and natural forms as a source of design.

Study and use of diverse materials to explore new design relationships.

Experiments in Plasticine, Terracotta, Plaster of Paris, Cement, etc.

Three Dimensional experiments in design for table top and window display.

**iii) Head Study**

Rendering the human head in colour. Study of structural planes and masses with the help of shade and light. Study of the head in perspective. Relationship of the head with neck and shoulder. Study of light on the human head.

Understanding of tones and their relationship in the context of figurative studies.

Composing the head with the background within a pictorial space.

Rendering the head as a unified structure. Well composed studies in Oil, Water Colours and Pastels.

Exploring various techniques in colour application. Studies in monochrome with a progressive palette towards Head Study in full colour.

#### **iv) Still Life**

Study of configuration of ordinary and exotic man-made objects in a specific, arranged environment.

Observation and rendering of varied shapes, body colours, sheen and related textures.

Rendering the play of light and shade in the context of the group of objects.

Full fledged picture making on the basis of observed and focused reality with the formal adjustment necessary for the painting.

#### **v) Print Making**

Study of advanced methods of manual and manipulative Print Making. Practical studies in Lino Cut, Wood Cut, Etching (Dry Point) and Lithography.

### **C**

#### **i) Drawing**

In depth study of the human figure with special attention to structure and anatomy.

Basic study of bones, joints and muscles – the way they function and influence posture and action. Study of the human head and its construction from skull.

Understanding the dimensions, movement and rhythm of the body.

Studies of figures in action and in groups.

Studies in line, tone (charcoal) and colour with reference to the conditions of light and shade and the immediate surroundings.

Awareness and formation of style leading to individuality and technical competence.

Maintaining a sketch book of studies from life, rapid sketching and drawings from memory to be further used as a source book.

### **Standard for passing the Examination**

**OC.31.14 (effective from 29<sup>th</sup> October 2002 )** To pass the examination, a candidate must obtain:

- (a) At least 35% of the full marks in (1) Internal Assessment (Term Work) and (2) the theory papers, separately, prescribed for each subject in Group I (Theory) and a minimum of 40% marks of the aggregate of group I (Theory)
- (b) At least 35% of the full marks in (1) Internal Assessment (Term Work) and (2) the practicals, separately, prescribed for each subject in Group II (Practicals) and a minimum of 40% marks of the aggregate of Group II (Practicals)

Those of the successful candidates who obtain less than 50% marks in Group I & II taken together at one and the same sitting shall be placed in Pass Class.

Those of the successful candidates who obtain 50% and above of the total marks I Group I and II taken together, at one and the same sitting, shall be placed in the Second Class.

Those of the successful candidates who obtain 60% and above of the total marks in Group I and II taken together, at one and the same sitting, shall be placed in the First Class.

Those of the successful candidates who obtain 70% and above of the total marks in Group I and II taken together, at one and the same sitting, shall be placed in Distinction.

The successful candidate who is a repeater shall be declared as 'Passes'.

**OC.31.15 (effective from 29<sup>th</sup> October 2002 )**A candidate who has passed in any one or more subject/s in Group I securing a minimum of 40% marks in each head, may at his option be exempted from appearing in the subject/s at a subsequent examination and will be declared to have passed that whole examination when he has passed in the remaining subjects of the examination in accordance with the Rules.

**OC.31.15.1 (effective from 29<sup>th</sup> October 2002 )**A candidate who has passed in all the subjects of Group II and who has obtained 40% of the total number of marks of the aggregate in Group II may, at his option, be exempted from appearing in that Group at a subsequent examination, and will be declared to have passed that whole examination when he has passed in the remaining subjects of the examination in accordance with the Rules.

**OC.31.15.2 (effective from 29<sup>th</sup> October 2002 )**Candidates passing the examination in this manner will not be eligible for a class or prize or scholarship to be awarded at the examination.

### **THIRD YEAR EXAMINATION OF THE B. F. A. (APPLIED ART) COURSE**

**OC.31.16 (effective from 29<sup>th</sup> October 2002 )**The THIRD YEAR Examination will be conducted by the college, recognized by Goa University and no candidate will be admitted to this examination unless (a) he has kept two terms at a College of Art affiliated to the University, subsequent to his passing the Second Year Examination leading to the degree of Bachelor of Fine Art and (b) unless he produces, from the Head of the Institute, a certificate:

1. Of having attended, in each term, at least three fourth of the total number of lectures in theory and at least three fourth of the total periods devoted to studio practice.
2. Of having completed and submitted the minimum number of units in theory and practicals as prescribed in the syllabus and of having secured a minimum of 35% marks, in internal assessment in each subject, both in Theory (Group I) as well as Practical (Group II).

**OC.31.17 (effective from 29<sup>th</sup> October 2002 )**A Candidate who has passed in all the subjects at the Second Year Examination leading to the degree of Bachelor of Fine Art except in the theory subject/s under Group I will be allowed to keep terms and appear for the Third Year examination after attending both the academic terms in the Second Year B.F.A. Class. However, he will not be declared to have passed the Third Year Examination for the Degree of Bachelor of fine Art unless he has passed in the remaining subject/s of Group I at the Second Year Examination.  
For the purpose of deciding whether a candidate has passed the examination in the manner aforesaid, the marks obtained by him in Group II (Major & Compulsory) at the Second Year Examination shall be carried over.

### **(EFFECTIVE FROM 9<sup>TH</sup> MAY, 2008)**

<b>OC-31.18</b>	<b>Third Year B. F. A. (Applied Art) Examination</b>				
	Candidates will be examined in the subjects as indicated in the following table.				
	<b>Subject</b>	<b>Internal Assessment Marks</b>	<b>Annual Exam marks</b>	<b>Total marks</b>	<b>Duration of Exam. Papers.</b>



<b>Group I (Theory)</b>				
1. Advertising	40	60	100	3 hours
2. Visual Communication	40	60	100	3 hours
<b>Group II (Practicals)</b>				
<b>A</b>				
1) Design I	40	60	100	<b>20 hours</b>
2) Design II	40	60	100	<b>20 hours</b>
3) Subject of Specialisation Any one of the following options: i) Illustration ii) Photography iii) Audio-Visual iv) Computer Graphics v) Stage Craft	40	60	100	<b>20 hours</b>
Grand Total of marks for the examination			500*	

**The Board of examiners may go through the class work of the students in any particular case or cases whenever necessary during the assessment of the practical examination.**

The following table indicates subjects and the number of assignments to be completed in the specified number of hours during the second academic year.

Subject	Hours	Assignments
<b>Group I (Theory)</b>		
1. Advertising	090	06 Tutorial
2. Visual Communication	090	06 Tutorial
<b>Group II (Practicals)</b>		
1) Design I	180	05
2) Design II	180	04
3) Subject of Specialisation	360	09
Library	60	--
<b>Total</b>	<b>960</b>	<b>30</b>

### **Standard for passing the Examination**

**OC.31.19 (effective from 29<sup>th</sup> October 2002 )** To pass the examination, a candidate must obtain:

- At least 35% of the full marks in (1) Internal Assessment (Term Work) and (2) the theory papers, separately, prescribed for each subject in Group I (Theory) and a minimum 40% marks of the aggregate of Group II (Theory)
- At least 35% of the full marks in (1) Internal Assessment (Term Work) and (2) the practicals, separately, prescribed for each subject in Group II (Practicals) and a minimum of 40% marks of the aggregate of Group II (Practicals)

Those of the successful candidates who obtain less than 50% marks in Group I & Group II taken together at one and the same sitting shall be placed in Pass Class.

Those of the successful candidates who obtain 50% and above of the total marks in Group I & Group II taken together at one and the same sitting shall be placed in Second Class.

Those of the successful candidates who obtain 60% and above of the total marks in Group I & Group II taken together at one and the same sitting shall be placed in First Class.

Those of the successful candidates who obtain 70% and above of the total marks in Group I & Group II taken together at one and the same sitting shall be placed in Distinction.

The successful candidate who is a repeater shall be declared 'Passes'.

**OC.31.20 (effective from 29<sup>th</sup> October 2002 )**A candidate who has passed in any one or more subject/s in Group I securing a minimum of 40% marks in each head, may at his option be exempted from appearing in the subject/s at a subsequent examination and will be declared to have passed that whole examination when he has passed in the remaining subjects of the examination in accordance with the Rules.

**OC.31.20.1 (effective from 29<sup>th</sup> October 2002 )**A candidate who has passed in all the subjects of Group II and who has obtained 40% of the total number of marks of the aggregate in Group II may, at his option, be exempted from appearing in that Group at a subsequent examination, and will be declared to have passed that whole examination when he has passed in the remaining subjects of the examination in accordance with the Rules.

**OC.31.20.2 (effective from 29<sup>th</sup> October 2002 )**Candidates passing the examination in this manner will not be eligible for a class or prize or scholarship to be awarded at the examination.

#### **FOURTH YEAR EXAMINATION OF THE B. F. A. (APPLIED ART) COURSE**

**OC.31.21 (effective from 29<sup>th</sup> October 2002 )**The FOURTH YEAR Examination will be conducted by the college, recognized by Goa University and no candidate will be admitted to this examination unless (a) he has kept two terms at a College of Art affiliated to the University, subsequent to his passing the Second Year Examination leading to the degree of Bachelor of Fine Art and (b) unless he produces, from the Head of the Institute, a certificate:

1. Of having attended, in each term, at least three fourth of the total number of lectures in theory and at least three fourth of the total periods devoted to studio practice.
2. Of having completed and submitted the minimum number of units in theory and practicals as prescribed in the syllabus and of having secured a minimum of 35% marks, in internal assessment in each subject, both in Theory (Group I) as well as Practical (Group II).

**OC.31.22 (effective from 29<sup>th</sup> October 2002 )**A Candidate who has passed in all the subjects at the Third Year Examination leading to the degree of Bachelor of Fine Art except in the theory subject/s under Group I will be allowed to keep terms and appear for the Third Year examination after attending both the academic terms in the Second Year B.F.A. Class. However, he will not be declared to have passed

the Fourth Year Examination for the Degree of Bachelor of fine Art unless he has passed in the remaining subject/s of Group I at the Third Year Examination.

For the purpose of deciding whether a candidate has passed the examination in the manner aforesaid, the marks obtained by him in Group II at the Third Year Examination shall be carried over.

**(EFFECTIVE FROM 9<sup>TH</sup> MAY, 2008)**

**Fourth Year B. F. A. (Applied Art) Examination**

**OC-31.23** Candidates will be examined in the subjects as indicated in the following table.

Subject	Internal Assessment Marks	Annual Exam marks	Total marks	Duration of Exam. Papers.
<b>Group I (Theory)</b>				
1. Advertising	40	60	100	3 hours
2. Visual Communication	40	60	100	3 hours
<b>Group II (Practicals)</b>				
<b>A</b>				
1) Design I	40	60	100	<b>25 hours</b>
2) Design II	40	60	100	<b>25 hours</b>
3) Subject of Specialisation Any one of the following options: i) Illustration ii) Photography iii) Audio-Visual iv) Computer Graphics v) Stage Craft	40	60	100	<b>25 hours</b>
4) Dissertation & Viva-Voce	40	60	100	
Grand Total of marks for the examination			600*	

The Board of examiners may go through the class work of the students in any particular case or cases whenever necessary during the assessment of the practical examination.

The following table indicates subjects and the number of assignments to be completed in the specified number of hours during the second academic year.

Subject	Hours	Assignments
<b>Group I (Theory)</b>		
1. Advertising	70	06 Tutorial
2. Visual Communication	70	06 Tutorial
<b>Group II (Practicals)</b>		
1) Design I	160	05
2) Design II	160	04
3) Subject of Specialisation	360	09
4) Dissertation & Vica-Voce Library	80 60	-- --
<b>Total</b>		<b>960</b>
		<b>30</b>

## Standard for passing the Examination

**OC.31.24 (effective from 29<sup>th</sup> October 2002 )** To pass the examination, a candidate must obtain:

- a) At least 35% of the full marks in (1) Internal Assessment (Term Work) and (2) the theory papers, separately, prescribed for each subject in Group I (Theory) and a minimum of 40% marks of the aggregate of Group II (Theory)
- b) At least 35% of the full marks in (1) Internal Assessment (Term Work) and (2) the practicals, separately, prescribed for each subject in Group II (Practicals) and a minimum of 40% marks of the aggregate of Group II (Practicals)

Those of the successful candidates who obtain less than 50% marks in Group I & Group II taken together at one and the same sitting shall be placed in Pass Class.

Those of the successful candidates who obtain 50% and above of the total marks in Group I & Group II taken together at one and the same sitting shall be placed in Second Class.

Those of the successful candidates who obtain 60% and above of the total marks in Group I & Group II taken together at one and the same sitting shall be placed in First Class.

Those of the successful candidates who obtain 70% and above of the total marks in Group I & Group II taken together at one and the same sitting shall be placed in Distinction.

The successful candidate who is a repeater shall be declared 'Passes'.

**OC.31.25 (effective from 29<sup>th</sup> October 2002 )** A candidate who has passed in any one or more subject/s in Group I securing a minimum of 40% marks in each head, may at his option be exempted from appearing in the subject/s at a subsequent examination and will be declared to have passed that whole examination when he has passed in the remaining subjects of the examination in accordance with the Rules.

**OC.31.25.1 (effective from 29<sup>th</sup> October 2002 )** A candidate who has passed in all the subjects of Group II and who has obtained 40% of the total number of marks of the aggregate in Group II may, at his option, be exempted from appearing in that Group at a subsequent examination, and will be declared to have passed that whole examination when he has passed in the remaining subjects of the examination in accordance with the Rules.

**OC.31.25.2 (effective from 29<sup>th</sup> October 2002 )** Candidates passing the examination in this manner will not be eligible for a class or prize or scholarship to be awarded at the examination.

## THIRD YEAR EXAMINATION OF THE B. F. A. (PAINTING) COURSE

**OC.31.26 (effective from 29<sup>th</sup> October 2002 )** The THIRD YEAR Examination will be conducted by the college, recognized by Goa University and no candidate will be admitted to this examination unless (a) he has kept two terms at a College of Art affiliated to the University, subsequent to his passing the Second Year Examination

leading to the degree of Bachelor of Fine Art and (b) unless he produces, from the Head of the Institute, a certificate:

3. Of having attended, in each term, at least three fourth of the total number of lectures in theory and at least three fourth of the total periods devoted to studio practice.

4. Of having completed and submitted the minimum number of units in theory and practicals as prescribed in the syllabus and of having secured a minimum of 35% marks, in internal assessment in each subject, both in Theory (Group I) as well as Practical (Group II).

**OC.31.27 (effective from 29<sup>th</sup> October 2002 )** A Candidate who has passed in all the subjects at the Second Year Examination leading to the degree of Bachelor of Fine Art except in the theory subject/s under Group I will be allowed to keep terms and appear for the Third Year examination after attending both the academic terms in the Second Year B.F.A. Class. However, he will not be declared to have passed the Third Year Examination for the Degree of Bachelor of fine Art unless he has passed in the remaining subject/s of Group I at the Second Year Examination. For the purpose of deciding whether a candidate has passed the examination in the manner aforesaid, the marks obtained by him in Group II (Major & Compulsory) at the Second Year Examination shall be carried over.

**(EFFECTIVE FROM 9<sup>TH</sup> MAY, 2008)**

**Third Year B. F. A. (Painting) Examination**

**OC-31.28** Candidates will be examined in the subjects as indicated in the following table.

<b>Subject</b>	<b>Internal Assessment Marks</b>	<b>Annual Exam marks</b>	<b>Total marks</b>	<b>Duration of Exam. Papers.</b>
<b>Group I (Theory)</b>				
1. History of Art	40	60	100	3 hours
2. Aesthetics	40	60	100	3 hours
<b>Group II (Practicals)</b>				
1) Painting I	40	60	100	<b>15 hours</b>
2) Painting II	40	60	100	<b>15 hours</b>
3) Subject of Specialisation Any one of the following options: i) Portraiture ii) Mural iii) Print Making iv) Culture v) Sculpture	40	60	100	<b>20 hours</b>
Grand Total of marks for the examination			500*	

The Board of examiners may go through the class work of the students in any particular case or cases whenever necessary during the assessment of the practical examination.

The following table indicates subjects and the number of assignments to be completed in the specified number of hours during the second academic year.

<b>Subject</b>	<b>Hours</b>	<b>Assignments</b>
<b>Group I (Theory)</b>		
1. History of Art	120	08 Tutorial

2.	Aesthetics	090	08 Tutorial
	<b>Group II (Practicals)</b>		
1)	Painting I	170	08
2)	Painting II	170	06
3)	Subject of Specialisation	350	08
	Library	60	--
<b>Total</b>		<b>960</b>	<b>38</b>

### Standard for passing the Examination

**OC.31.29 (effective from 29<sup>th</sup> October 2002 )** To pass the examination, a candidate must obtain:

- e) At least 35% of the full marks in (1) Internal Assessment (Term Work) and (2) the theory papers, separately, prescribed for each subject in Group I (Theory) and a minimum of 40% marks of the aggregate of Group II (Theory)
- f) At least 35% of the full marks in (1) Internal Assessment (Term Work) and (2) the practicals, separately, prescribed for each subject in Group II (Practicals) and a minimum of 40% marks of the aggregate of Group II (Practicals)

Those of the successful candidates who obtain less than 50% marks in Group I & Group II taken together at one and the same sitting shall be placed in Pass Class.

Those of the successful candidates who obtain 50% and above of the total marks in Group I & Group II taken together at one and the same sitting shall be placed in Second Class.

Those of the successful candidates who obtain 60% and above of the total marks in Group I & Group II taken together at one and the same sitting shall be placed in First Class.

Those of the successful candidates who obtain 70% and above of the total marks in Group I & Group II taken together at one and the same sitting shall be placed in Distinction.

The successful candidate who is a repeater shall be declared 'Passes'.

**OC.31.30 (effective from 29<sup>th</sup> October 2002 )** A candidate who has passed in any one or more subject/s in Group I securing a minimum of 40% marks in each head, may at his option be exempted from appearing in the subject/s at a subsequent examination and will be declared to have passed that whole examination when he has passed in the remaining subjects of the examination in accordance with the Rules.

**OC.31.30.1 (effective from 29<sup>th</sup> October 2002 )** A candidate who has passed in all the subjects of Group II and who has obtained 40% of the total number of marks of the aggregate in Group II may, at his option, be exempted from appearing in that Group at a subsequent examination, and will be declared to have passed that whole examination when he has passed in the remaining subjects of the examination in accordance with the Rules.

**OC.31.30.2 (effective from 29<sup>th</sup> October 2002 )**Candidates passing the examination in this manner will not be eligible for a class or prize or scholarship to be awarded at the examination.

#### **FOURTH YEAR EXAMINATION OF THE B. F. A. (PAINTING) COURSE**

**OC.31.31 (effective from 29<sup>th</sup> October 2002 )**The FOURTH YEAR Examination will be conducted by the Goa University and no candidate will be admitted to this examination unless (a) he has kept two terms at a College of Art affiliated to the University, subsequent to his passing the Third Year Examination leading to the degree of Bachelor of Fine Art and (b) unless he produces, from the Head of the Institute, a certificate:

3. Of having attended, in each term, at least three fourth of the total number of lectures in theory and at least three fourth of the total periods devoted to studio practice.

4. Of having completed and submitted the minimum number of units in theory and practicals as prescribed in the syllabus and of having secured a minimum of 35% marks, in internal assessment in each subject, both in Theory (Group I) as well as Practical (Group II).

**OC.31.32 (effective from 29<sup>th</sup> October 2002 )**A CANDIDATE WHO HAS PASSED IN ALL THE SUBJECTS AT THE THIRD YEAR EXAMINATION LEADING TO THE DEGREE OF BACHELOR OF FINE ART EXCEPT IN THE THEORY SUBJECT/S UNDER GROUP I WILL BE ALLOWED TO KEEP TERMS AND APPEAR FOR THE FOURTH YEAR EXAMINATION AFTER ATTENDING BOTH THE ACADEMIC TERMS IN THE THIRD YEAR B.F.A. CLASS. HOWEVER, HE WILL NOT BE DECLARED TO HAVE PASSED THE FOURTH YEAR EXAMINATION FOR THE DEGREE OF BACHELOR OF FINE ART UNLESS HE HAS PASSED IN THE REMAINING SUBJECT/S OF GROUP I AT THE THIRD YEAR EXAMINATION.

FOR THE PURPOSE OF DECIDING WHETHER A CANDIDATE HAS PASSED THE EXAMINATION IN THE MANNER AFORESAID, THE MARKS OBTAINED BY HIM IN GROUP II AT THE THIRD YEAR EXAMINATION SHALL BE CARRIED OVER.

**(EFFECTIVE FROM 9<sup>TH</sup> MAY, 2008)**

#### **Fourth Year B. F. A. (Painting) Examination**

**OC-31.33** Candidates will be examined in the subjects as indicated in the following table.

<b>Subject</b>	<b>Internal Assessment Marks</b>	<b>Annual Exam marks</b>	<b>Total marks</b>	<b>Duration of Exam. Papers.</b>
<b>Group I (Theory)</b>				
1. History of Art	40	60	100	3 hours
2. Aesthetics	40	60	100	3 hours
<b>Group II (Practicals)</b>				
1) Painting I	40	60	100	<b>20 hours</b>
2) Painting II	40	60	100	<b>20 hours</b>
3) Subject of Specialisation	40	60	100	<b>25 hours</b>

Any one of the following options: i) Portraiture ii) Mural iii) Print Making iv) Culture v) Sculpture 4) Dissertation & Viva-Voce	40	60	100	
Grand Total of marks for the examination			600*	

The Board of examiners may go through the class work of the students in any particular case or cases whenever necessary during the assessment of the practical examination.

The following table indicates subjects and the number of assignments to be completed in the specified number of hours during the second academic year.

Subject	Hours	Assignments
<b>Group I (Theory)</b>		
1. History of Art	100	08 Tutorial
2. Aesthetics	80	06 Tutorial
<b>Group II (Practicals)</b>		
1) Painting I	120	04
2) Painting II	120	04
3) Subject of Specialisation	400	10
4) Dissertation & Viva-Voce	80	--
Library	60	--
<b>Total</b>	<b>960</b>	<b>32</b>

### Standard for passing the Examination

**OC.31.34 (effective from 29<sup>th</sup> October 2002 )** To pass the examination, a candidate must obtain:

- g) At least 35% of the full marks in (1) Internal Assessment (Term Work) and (2) the theory papers, separately, prescribed for each subject in Group I (Theory) and a minimum of 40% marks of the aggregate of Group II (Theory)
- h) At least 35% of the full marks in (1) Internal Assessment (Term Work) and (2) the practicals, separately, prescribed for each subject in Group II (Practicals) and a minimum of 40% marks of the aggregate of Group II (Practicals).

Those of the successful candidates who obtain less than 50% marks in Group I & Group II taken together at one and the same sitting shall be placed in Pass Class.



Those of the successful candidates who obtain 50% and above of the total marks in Group I & Group II taken together at one and the same sitting shall be placed in Second Class.

Those of the successful candidates who obtain 60% and above of the total marks in Group I & Group II taken together at one and the same sitting shall be placed in First Class.

Those of the successful candidates who obtain 70% and above of the total marks in Group I & Group II taken together at one and the same sitting shall be placed in Distinction.

The successful candidate who is a repeater shall be declared 'Passes'.

**OC.31.35** **(effective from 29<sup>th</sup> October 2002 )** A candidate who has passed in any one or more subject/s in Group I securing a minimum of 40% marks in each head, may at his option be exempted from appearing in the subject/s at a subsequent examination and will be declared to have passed that whole examination when he has passed in the remaining subjects of the examination in accordance with the Rules.

**OC.31.35.1** **(effective from 29<sup>th</sup> October 2002 )** A candidate who has passed in all the subjects of Group II and who has obtained 40% of the total number of marks of the aggregate in Group II may, at his option, be exempted from appearing in that Group at a subsequent examination, and will be declared to have passed that whole examination when he has passed in the remaining subjects of the examination in accordance with the Rules.

**OC.31.35.2** **(effective from 29<sup>th</sup> October 2002 )** Candidates passing the examination in this manner will not be eligible for a class or prize or scholarship to be awarded at the examination.

**OC-32** **(effective from 16<sup>th</sup> February, 2004) Ordinance of the Post Graduate Diploma / MBA in Tourism Management of Goa University ( approved from 16<sup>th</sup> February 2004).**

**OC-32.1** **(effective from 16<sup>th</sup> February, 2004)Objective of the Programme**  
To build managerial competence and professionalism in candidates who are already employed as supervisors / executives in tourism related organisations in the State of Goa and to develop entrepreneurial competence appropriate for the tourism industry.

**OC-32.2** **(effective from 16<sup>th</sup> February, 2004)Duration of the Programme**  
Twenty-seven months part time programme consisting of 9 terms for MBA. Successful completion of the first four Terms will lead to the award of Post Graduate Diploma and successful completion of any subject of any Term will lead to the award of a Certificate. Each term will be of 11 weeks effective duration with ten weeks for interaction sessions and one week for taking care of sessions for evaluations. The fee will be Rs. 15,000/- per term totaling Rs. 60,000/- for this course.  
The contact hours will be around 10 to 12 per week and will be arranged during evenings/week-ends to suit the needs of majority of the students.

**OC-32.3** **(effective from 16<sup>th</sup> February, 2004)Admission and Eligibility for Admission**  
Graduate in any subject such as arts, commerce, science, engineering, etc., who has undergone at least the 10+2+3 scheme to graduate will be eligible for admission.

Number of years (after graduation) of executive / supervisory experience in a tourism related organisation will be one of the criteria for selection for admission. The nature of the particular admissions test and procedure for admission will be decided by an Admissions Committee appointed by the Vice Chancellor of the University for the particular Batch.

#### **OC-32.4 (effective from 16<sup>th</sup> February, 2004) Structure of the Programme**

##### **OC-32.4.1 (effective from 16<sup>th</sup> February, 2004)Term wise Programme Structure**

###### **Term 1**

Code	Subject	Credits	Minimum Contact Hours
T01	Tourism : Philosophies, Principles and Practices	2	20
T02	Hospitality Management	2	20
T03	Tour Operations Management	2	20
T04	Economics of Tourism I	3	30
102	Management Process	1	10
103	Computer Applications	2	10

###### **Term 2**

Code	Subject	Credits	Minimum Contact Hours
T05	Marketing Tourism and Hospitality	2	20
T06	Travel Agency Management	2	20
T07	Hotel Operations Management	2	20
T08	Economics of Tourism II	2	20
101	Organisational Behaviour I	2	20
104	Financial Statement Analysis	2	20

###### **Term 3**

Code	Subject	Credits	Minimum Contact Hours
T09	Tourism Planning and Policies	2	20
T10	Tourist and Tourism	2	20
T11	Information Technology in Tourism	2	20
T12	Electives	Totally 8 Credits in Terms 3 and 4	
303		2	20

###### **Term 4**

<b>Code</b>	<b>Subject</b>	<b>Credits</b>	<b>Minimum Contact Hours</b>
T13	Electives	Totally 8 Credits in Terms 3 and 4	
T14	Project: Evaluation by the Client	1	Project: Evaluation by the Client
T15	Project Seminar	3	Project Seminar 1 hour per student
304	Business Research Methods II	2	20

**Term 5**

<b>Code</b>	<b>Subject</b>	<b>Credits</b>	<b>Minimum Contact Hours</b>
105	Quantitative Method I	2	20
106	Human Resource Management	3	30
107	Managerial Communication : Oral	2	20
201	Organizational Behaviour II	2	20
M6	Service Marketing	2	20

**Term 6**

<b>Code</b>	<b>Subject</b>	<b>Credits</b>	<b>Minimum Contact Hours</b>
203	Quantitative Methods II	2	20
204	Management Accounting	2	20
02	International Economics	3	30
206	Indian Ethos and Values in Management	2	20
207	Managerial Communication : Written	2	20

**Term 7**

<b>Code</b>	<b>Subject</b>	<b>Credits</b>	<b>Minimum Contact Hours</b>
301	Finance Management I	2	20
F5	International Finance	2	20
F3	Project Planning and Implementation	3	30
305	Business Environment	2	20
306	Environment and Management	2	20

**Term 8**

<b>Code</b>	<b>Subject</b>	<b>Credits</b>	<b>Minimum Contact Hours</b>
403	Legal Aspect of Business	4	40
404	Finance Management II	2	20
405	Management Information Systems	2	20
406	International Business Environment	2	20

**Term 9**

<b>Code</b>	<b>Subject</b>	<b>Credits</b>	<b>Minimum Contact Hours</b>
401	Strategic Management	3	4
801	Dissertation	7	40
901	Dissertation Seminar	3	1 Hour per Student

**OC-32.4.2** (effective from 16<sup>th</sup> February, 2004) Subjects T14 and T15 comprise of a single Project and subjects 801 and 901 comprise of a single Dissertation spread over two heads and will be undertaken under the guidance of a regular, contributory or guest teacher. The Dissertation will preferably address a problem faced by the organisation in which the student is working or is attached to for Internship and the student is expected to do the Project / Dissertation in

a rigorous and professional manner thereby demonstrating the value addition due to the Programme.

- OC-32.4.3 (effective from 16<sup>th</sup> February, 2004)** Subject allocations to Terms are only indicative. The Department / Institute offering the Programme will have the freedom to reallocate subject across Terms.
- OC-32.4.4 (effective from 16<sup>th</sup> February, 2004)** All assignments, term papers, projects, etc. done as part of any of the subjects of any of the terms should preferably address problems faced by the organisation in which the student works or is attached for Internship. Other components of evaluation such as written / oral test will evaluate the ability of student to apply the knowledge to tourism industry rather than testing mere knowledge.
- OC-32.4.5 (effective from 16<sup>th</sup> February, 2004)** Before the commencement of each term, the Course Outline giving session by session reading assignments, case studies, exercises, credit-wise evaluation plan, etc. for each subject will be submitted to the Faculty Board of the Faculty of Management Studies for approval. The approved course outline with modifications suggested (if any) by the Faculty Board will be followed for the Term.  
Faculty Board will consider and appropriately approve Credit transfers for any subject in the case of students on exchange with Institutions / Universities with which Goa University has agreements for such Credit transfer.
- OC-32.5 (effective from 16<sup>th</sup> February, 2004) Registration for electives**
- OC-32.5.1 (effective from 16<sup>th</sup> February, 2004)** Each elective opted for should be a distinct subject.
- OC-32.5.1.1 (effective from 16<sup>th</sup> February, 2004)** Elective offered could range in Credits from 1 to 4.
- OC-32.5.1.2 (effective from 16<sup>th</sup> February, 2004)** Every year, before the end of 2<sup>nd</sup> Term, the syllabi for the electives along with tentative course outlines will be submitted to the Faculty Board of Faculty of Management Studies.  
The format of the Syllabus will include objectives in terms of competencies to be developed, broad outline of topics to be covered, pedagogical and evaluation methods to be used and minimum reading stipulated. The format for the Course Outline will include session by session topics to be covered, reference of essential reading for each session, session by session assignments, components of evaluation, rationale for each component of evaluation, weights for each component of evaluation, etc.  
The details of the electives approved by the Faculty Board will be announced to the students for registration.
- OC-32.5.1.3 (effective from 16<sup>th</sup> February, 2004)** Each student will opt for 8 Credits of electives.
- OC-32.5.2 (effective from 16<sup>th</sup> February, 2004)** The student may opt for Project Course (PC) under an approved guide (a regular faculty member of the Institution / University or a Contributory / Guest teacher) in lieu of 2 Credits of electives. The project should be relevant to the organisation in which the student works or is attached to for Internship.
- OC-32.5.3 (effective from 16<sup>th</sup> February, 2004) Registration for Non Credit Subjects**

The Institution / Department, with the help of its regular, contributory or guest faculty, will periodically offer non-credit subjects in various areas of management / tourism management and especially in newly emerging areas. Once a student registers for such a subject, it becomes a compulsory subject for the student. In exceptional circumstance, the Institution may allow a student to withdraw registration, if it is convinced about the genuineness of the reasons. There will be no evaluation in non-credit subjects. The Institution will issue a Certificate to the student mentioning the names and number of Credits of each such subject attended by the student.

**OC-32.6** (effective from 16<sup>th</sup> February, 2004) Evaluation, Grading and Pass Requirements

**OC-32.6.1** (effective from 16<sup>th</sup> February, 2004) Each subject or component of evaluation is split into certain number of Credits as given in 4.1 above. The number of Credits will be approximately the number of minimum contact hours divided by 10. The teacher teaching the subject, with the consent of the Faculty Board of Faculty of Management Studies of Goa University, will decide the method as well as the content of evaluation of each credit of Project / Dissertation work will be decided by the concerned guide with the consent of the Head of the Department / Institute. The respective teacher or the guide of the Credit will do the assessment as well as grading. No component of evaluation shall exceed 60% weight in the total evaluation of the subject.

**OC-32.6.2** (effective from 16<sup>th</sup> February, 2004) The method as well as the content of evaluation of each subject of each term will be reviewed by an Academic Audit Committee of examiners appointed by the Vice Chancellor from a panel of approved examiners. The committee will consist of at least three examiners, of which preferably two will be from outside the Department / Institute and at least one from the Faculty of Management Studies of Goa University in the case of affiliated Institutes. At least one of the examiners should preferably be from the tourism sector. If the work for a committee is on the higher side, more than one committee may be appointed. All question papers, answer sheets, assignments, project reports, mark lists, etc. shall be available for the scrutiny of the committee. The results of the term are finalized after the committee approves the conduct of the Term. The committee will settle the grievances of the students before permitting the Department / Institute to release the results with any modifications suggested by the Committee. Project / Dissertation Seminars will be organized as public seminars, where anybody from the audience can ask questions, unless the organization on which the work was done requires the results to be kept confidential. In the latter case, only examiners will be present during the Seminar.

**OC-32.6.3** (effective from 16<sup>th</sup> February, 2004) after evaluation, each student will be graded for each subject, as per the following scheme of grades and grade points.

Grade

A: Excellent 7.55 upwards  
B: Good 4.55-7.54  
C: Satisfactory 1.55-4.54  
D: Low Pass 0.55-1.54  
F: Failed 0.00-0.54

Teachers may use the following grades and grade points for individual components of evaluation.

A+: 10, A: 9, A-: 8, B+: 7, B: 6, B-: 5, C+: 4, C: 3, C-: 2, D: 1, F: 0

The grade points awarded for a subject will be rounded off to two decimals for determining grades for the subject.

- OC-32.6.4 (effective from 16<sup>th</sup> February, 2004)**In case a student wants to improve grades in any subject of any Term, the student will have the option of re-registering for the subject in the subsequent academic years by paying the appropriate fee.
- OC-32.6.5 (effective from 16<sup>th</sup> February, 2004)**To obtain a pass in PGDM, the student should have obtained a weighted average grade point (weighted by the number of Credits of each subject) of 4.00 for the subjects of Terms 1 to 4 taken as a whole, should not have obtained F grades for more than three subjects and should have completed the requirements of the non-credit subjects the student had registered for.
- To obtain a pass in MBA, the student should have obtained a weighted average grade point (weighted by the number of Credits of each subject) of 4.00 for the subjects of Terms 1 to 9 taken as a whole, should not have obtained F grades for more than three subjects and should have completed the requirements of the non-credit subjects the student had registered for.
- For award of Certificates for individual subjects, the student should have obtained a minimum grade point of 5 in the respective subjects.
- OC-32.6.5.1 (effective from 16<sup>th</sup> February, 2004)**The student should obtain a pass within a period of 3 years from the date of joining for award of PGDM and within a period of 6 years of joining for award of MBA.
- OC-32.6.5.2 (effective from 16<sup>th</sup> February, 2004)**A student has to register / reregister for a full subject and not a part thereof. A student reregistering for Project / Dissertation related subjects should reregister for both Report and Seminar components.
- OC-32.6.5.3 (effective from 16<sup>th</sup> February, 2004)**A student may cancel an elective subject and may register for another elective while reregistering.
- OC-32.6.5.4 (effective from 16<sup>th</sup> February, 2004)**A student who wants to improve grades in a subject or subjects may reregister for such a subject or subjects in subsequent years by paying the appropriate fee and attempt to obtain improved grades in such a subject or subjects within a period of 3 years from the date of joining for PGDM and within a period of 6 years for the MBA programme. This provision will not be available for students after their receiving the PGDM Diploma / MBA Degree.
- OC-32.6.5.5 (effective from 16<sup>th</sup> February, 2004)**In all cases of re-registration, the grades obtained in the last registration by the student will hold good.
- OC-32.7 (effective from 16<sup>th</sup> February, 2004)**The Faculty Board of the Faculty of Management Studies of Goa University will resolve ambiguities and interpretation requirement arising from this Ordinance.
- OC-33 (effective from 26<sup>th</sup> September, 2003)**Ordinance relating to the Degree of Master of Laws – LL.M.

- OC-33.1 (effective from 26<sup>th</sup> September, 2003) Objectives**  
The LL.M. Programme of Goa University is to enable those students who have passed the LL.B. professional programme to seek academic excellence and to provide those job opportunities, which require the higher level of legal learning.
- OC-33.2 (effective from 26<sup>th</sup> September, 2003) Eligibility**  
Any person who has obtained the Professional Bachelor's Degree in Law either by the Three Year Programme or by the Five Year programme recognized by the Bar Council of India from Goa University or from any other university recognized by the Bar Council, UGC and Goa University and has obtained a minimum of 50% marks in aggregate at the Final Year of the LL.B. examination shall be eligible for admission to the LL.M. Programme. The admission shall be based on merit only.  
The LL.M. Programme shall be a regular course of 4 semesters for a duration of two academic years. Each of the semester shall have 3 subjects of 100 marks each. The subjects for the First and Second Semester shall be compulsory. Candidates may choose any of their specialized branch for the Third and Fourth Semesters subject to availability of teaching faculty at the university or at the college/institution where the LL.M. Programme is conducted. The Third and Fourth Semesters shall have two subjects of 100 marks each and a dissertation of 200 marks.
- OC-33.3 (effective from 26<sup>th</sup> September, 2003) The subject for the First and Second Semesters shall be as follows:**
- OC-33.3.1 FIRST YEAR LL.M. First Semester**
1. Paper I – Legal Theory I
  2. Paper II – Constitutional Law I
  3. Paper III – Research Methodology
- OC-33.3.2 Second Semester**
1. Paper I – Legal Theory I
  2. Paper II – Constitutional Law I
  3. Paper III – Research Methodology
- OC-33.3.3 SECOND YEAR LL.M. Third Semester and Fourth Semester**
1. Human Rights Branch – 4 papers and a dissertation
  2. Intellectual Property Law - 4 papers and a dissertation
  3. Labor Law Branch - 4 paper and a dissertation
  4. Criminology Branch - 4 papers and a dissertation
- OC-33.4 (effective from 26<sup>th</sup> September, 2003) Scheme of Examination**  
There shall be an examination for each of the papers except for dissertation at the end of every semester.
- OC-33.4.1 (effective from 26<sup>th</sup> September, 2003) The scheme of evaluation shall be as follows :**  
In each of the papers there shall be an internal assessment in the form of seminar or project work, which shall be presented by the candidates in the open classroom during the normal course of the academic year for 25 marks. There shall be a University examination for 75 marks of 3 hour duration at the end of the semester for each of the papers.

**OC-33.4.2 (effective from 26<sup>th</sup> September, 2003)** The paper setters and the examiners for each of the theory paper shall be appointed by the University from the panel of examiners approved by the Board of Studies in Law and the Academic Council.

There shall be two paper setters one internal and one external for each of the theory papers. The internal examiner shall be a person who is teaching the subject or has thought the respective subject.

The question paper for the examination shall be set by the external examiners and sent to the internal examiner for review and modification, who shall submit the same to the Controller of Examination as a confidential document.

**OC-33.4.3 (effective from 26<sup>th</sup> September, 2003) Evaluation**

Each of the theory paper shall be evaluated by two examiners separately. The average of the marks given by the two examiners shall be the marks secured by the candidate.

**OC-33.4.4 Scheme of Dissertation Evaluation (effective from 18<sup>th</sup> October, 2004)** The LL.M. Dissertation Evaluation Scheme shall be as follows:

For the old scheme students, the dissertation to be evaluated for a maximum of 100 marks by two examiners one internal who shall be the guide himself and the other external examiner. The average of the marks allotted by the two examiners shall be the marks scored by the candidate.

Under the new scheme, the dissertation is for 200 marks of which 50 marks are reserved for Viva. The dissertation shall be evaluated by the two examiners external and internal (Guide) for 150 marks. The average of the marks allotted by the internal and the external examiner shall be the marks scored by the candidate. The average of the marks shall be added to the marks scored at the Viva to arrive at the final marks obtained by the candidate for the dissertation.

#### **Viva Scheme**

The viva shall be conducted by a panel consisting of internal examiner i.e. the guide, the external examiner appointed by the University and the Chairman. The Panel shall be appointed as per OB.4. The average of the marks allotted by the three examiners for the viva shall be the marks scored by the candidate.

**OC-33.5 (effective from 26<sup>th</sup> September, 2003) Standard of Passing**

To pass each semester examination, the candidate shall obtain 50% of the maximum marks obtainable in each of the papers. The total marks obtained by the candidate shall be the aggregate of the internal marks and the marks obtained at the theory examination. At the end of each semester, the College shall submit the internal assessment marks of each of the candidates appearing for the theory paper of the University for consolidation.

The award of class shall be as follows:

Aggregate 50% and above Second Class.

Aggregate 60% and above First Class.

Aggregate 70% and above First Class with distinction.

The class for the degree shall be based on the performance of the candidate at all the semesters.



**OC-33A Ordinance for Choice Based Credit Post-Graduate Degree Programme, Master of Law - LL.M. in Goa University Affiliated Colleges** (Applicable for candidates who register from the academic year 2016-17 onwards)

**OC-33A.1 GENERAL**

LL.M. Programme of Goa University with Choice Based Credit System of Instruction is to enable those students who have passed the LL.B. professional Programme, to seek academic excellence and to facilitate job opportunities, which require higher level of legal learning. The broad objective of the Ordinance is to restructure the LL.M. Programme to suit the present needs and to implement University Grants Commission recommendation of introducing Choice Based Credit System (CBCS).

**OC-33A.2 DURATION AND SPECIALIZATIONS OF THE PROGRAMME**

1. The LL.M. Programme shall be of two years duration with four Semesters. Each Semester shall have minimum 15 weeks of teaching, excluding the break, vacation and examination.
2. The LL.M. Programme shall be offered in any one or more of the following Specializations:
  - (i) Criminal Law
  - (ii) Intellectual Property Rights
  - (iii) Corporate and Commercial Law
  - (iv) Constitution and Administrative Law
  - (v) Labour and Industrial Law

**OC-33A.3 DEGREE TO BE AWARDED**

Master of Law (LL.M.)

**OC-33A.4 ADMISSION AND ELIGIBILITY**

1. **(Notified on 25<sup>th</sup> July, 2017)** To be eligible for admission to the LL.M. Programme, a candidate shall be required to have obtained a minimum of 50% marks in aggregate (45% in case of SC and ST candidates) at the 5 years or 3 years LL.B. Programme, recognized by the Bar Council of India.
1. **(Notified on 4<sup>th</sup> December, 2019)**

A candidate who has obtained a degree in Law securing at least 50% aggregate marks (45% in case of SC and ST candidates) or equivalent grade from Goa University or from any other University recognized by Goa University is eligible to seek admission for LL.M. program.
2. Admission to the LL.M. Programme shall be based on merit. The Merit List shall be prepared, based on the highest score obtained by the candidate at the 5 years or 3 years LL.B. Programme.
3. Colleges offering the LL.M. Programme may choose from amongst the above Specializations. Colleges must expressly mention on their website and the prospectus about the Specializations offered, at the beginning of each Academic Year.
4. Students shall opt for any one of the Specializations offered by the College, at the time of admission to the Programme. The selected candidates shall be admitted by the College in the specified Specialization in the First Semester itself based on merit and the availability of seats.

5. Reservation of seats shall be in accordance with the directives of the Government of Goa and as adopted by Goa University. A candidate applying for admission under these categories shall be required to submit a valid certificate to that effect, issued by the Officer of the rank of the Deputy Collector or any other authorized Officer as notified by the State Government.

#### **OC-33A.5 SCHEME OF INSTRUCTION**

1. The instructional scheme for the LL.M. Degree Programme shall be based on the system of time-integrated units called Credits. To be eligible for the award of a Degree under the Choice Based Credit System (CBCS), a student shall be required to earn a minimum of 48 Credits.
2. One Credit Theory Course shall be equivalent to 15 contact hours of learning activities such as lectures, group discussion, seminars, problem solving, tutorials and assessment. For example, A Four Credit Course shall have 60 contact hours (4 hours per week x 15 weeks) of these learning activities.
3. The Credits shall comprise of Core Courses, Optional Courses and Dissertation. The Programme shall have Core Courses of 32 Credits, Optional Courses compulsorily of 8 Credits and a compulsory dissertation comprising of 8 Credits. An adequate number of Optional Courses shall be offered to choose from, as recommended by the Board of Studies (BoS) and approved by the Academic Council, in order to earn the 8 Optional Credits. In case a student opts for an Optional Course from outside the parent College, such Course shall be decided by the Departmental Faculty Committee (DFC), as specified under clause OC-33A.6.8.
4. A student shall be eligible for the award of LL.M. Degree on the successful completion of 48 Credits. A student is also permitted to obtain maximum 8 additional Credits (48 + 8 = Total of 56 credits). However, the Degree/final Grade shall be awarded /computed based on his/her performance in Core Courses, and the best performance of the Optional Courses required to fulfill the minimum number of Credits for the award of the LL.M. Degree. Additional Credits, if any, shall however, be depicted in the final transcript/mark sheet.
5. A student is required to obtain a minimum of 40 Credits from the parent Institute, at which the student is registered, of which 32 would be the minimum number of Core Credits and Dissertation of 8 credits. The remaining 8 Credits may be earned by the student by choosing from Optional Courses either from the parent Institute or any other Institute.
6. Permission to transfer Credits in case of Institutions not affiliated to Goa University, may be allowed on a case to case basis by the Departmental Faculty Committee (DFC). Such Courses, when opted for by the students, may be approved provisionally by the DFC, as specified under clause OC-33A.6.8 and placed for ratification before the Board of Studies at its subsequent meeting.

#### **OC-33A.6 COURSE STRUCTURE**

1. The Colleges shall notify all the Core and Optional Courses offered to students before the beginning of the Academic Year. The Colleges shall also provide adequate Optional Courses in case the student desires to obtain all Credits from the parent College. In addition, BoS may identify Courses for self-learning in the form of field work, project, summer training, online Courses, and other such Optional Courses. In such cases the BoS shall specify the Credits for each of these activities.

2. The Semester-wise flow chart of Courses is as under:

Semester	Core Courses	Optional Courses	Credits	Total Credits
Semester-I	3	-----	3 X 4	12
Semester-II	3	-----	3 X 4	12
Semester-III	1	1	2 X 4	8
Semester-IV	1	1	2 X 4	8
Dissertation	-----	-----	1 X 8	8
Total No of Credits				48

3. An Optional Course may consist of 1 to 6 numbers of Credit(s).
4. A student is required to choose not less than 8 credits and not more than 16 Credits in a Semester. However, a student may not take up any of the Courses earmarked in a Semester and defer the same till such Semester when the concerned Courses are next offered by the College.
5. A student is required to choose the Optional Courses before the beginning of the Semester. Minimum number of students for an Optional Course shall not be less than five.
6. Ordinarily, one teacher shall teach an entire Course. When more than one teacher is teaching a Course, the senior most teacher amongst them, shall be the Course Coordinator for that Course. The Course outline/session plan for each Course offered during the Semester shall be submitted by the concerned teacher/Course Coordinator to the Departmental Faculty Committee (DFC) as specified under clause OC-33A.6.8, before the commencement of teaching of the said Course.
7. The BoS shall prepare the objectives, themes and topics for all Courses and recommend it for the approval of the Academic Council. All such approved Courses, either Core or Optional, shall be uploaded on the College Website prior to offering of the respective Courses.
8. Departmental Faculty Committee:  
The Principal of the College, Head of the Department (HoD), and two senior most full-time teachers of the College, appointed on regular basis and teaching in the LL.M. Programme shall constitute the DFC. Each College shall constitute DFC, which shall be responsible for the proper implementation and conduct of the Choice based Credit LL.M. Degree Programme.

#### **OC-33A.7 DISSERTATION**

- The Dissertation work shall be spread over third and fourth Semesters. The DFC shall decide at the end of the second Semester, the modalities relating to the Dissertation, which shall be informed to the students.
- Topics for dissertations shall be finalized by the student in consultation with the DFC before the end of the second Semester.
- The DFC shall decide the number of students each teacher can guide, preferably, with an equitable distribution of students to Guides.
- Dissertation being 8 Credit Course, a student is required to engage 120 hours on dissertation work, of which at least 10% (12 hours) shall be compulsorily spent on consultation with the Guide, who shall supervise the student on a regular basis.
- The final Dissertation shall be screened for Similarity Test as per the University norms.

6. The student shall declare, in the prescribed proforma, that the dissertation is his/her own work and that all the sources used are duly acknowledged.
7. The Guide shall certify, in the prescribed proforma, that the dissertation is an original work of the candidate completed under his/her supervision.
8. The student shall submit the dissertation to the College through the Guide, at least two weeks before the end of the term, which shall be notified by the DFC.
9. Every student shall submit one soft copy in CD and two hard bound copies of the dissertation to the College in the standard format as prescribed by the DFC.

#### **OC-33A.8 SCHEME OF EXAMINATION**

1. The assessment of all Courses shall comprise continuous Intra-Semester Assessment (ISA) and Semester-End Assessment (SEA). The ISA shall be assessed internally by the concerned teacher(s) and the SEA shall be conducted by the University. Provided that if a student chooses any course from an Institute other than the parent Institute, the scores/grades communicated by such other Institute, based on their assessment, shall be accepted by the parent Institute.
2. For each theory Course, Intra-Semester Assessment (ISA) shall be 30% and Semester-End Assessment (SEA) shall be 70%. ISA shall be conducted by assignment, presentation, projects, case reviews and such other as approved by the DFC and the SEA shall be a written component only. However, the Core Course on Legal Education and Legal Pedagogy offered at second Semester shall have 50% of ISA and the remainder 50% of SEA.
3. A One Credit Course shall carry 25 marks. All other Courses shall carry marks proportionate to the number of Credits. For example a four credit course shall carry  $4 \times 25 = 100$  marks.
4. In case of ISA, each teacher of the concerned Course shall be the examiner for the portion he/she has taught. When more than one teacher is teaching a Course, the Course Coordinator shall coordinate the teaching, examination and continuous evaluation of ISA of the Course and maintain records of all assessments/tests/ examinations.

#### **OC-33A.9 SCHEME OF EVALUATION**

1. Each component of ISA shall be evaluated for 10% of the total marks of the Course. Total number of ISA components for any Course, other than a one credit course, shall be three, irrespective of the number of Credits in the course, except the Core Course on Legal Education and Legal Pedagogy offered at the Second Semester, which shall be of five components. However, for a One Credit Course, a single ISA component shall be conducted and evaluated for 30% of total marks of the Course. The Course-wise ISA schedule shall be displayed at the beginning of each Semester. The scheme of assessment and the marks allotted for various components of ISA shall be submitted to the HoD before the commencement of the relevant Semester. The result of each assessment shall be displayed on the Notice Board and the assessed material shall be shown to the candidate(s) by the concerned teacher and submitted to the HoD.
2. An additional assessment for components of ISA, irrespective of the number of Credits a Course carries, may be provided at the request of the concerned student for the purpose of improvement, in which case, the assessment with the least score shall not be considered for ISA. Institution may charge an examination fee for such additional assessment. All internal assessments shall be completed as per the schedule notified by the DFC.

3. At the end of each Semester, the ISA scores shall be verified by the DFC and thereafter sent to the Controller of Examinations (CoE). However, all such assessment shall be completed in all respects and communicated to the CoE before the commencement of SEA.
4. SEA shall be through Central Assessment Programme (CAP) conducted by the University.
5. In case of Optional Courses opted outside the parent Institute, the final Course grade shall be as per the assessment scheme of such other Institute. In all such cases, the score/grade given by such other Institute shall be sent to the parent Institute and the DFC shall forward the same to CoE for declaring result.
6. For all Courses, a student is required to pass both ISA and SEA separately, with a minimum of 40%. Students securing less than 40% marks either in ISA or SEA will be declared as fail. Student cannot appear for SEA without passing in ISA. Students who have either been declared failed in ISA even after improvement or who have not appeared in ISA, may appear for ISA only when ISA in that Course is next offered by the College.
7. Fractional marks shall be rounded off to the nearest integer only at the time of calculating the Course grade.

#### **OC-33A.10 SCHEME OF EVALUATION FOR DISSERTATION**

1. The dissertation shall be assessed by a panel of three examiners, consisting of the Guide and two external examiners from the panel recommended by the BoS. The student shall make a presentation of the work before the panel of examiners and students of the College. The dissertation shall be assessed for a total of 200 marks, of which 50 marks shall be for the presentation and *viva voce* and 150 marks shall be for the dissertation submitted. The average marks of the panel of all three examiners shall be considered for the grade.
2. To pass in the dissertation, a student has to secure a minimum grade of 'P' as indicated under OC-33A.11(i).
3. A student who fails in the dissertation may be allowed to re-submit the dissertation after incorporating suitable modifications under the supervision of the Guide, in any subsequent Semester Examination.

#### **OC-33A.11 STANDARD OF PASSING**

##### **(i) Award of Grades**

1. Marks awarded in each Course shall be represented in the form of Grades. The Final result shall be declared as Grade Points.

- The marks awarded in the ISA and SEA shall be added for awarding the grade for each Course. The percentage of marks and the corresponding grades for the Courses are indicated in the table below:

Range of percentage scored	Grades	Grade Point
85 – 100	O (Outstanding)	10
75 – <85	A+ (Excellent)	9
65 – <75	A (Very Good)	8
55 – <65	B+ (Good)	7
50 – <55	B (Above Average)	6
45 – <50	C (Average)	5
40 – <45	P (Pass)	4
0 – <40	F (Fail)	0
	Ab (Absent)	0

- A student shall be required to secure a minimum of 'P' grade to pass the Course.
- For each Course, a student securing 'F' Grade in the Course, shall not be entitled to earn any Credits for that Course.
- Students who do not secure a minimum of 'P' Grade in Core Courses shall have the option of answering SEA or to repeat the Course by registering for the Course whenever it is offered in the regular Semester.
- In the case of Optional Courses, a student shall have the option of answering SEA in theory, as well as practical component, where applicable, in the following Semester(s), or to repeat the Course by registering for the Course whenever it is offered in the regular Semester, or register for an alternative Optional Course to secure requisite number of Credits.

(ii) **Semester Grade Point Average (SGPA) and Cumulative Grade Points Average (CGPA)**

- Calculation of weighted grade points of a course shall be done by multiplying the grade points scored, by the number of Credits of the respective course.
- Calculation of Semester Grade Point Average (SGPA)  
The SGPA is the ratio of sum of the product of the number of credits with the grade points scored by a student in all the courses taken by a student and the sum of the number of credits of all the courses undergone by a student, i.e.

$$SGPA (S_i) = \frac{\sum(C_i \times G_i)}{\sum C_i}$$

Where 'C<sub>i</sub>' is the number of credits of the *i*th course and 'G<sub>i</sub>' is the grade point scored by the student in the *i*th course

- Calculation of Cumulative Grade Point Average (CGPA)

The CGPA is also calculated in the same manner taking into account all the courses undergone by a student over all the Semesters of this Programme, i.e.

$$CGPA = \frac{\sum(C_i \times S_i)}{\sum C_i}$$

Where 'Si' is the SGPA of the *i*th semester and 'Ci' is the total number of credits in that semester.

4. At the end of the Semester IV on completion of 48 Credits, or more, Cumulative Grade Point Average (CGPA) shall be calculated as shown in OA-33A.11.(ii)3 For calculating CGPA all the courses taken and all the credits and grades earned by a candidate shall be taken into account.
5. The CGPA shall be converted to the Final grade, as shown in the table below

Range of Percentage Scored	Grades
10	O (Outstanding)
9.0 – <10	A+ (Excellent)
8.0 – <9.0	A (very Good)
7.0 – <8.0	B+ (Good)
6.0 – <7.0	B (Above Average)
5.0 – <6.0	C (Average)
4.0 – <5.0	P (Pass)
0 – <4.0	F (Fail)
AB	Ab (Absent)

6. The SGPA and CGPA shall be rounded off to 2 decimal points and reported in the transcripts.
7. The CGPA shall be calculated up to two decimal places. If the CGPA is higher than the indicated upper limit in the two decimal digits by a factor of  $\geq 0.005$ , then the higher grade will be awarded. Eg. A candidate with CGPA  $\geq 4.995$  will be awarded 'C' grade. A candidate who has not earned 48 Credits shall be given final grade 'F' and be declared 'Fail'.
8. Students, who have not completed the Programme in four Semesters, are permitted to re-register for additional Semester(s) and opt for Courses, provided that these Courses are available for instruction in the Department. Such candidate(s) shall be treated as supernumerary for the particular Course.

#### **OC-33A.12 IMPROVING THE CGPA**

1. A candidate shall be permitted to improve upon his/her CGPA, subject to the following conditions:
  - (i) The candidate should be declared passed in LL.M. Degree Examination.
  - (ii) The candidate shall have only one opportunity to appear for SEA of any of the Core Course in any Semester of his/her choice in the immediate Examination.
  - (iii) However, the candidate is not allowed to reappear for any Optional Courses or the dissertation.
  - (iv) In case the reappeared grade is lesser than the grade scored at the earlier Examination, the earlier grade shall be final.
  - (v) Revised grade shall not be considered for any awards or medals except for awarding the CGPA.

**OC-33A.13 GRADE CERTIFICATE**

1. Based on the Grades earned, a Grade Certificate shall be issued by the University to all the registered students after every Semester. The Grade Certificate shall display the course details (code, title, number of Credits, Grade secured) along with SGPA of that Semester.
2. After completion of the LL.M. Programme a consolidated Grade Certificate indicating the performance in all Semesters and CGPA earned shall be issued to all the registered students by the University.

**OC-33A.14 ACADEMIC AUDIT COMMITTEE (AAC)**

1. There shall be an audit of the LL.M. Programme, annually conducted by an Academic Audit Committee (AAC). For this purpose, an AAC shall be constituted for each College.
2. The AAC consisting of three members shall be nominated by the Vice-Chancellor from the panel of experts prepared by the BoS and approved by the Academic Council.
3. The audit shall be conducted at the end of every Academic Year, within two months after the declaration of results.

4. The conduct of the academic audit by the AAC shall comprises of:

(i)	Reviewing of question papers and assessments held during the preceding year/Semester
(ii)	Determining the adequacy of coverage of the syllabus and
(iii)	Determining the standard of questions in relation to the syllabus.
(iv)	Reviewing of sample answer scripts to check for objectivity and uniformity of assessment.
(v)	Scrutiny of the records of ISA maintained by the College, in order to determine the suitability and adequacy of the methods of assessment.
(vi)	Evaluation and suggestion of remedial measures on the basis of feedback obtained from the students.

5. The AAC shall prepare a report and submit the same to the Vice-Chancellor, who, after making necessary observations, shall forward the same to the BoS of the concerned subject. The BoS shall make suitable recommendations to the DFC for implementation.
6. The Principal shall co-ordinate the meeting of the AAC.

**OC-33A.15 GRIEVANCE COMMITTEE**

1. There shall be Grievance Committee of three teachers, Principal as the Chairperson, Head of the Department and the Senior most faculty members as other two members. No teacher against whom a grievance is made, shall participate in the meetings of the Committee.
2. The Grievance Committee shall examine and decide on the grievances relating to the marking of answer-scripts/evaluation of tests of the students. The Committee may also consider any other matter related to examination and evaluation.
3. A student shall address his/her grievance(s) to the Principal, who shall place the same before the Grievance Committee for resolution. If the grievances are in the Course(s) taught by the Chairperson, the grievances shall be addressed to the Dean of the Faculty.



4. If the Grievance Committee finds that there is a prima facie case, it may refer the respective answer-scripts/ assignments, to an expert outside the University, for which the student shall have to pay the prescribed fee. The result of such an evaluation shall be final and binding.
5. The decision of the Grievance Committee shall be communicated to the student within one month of his/her filing of the grievance.

**OC-33A.16 COORDINATION COMMITTEE**

1. There shall be a Coordination Committee for this Programme with representatives of the Colleges.
2. The Vice-Chancellor shall appoint a Coordination Committee which shall comprise the Dean of Faculty as Chairperson and four members from the Colleges (two from each) other than the Dean.
3. The Committee shall coordinate implementation of the Programme, and resolve anomalies arising during the implementation of the Programme. The Committee shall draw a common time-table for Optional Courses offered across the Departments, so as to enable students to opt for various Courses.
4. The Committee shall consider suggestions received from students, HoDs, Faculty members, BoS and the Examination Section, and recommend modification of existing provisions or introduction of new provisions.
5. At the end of the teaching of every Semester there shall be an assessment of the teacher, the Course-taught and of the overall Programme by the student(s), the records of which shall be retained by the Internal Quality Assurance Cell (IQAC).

**OC-34 (effective from 26<sup>th</sup> September, 2003) Ordinance relating to LL.B. (Hon) Programme**

**OC-34.1 (effective from 26<sup>th</sup> September, 2003)** In order to provide professional legal education to those who aspire to take up the profession in the field of law and in keeping with the directions of the Bar Council of India, the Five Year Law Degree Programme called LL.B. (Hon) is introduced in Goa University through its affiliated colleges. The Course shall be a full time course conducted according to the semester pattern.

**OC-34.2 (effective from 26<sup>th</sup> September, 2003) (a) Eligibility for admission to the First Year of the LL.B. (Hon) Course.**

Candidates who have passed the 12<sup>th</sup> Std. Examination of Goa Board of Higher Secondary Education or any other equivalent examination recognized by Goa University with a minimum of 45% in any stream shall be eligible for admission to the First Year of LL.B. (Hon) Programme.

**OC-34.3 (effective from 26<sup>th</sup> September, 2003) (b) Eligibility for admission to the Second Year of the LL.B. (Hon) Course**

Only candidates who have passed the First Semester Examination of LL.B. (Hon) Course shall be eligible for admission to the Second Year of LL.B. (Hon) Programme.

**OC-34.4 (effective from 26<sup>th</sup> September, 2003) (c) Eligibility for admission to the Third Year of the LL.B (Hon) Course.**

Only candidates who have passed the First, Second and Third Semester Examination of LL.B. (Hon) Course shall be eligible for admission to the Third Year of LL.B. (Hon) Programme.

**OC-34.5 (effective from 26<sup>th</sup> September, 2003) (d) Eligibility for admission to the Fourth Year of the LL.B. (Hon) Course.**

Only candidates who have passed the First, Second, Third, Fourth and Fifth Semester Examination of LL.B. (Hon). Course shall be eligible for admission to the Fourth Year of LL.B. (Hon) Programme.

**OC.34.6. (effective from 26<sup>th</sup> September, 2003) (d) Eligibility for admission to the Fifth Year of the LL.B. (Hon) Course.**

Only candidates who have passed the First, Second, Third, Fourth, Fifth, Sixth and Seventh Semester Examination of LL.B. (Hon). Course shall be eligible for admission to the Fourth Year of LL.B. (Hon) Programme.

**OC-34.7. (effective from 26<sup>th</sup> September, 2003) (f) Eligibility for candidates seeking admission from other universities.**

Candidates seeking admission to the LL.B. (Hon) Course from other universities shall be eligible for admission based on the eligibility granted by Goa University. For the purpose of granting eligibility, the university may decide the equivalence of the various semester examinations with the examinations passed by the candidate and the university shall admit the candidate to only such semester to which he/she is found eligible.

**OC-34.8 (effective from 18<sup>th</sup> July, 2005) The Degree of Bachelor of General Laws**

Candidates who have passed the First, Second, Third, Fourth, Fifth and Sixth Semesters of the LL.B. (Hons) Programme, shall be eligible for the award of the Degree of Bachelor of General Laws (B.G.L.).

**OC-34.9 (effective from 26<sup>th</sup> September, 2003)The course of study of LL.B. (Hon)**

The LL.B. (Hon) Course shall be a semester programme. Each semester shall consist of four papers/subjects. Each of the subjects shall have a minimum of 90 classroom contact hours or 8 lectures of 50 minutes per week. The subjects for each of the semesters shall be as follows:

**OC-34.9.1 (effective from 26<sup>th</sup> September, 2003) FIRST YEAR First Semester**

1. General English – I
2. Political Science – I
3. Sociology
4. History – I

**OC-34.9.2 (effective from 26<sup>th</sup> September, 2003)Second Semester**

1. General English II
2. Political Science II
3. Legal Methods
4. Legal and Constitutional History

**OC-34.9.3 (effective from 18<sup>th</sup> July, 2005) SECOND YEAR Third Semester**

Economics I  
Computer Applications

Political Science II  
General Principles of Contract

- OC-34.9.4 (effective from 18<sup>th</sup> July, 2005) Fourth Semester**  
History II  
Economics II  
Environmental Studies  
Law of Torts
- OC-34.9.5 (effective from 26<sup>th</sup> September, 2003)THIRD YEAR  
Fifth Semester**  
1. Contract – II  
2. Family Law – I  
3. Law of Crimes  
4. Constitutional Law – I
- OC-34.9.6 (effective from 26<sup>th</sup> September, 2003)Sixth Semester**  
1. Constitutional Law – II  
2. Legal Theory  
3. Property Law  
4. Family Law – II OR Family Law – II (Civil Law)
- OC-34.9.7 (effective from 26<sup>th</sup> September, 2003)FOURTH YEAR  
Seventh Semester**  
1. International Law – Public and Private  
2. Company Law  
3. Labor Laws  
4. Interpretation of Statutes
- OC-34.9.8 (effective from 26<sup>th</sup> September, 2003)Eighth Semester**  
1. Administrative Law  
2. Land Laws  
3. Women, Poverty and Development Laws  
4. Environmental Laws
- OC-34.9.9 (effective from 26<sup>th</sup> September, 2003)FIFTH YEAR  
Ninth Semester**  
1. Practical Paper I – Moot Court, attendance in court, lawyer’s office etc.  
  
2. Practical Paper II – Drafting, Pleading, Conveyancing  
3. Civil Procedure Code  
4. Criminal Procedure Code
- OC-34.9.10 (effective from 26<sup>th</sup> September, 2003)Tenth Semester**  
1. Practical Paper III – Professional Ethics, Bar Bench Relations, etc.  
2. Practical Paper IV – Legal Aid, Public Interest Litigation, Legal Awareness etc.  
3. Indian Evidence Act  
4. Optional Paper (any one)  
    a) Arbitration, Conciliation and Alternative Disputes  
    b) Intellectual Property.  
    c) Taxation  
The content of each of the subjects and the detailed syllabus shall be as prescribed by the Board of Studies and approved by the Academic Council.
- OC-34.10 (effective from 26<sup>th</sup> September, 2003)Scheme of teaching of practical papers**

Practical papers are introduced as part of the syllabus as per the recommendation of the Bar Council of India. The purpose of practical papers is to give practical experience to the students as effectively as possible, since the four practical papers deal with four different aspects of practice, they are to be taught differently.

**OC-34.11 (effective from 26<sup>th</sup> September, 2003) XLV)** For the LL.B. (Hon) Programme, the practical papers are to be taught as part of the Ninth and Tenth Semester.

**OC-34.11.1 (effective from 26<sup>th</sup> September, 2003) XLVI) Practical Paper I**  
Practical Paper I is to be taught through classroom exercise, discussion, presentation of moot court cases, observation of trial with the help of practicing lawyer, verification of records of such trial maintained by the students periodically by the subject teacher.

**a) Moot Court**

Moot court shall be taught through classroom teaching, case study and presentation of prescribed number of cases in the open class during specified days.

**b) Interview Techniques**

The topic of interview techniques to be taught through stimulated exercises presentation of cases, interview sessions, through audio and videotapes. Students are required to note their findings, observation and advice and record in their journal.

**c) Attendance at Lawyers office**

Interview Technique has to be further substantiated by the students attending lawyers office for a period of 30 days and maintain a diary of their observation or proceedings, manner of handling of clients, manner of case discussion with the clients and review of the advice given to the client. Students are required not to mention the names of the clients. They are required to maintain a diary on a day-to-day basis.

**OC-34.11.2 (effective from 26<sup>th</sup> September, 2003) XLVII) Practical Paper II**  
Practical paper II is related to classroom teaching. In addition to teaching the techniques of drafting and pleading, the students are to be taught by means of classroom lectures, the various specific drafts and kinds of pleading and conveyancing. They are required to prepare their own draft documents in their journal based on the guidance provided by the faculty in charge of the subject.

**OC-34.11.3 (effective from 26<sup>th</sup> September, 2003) XLVIII) Practical Paper III**

**a) Accountancy for lawyers**

The topic of accountancy for lawyers is to be taught with the help of an accounting expert preferably a chartered accountant. The students are to be taught the basic principles of accounting followed by exercise in accounting based on the nature of transactions that may come up before an advocate.

**b) Professional ethics**

Professional ethics is to be taught by classroom lectures stimulated exercises use of audio and video etc. The aim of teaching this topic is to ensure their understanding of the need and importance of professional ethics for a

practitioner of law. The students are required to prepare various exercises based on various situations/problems provided by the faculty.

**c) Bar bench relations.**

The topic has to be taught through classroom teaching, study of disciplinary cases before the Bar Council of India and appeal to the Supreme Court. The students are required to prepare summary of 10 such cases allotted to them by the faculty in charge.

**OC-34.11.14 (effective from 26<sup>th</sup> September, 2003) XLIX) Practical Paper IV**

**a) Public Interest Lawyering**

The topic of Public interest lawyering is to be taught by classroom lectures followed by exercises where the students are trained to identify matters of public interest. They are required to study PIL's that have come up before the Supreme Court and High Court. They should be encouraged to identify public causes and even file public interest litigation wherever possible. All the activities carried out under this have to be recorded in the journal.

**b) Legal Aid**

Students are required to attend legal aid cells with the guidance of faculty members and render free legal service to the public. The activity may be carried out by a regular legal aid cells activity or by special legal aid programme.

**c) Para Legal Service**

This activity is carried out under the guidance of a faculty by organizing legal awareness programmes in High school, Colleges, Public places, Markets, Gram Sabhas, etc.

The students are required to maintain a record of the activities and the cumulative effect of their activity has to be evaluated at the practical examination.

**OC-34.12 (effective from 18<sup>th</sup> July, 2005) Scheme of Examination**

There shall be an examination at the end of each semester as per the academic programme issued by Goa University. The University examination in each of the papers shall be for a maximum of 75 marks.

**OC-34.12.1 (effective from 18<sup>th</sup> October, 2004) (1) Internal Assessment**

In each of the papers except the practical paper, for which there shall be a separate scheme, each of the students shall be assessed at the college level during the course of the programme for a maximum of 25 marks in the form of seminars/project work/workshop/field work and other related activities.

The internal marks are required to be sent by the college to the University at the end of the semester. For repeater candidates the marks already allotted and submitted to the University shall be the internal marks.

**OC-34.12.2 (effective from 18<sup>th</sup> July, 2005) (2) Evaluation**

Evaluation of answer scripts shall be done by examiners appointed from the panel of examiners prepared by the Board of Studies.

**OC-34.12.3 (effective from 18<sup>th</sup> July, 2005) (3) Standard of Passing**

To pass each semester examination, the candidate shall obtain 50% of the maximum marks obtainable in each of the papers. The total marks obtained by the candidate shall be the aggregate of the internal marks and the marks obtained at the theory examination.

#### **OC-34.12.3.1**

##### **(effective from 18<sup>th</sup> October, 2004) Award of Class**

Class shall be awarded based on the total marks secured by a candidate at the two consecutive semesters of an academic year i.e. Semester I and 2 or 3 and 4 or 5 and 6 or 7 and 8 or 9 and 10. To be eligible for the award of class a candidate should appear for all the four papers of a semester in one sitting.

The scheme of award of class shall be  
50% or more but less than 60% Second Class  
60% or more but less than 70% First Class  
70% or more First Class with distinction.

The results of the odd semesters shall merely mention the total marks and passed or failed.

#### **OC-34.12.4 (effective from 26<sup>th</sup> September, 2003) (4) Practical Examination**

The practical examination for the 4 practical papers shall be as per the scheme prescribed by Bar Council of India and approved by the University.

The students shall maintain a practical journal for each of the practical papers. At the end of the semester there shall be a practical examination conducted by the concerned college. For the purpose of conducting the practical examination, the colleges may levy such fees and pay such remuneration to the examiners as approved by the Board of Studies in Law and the Academic Council. The scheme of practical examination and the allotment of marks shall be as follows :

##### **OC-34.12.4.1 (effective from 26<sup>th</sup> September, 2003) PRACTICAL PAPER I**

(Moot Court, Pre Trial Preparations and participation OC-34.1.2.4n in pre trial proceedings, detailed as below:

This paper will have three components of 30 marks each and a viva for 10 marks.

##### **OC-34.12.4.1.1 (effective from 26<sup>th</sup> September, 2003) a) Moot Court (30 marks)**

Every student will do at least 3 moot courts during the course with 10 marks for each. The moot court work will be on assigned problems and it will be evaluated for 5 marks for written submissions and 5 marks for oral advocacy.

##### **OC-34.12.4.1.2 (effective from 26<sup>th</sup> September, 2003) b) Observance of trial in two cases, one civil and one criminal (30 marks)**

Students will attend two trials in the course of the last 2 or 3 years of L.L.B. studies. They will maintain a record and enter the various steps observed during their attendance on different days in the Court assignment. This scheme will carry 30 marks.

##### **OC-34.12.4.1.3 (effective from 26<sup>th</sup> September, 2003) c) Interviewing techniques and Pre-trial preparations (30 marks)**

Each student will observe two interviewing sessions of clients at the Lawyer's Office / Legal aid Office and record the proceedings in a diary which will carry 15 marks. Each student will further observe the preparation of documents and

court papers by the Advocate and the procedure for the filing of the suit / petition. This will be recorded in the diary, which will carry 15 marks.

**OC-34.12.4.1.4 (effective from 26<sup>th</sup> September, 2003) c) The Fourth component of this Paper will be viva-voce examination on all the above 3 aspects. This will carry 10 marks.**

**OC-34.12.4.2 (effective from 26<sup>th</sup> September, 2003) PRACTICAL PAPER II (Drafting, Pleading and Conveyancing).**

The student shall maintain a journal containing documents drafted by them relating to the topics mentioned here below and the students shall be examined on the following topics:

**OC-34.12.4.2.1 (effective from 26<sup>th</sup> September, 2003) a) Drafting:-**

General principles of drafting and relevant substantive rules shall be taught.

**OC-34.12.4.2.2 (effective from 26<sup>th</sup> September, 2003) b) Pleading:**

**1. Civil**

- (i) Complaint
- (ii) Written Statement
- (iii) Interlocutory Application
- (iv) Original Petition
- (v) Affidavit
- (vi) Execution Petition and
- (vii) Memorandum of Appeal and revision
- (viii) Petition under Articles 226 and 32 of the Constitution of India.

**OC-34.12.4.2.3 (effective from 26<sup>th</sup> September, 2003) 2. Criminal**

- (i) Complaints
- (ii) Criminal Miscellaneous petition
- (iii) Bail Application and
- (iv) Memorandum of Appeal and Revision

**OC-34.12.4.2.4 (effective from 26<sup>th</sup> September, 2003) c) Conveyancing:**

- (i) Sale Deed
- (ii) Mortgage Deeds
- (iii) Lease Deeds
- (iv) Gift Deed
- (v) Promissory Note
- (vi) Power of Attorney
- (vii) Will

**OC-34.12.4.2.5 (effective from 26<sup>th</sup> September, 2003)** The candidate shall be evaluated for a maximum of 40 marks based on the various exercises on the above mentioned topics recorded in the journal. There shall be a written examination of 50 marks only, followed by Viva of 10 marks.

**OC-34.12.4.3 (effective from 26<sup>th</sup> September, 2003) PRACTICAL PAPER III (Professional Ethics, Accountancy for Lawyers and Bar Bench Relations)**

The students shall maintain a journal of their findings at the lawyer's office for 30 working days or training at an industrial concern or such trading house for a period of 30 days. They shall maintain a day-to-day journal. They are also required to record the selected judgments of the Bar Council and the

Supreme Court of India on Professional Ethics and Disciplinary Proceedings of the Bar Council.

There shall be Viva at the end of the semester.

The distribution of marks shall be attendance at a lawyers office/industrial house 50 marks. The record of selected judgment 40 marks, Viva 10 marks.

**OC-34.12.4.4 (effective from 26<sup>th</sup> September, 2003) PRACTICAL PAPER IV (Public Interest Lawyering, Legal Aid and Para Legal Services.)**

The student shall maintain a journal of their attendance at Legal Aid Cell, Legal Aid Camp, Legal Literacy and Para Legal Training. They are also encouraged to undertake public interest Lawyering. The record of their activities shall be maintained in a specified practical journal under the close supervision and guidance of a faculty member. The candidate shall be assessed for a maximum of 100 marks for the work done under this at the practical examination.

**OC-34.12.4.5 (effective from 18<sup>th</sup> October, 2004) Scheme of evaluation of practical papers.**

All the practical papers shall be evaluated at the College where the course is conducted and the marks allotted to the candidate shall be submitted to the University at the end of the semester.

The evaluation of the journal and the viva examination for which all the practical papers shall be conducted by a panel of two examiners appointed by the College who shall review the journal as well as interview the candidate at the place and time notified by the College.

**OC-34A (Effective from 27<sup>th</sup> July, 2011) ORDINANCE RELATING TO THE INTEGRATED FIVE YEAR DOUBLE DEGREE PROGRAMME IN LAW - BACHELOR OF ARTS AND BACHELOR OF LAWS (B.A.LL.B) AND/OR BACHELOR OF COMMERCE AND BACHELOR OF LAWS (B.Com. LL.B)**

**OC-34A GENERAL**

In order to provide professional legal education by conducting the law degree programme, there is a need to revise the existing LL.B. (honours) programme to B.A.LL.B and/or B.Com. LL.B. as per the recommendations of the Bar Council of India (vide Resolution No. 110/2008 of 14/9/2008). This ordinance shall come into effect for students who are admitted to the programme from academic year 2011-12 onwards.

**OC-34A.1 DURATION OF THE PROGRAMME:** The duration of the programme shall be 5 years of 10 semesters.

**OC-34A.1.1 DEGREE TO BE AWARDED:** The candidate who completes the 10 semesters successfully shall be awarded the degree of Bachelor of Arts and Bachelor of Laws (B.A. LL.B) and/or Bachelor of Commerce and Bachelor of Laws (B.Com. LL.B)



**OC-34A.1.2**            **MEDIUM OF INSTRUCTION:** The medium of instruction shall be English.

**OC-34A.1.3**            **(Notified on 25<sup>th</sup> July, 2017) ELIGIBILITY FOR ADMISSION**

**(i) ELIGIBILITY FOR ADMISSION TO FIRST YEAR B.A. LL.B. and/or B.Com. LL.B.**

Candidates who have passed the Higher Secondary of 12<sup>th</sup> Standard examination of Goa Board of Higher Secondary Education or any other equivalent examination recognized by Goa University in any stream of knowledge with a minimum of 45% marks (40% marks in case of SC/ST applicants and 42% for OBC applicants) shall be eligible for admission to the First Year provided the candidate:

- a) **(effective from 6<sup>th</sup> November, 2015)** – Deleted --
- b) appears and is declared passed at the common or college entrance examination.
- c) If the candidate is from any Board or University other than Goa Board of Higher Secondary Education the candidate obtains the eligibility certificate from Goa University.

**OC-34A.1.3(ii)**            **(Effective from 12<sup>th</sup> February, 2019) ELIGIBILITY FOR ADMISSION TO SECOND YEAR OF B.A. LL.B. and/or B.Com. LL.B.**

*Candidates who are eligible to appear for Semesters I and Semester II Examinations, shall be eligible for admission to Second Year B.A. LL.B. and/or B.Com. LL.B. irrespective of backlogs in Semester I and II.*

**OC-34A.1.3(ii)A**            **(Notified on 16<sup>th</sup> October, 2017)** -- Deleted --

**OC.34A.1.3(iii)**            **(Effective from 12<sup>th</sup> February, 2019) ELIGIBILITY FOR ADMISSION TO THIRD YEAR OF B.A. LL.B. and/or B.Com. LL.B.**

*Only those candidates, who have passed Semesters I and II, and are eligible to appear for Semesters III and Semester IV Examinations and have not more than five papers as backlog from Semesters III and IV taken together, shall be considered eligible for admission to the Third Year B.A. LL.B. and/or B.Com. LL.B..*

**OC-34A.1.3(iii)A**            **(Notified on 16<sup>th</sup> October, 2017)** -- Deleted --

**OC-34A.1.3(iv)**            **(Effective from 12<sup>th</sup> February, 2019) ELIGIBILITY FOR ADMISSION TO FOURTH YEAR OF B.A. LL.B. and/or B.Com. LL.B.**

*Only those candidates, who have passed Semesters I, II, III and IV, and are eligible to appear for Semesters V and Semester VI Examinations and have not more than five papers as backlog from Semesters V and VI taken together, shall be considered eligible for admission to the Fourth Year B.A. LL.B. and/or B.Com. LL.B.*

**OC-34A.1.3(iv)A**            **(Notified on 16<sup>th</sup> October, 2017)** -- Deleted --

**OC-34A.1.3(v) (Effective from 12<sup>th</sup> February, 2019) FOR ADMISSION TO FIFTH YEAR OF B.A. LL.B. and/or B.Com. LL.B.**

*Only those candidates, who have passed Semesters I, II, III, IV, V and VI examinations, and are eligible to appear for Semesters VII and Semester VIII Examinations and have not more than five papers as backlog in Semesters VII and VIII taken together, shall be considered eligible for admission to the Fifth Year B.A. LL.B. and/or B.Com. LL.B.*

**OC-34A.1.3(v)A (Notified on 16<sup>th</sup> October, 2017) -- Deleted –**

**OC-34A.1.3(vi) (Notified on 16<sup>th</sup> October, 2017)** In respect of the students who appear for two consecutive semesters, the result of the higher semester(s) can be declared irrespective of the performance in the lower semester(s). However, if there is a backlog in the preceding semester(s), the remark "Not Cleared Lower Examination (NCLE)" shall be shown in the remark column of the higher semester in which the student is successful.

**OC-34A.2 PROGRAMME STRUCTURE**

The Programme shall be a semester Programme of ten semesters. Each academic year shall consist of two semesters. Each semester shall consist of five courses including the practical courses.

**OC-34A.2.1 CONTACT HOURS**

(i) There shall be minimum of 8 contact hours per week in each of the 5 courses of a semester which would include lectures, seminars, workshops and other related classroom and practical activities.

(ii) Each contact hour shall be of 50 minutes.

(iii) The teaching schedule shall be arranged in such a way that five courses shall be taught during each semester. In addition, workload for teaching and guidance of a) legal aid and b) internship shall be calculated separately @ one lecture per week for a batch of 30 students.

(iv) The number of students per class/ division shall be limited to 60. If the intake of students exceeds 60 for a semester, the College should arrange for additional class / division.

(v) The programme shall be 5 years of 10 semesters. Each academic year shall consist of 2 semesters. Each semester shall consist of 5 courses of 100 marks including practicals.

(vi) Every student shall undergo 20 weeks compulsory internship spanning the entire programme. However, such internship shall not be more than 4 weeks in an academic year or at a time.

(vii) In addition, the student shall undergo training at the legal aid clinic established by the college for a minimum duration of 200 hours spanning over the entire programme of 5 years.

(viii) The students shall be grouped into batches of 30 for the purpose of internship and legal aid work. The batches may differ for legal aid and internship as per the convenience and arrangement of the college.

(ix) For the purpose of legal aid, the students shall be grouped into batches of 30 and each such batch shall be allotted to a faculty member to monitor, guide and certify their work. Such legal aid guidance shall be considered as part of work load of a teacher calculated @ one lecture per week for every batch.

(x) For the purpose of compulsory internship, the students shall be grouped into batches of 30, each such batch shall be allotted to a faculty to monitor, guide and certify their work. Such internship guidance shall be considered as part of work load of a teacher calculated @ one lecture per week for every batch.

(xi) A student shall opt for one major and two minor subjects other than law during the programme. A student shall not be allowed to opt the same subject as major and minor. A major subject shall consist of six courses and minor shall be of three courses.

(xii) The option of minor and major subject has to be decided by the College according to the availability of the teaching faculty. The College shall notify well in advance the major and minor subjects offered by them.

### **OC-34A.3**

#### **SCHEME OF EXAMINATION:**

(i) There shall be continuous internal assessment of 25 marks in each of the courses in every semester except the practical courses for which separate scheme is given.

(ii) The internal assessment component of 25 marks shall be carried out by the College by adopting suitable schemes and measures during the programme of the semester. The colleges may adopt and devise suitable internal assessment systems such as seminars, workshops, project writing, field work presentation in the respective semester. The scheme to be notified to the students in the beginning of the semester.

(iii) The marks allotted for internal assessment in each of the courses have to be submitted to the University by the concerned course faculty through the college in the prescribed input form provided by the University.

(iv) The internal marks shall be shown in the consolidated result register of the University.

(v) There shall be a semester end University examination in each theory course of every semester for a maximum of 75 marks (SEA).

(vi) The head of passing for each of the theory course shall be of 100 marks inclusive of 25 marks for internal assessment (ISA).

(vii) The semester end practical examination shall be of 100 marks. The semester end practical examination for each such practical course shall be conducted by the College towards the end of the semester but before the beginning of the theory examination of the semester. Marks to be submitted to University in the input Form received from the University.

### **OC-34A.3.1**

#### **CONDUCT OF SEMESTER END EXAMINATION**

(i) **Theory examination:** The theory examination for each of the course at the end of their respective semesters shall be a University examination as notified by the university.

(ii) The practical examination in each of the practical course shall be conducted by a panel of three examiners of which one may be an external examiner. In case of non availability of the third examiner the other two examiners shall conduct the practical examination.

(iii) The practical examination shall include scrutiny and verification of the journals and other records maintained by the students and a viva and written examination if necessary. The College should notify the scheme of allotment of marks at the beginning of the semester.

***(Effective from Academic year 2019-20 onwards)***

(iv) All Semester end Examinations shall be valued by two examiners and the average score of the two shall be the final score of the candidate. There shall be no revaluation.

**OC-34A.3.2**

**STANDARD OF PASSING**

To pass in a course a student shall obtain minimum 50% marks in aggregate (ISA & SEA taken together). The student shall be declared pass in a semester only if the student passes in all the courses of the semester.

**OC-34A.3.3**

**ELIGIBILITY FOR AWARD OF CLASS**

Class shall be awarded based on the total marks secured by the candidate at the two consecutive semesters of an academic year i.e. semester one and two or three and four or five and six or seven and eight or nine and ten, provided the candidate does not have any backlog and passes in all the courses of both the semesters in the first attempt.

Aggregate in a year (2 semesters):  $\geq 50\%$  and  $< 55\%$ : Pass Class

Aggregate in a year (2 semesters):  $\geq 55\%$  and  $< 60\%$ : Second Class

Aggregate in a year (2 semesters):  $\geq 60\%$  and  $< 70\%$ : First Class

Aggregate in a year (2 semesters):  $\geq 70\%$ : Distinction

**OC-34A.3.4**

**RANKS/AWARDS**

For the award of ranks/awards, the two semesters of the final year, i.e, ninth and tenth shall be taken into consideration, subject to other general conditions of the University. If an award is instituted for a particular course, marks scored in such course in the first attempt shall be considered subject to other general conditions of the University.

**OC-34A.3.5**

**IMPROVEMENT OF CLASS**

A candidate shall be permitted to improve his/her final year class. The candidate shall have one more opportunity to appear for the IX and X semester in one and same sitting, subject to the following conditions:

(i) The candidate has passed in the IX and X semester.

(ii) The internal marks allotted in the respective courses shall be carried forward.

(iii) The candidate shall appear for improvement within two years of the declaration of the BA. LL.B and/or B.Com. LL.B results i.e. the X semester results.

(iv) If the candidate fails to improve upon the performance, then earlier marks shall be retained.

**OC-35 (effective from 26<sup>th</sup> September, 2003) Ordinance relating to the Degree of LL.B.**

**OC-35.1 (effective from 26<sup>th</sup> September, 2003) Objectives**

In order to provide facility for professional education in the field of law to those students who graduate from various universities, colleges in Goa and elsewhere, the LL.B. Degree Programme full filled the need of the society for competent and qualified professional law graduates.

**OC-35.2 (effective from 26<sup>th</sup> September, 2003) (a) Eligibility for Admission to First Year LL.B.**

Any person who has obtained the Bachelor's Degree in any stream from Goa University or any other university recognized as equivalent by Goa University and has obtained the minimum of 45% marks in aggregate at the final year of the Degree examination, shall be eligible for admission to the First Year LL.B. Students from other universities should obtain eligibility from Goa University before seeking admission.

**OC-35.3 (effective from 26<sup>th</sup> September, 2003) (b) Eligibility for admission to Second Year LL.B.**

Only candidates who have passed the First Semester examination of the First Year LL.B. shall be eligible for admission to the Second Year LL.B.

**OC-35.4 (effective from 26<sup>th</sup> September, 2003) (c) Eligibility for admission to Third Year LL.B.**

Only candidates who have passed the First, Second and Third Semester examination shall be eligible for admission to the Third Year LL.B.

**OC-35.5 (effective from 26<sup>th</sup> September, 2003) (d) Eligibility for candidate from other universities.**

Irrespective of the above, the University may grant eligibility to students migrating from other universities depending upon the nature of the course and the subjects passed by them to a particular year/semester.

**OC-35.6 (effective from 26<sup>th</sup> September, 2003) Courses of study and curriculum.**

The LL.B. course shall be a semester course of six semesters each semester consisting of four papers of 100 marks each, in addition to four practical papers of 100 marks each to be evaluated during the Sixth Semester.

The subjects for each year shall be:

**OC-35.6.1 (effective from 26<sup>th</sup> September, 2003) FIRST YEAR LL.B. FIRST SEMESTER**

1. Contract I
2. Law of Crimes
3. Law of Torts
4. Legal language and Legal Writing

- OC-35.6.2 (effective from 26<sup>th</sup> September, 2003) SECOND SEMESTER**
1. Contract II
  2. Family Law I
  3. Constitutional Law
  4. Property Law including Easements.
- OC-35.6.3 (effective from 26<sup>th</sup> September, 2003) SECOND YEAR LL.B. THIRD SEMESTER**
1. International Law and Human Rights
  2. Administrative Law
  3. Jurisprudence
  4. Family Law II OR Family Law – II (Civil Law)
- OC-35.6.4 (effective from 26<sup>th</sup> September, 2003) FOURTH SEMESTER**
1. Environmental Law
  2. Law of Evidence
  3. Company Law
  4. Optional Paper (any one)
    - a. Law, Poverty and Development
    - b. Insurance Law
    - c. Banking Law including Consumer Protection Act.
- OC-35.6.5 (effective from 26<sup>th</sup> September, 2003) THIRD YEAR LL.B. FIFTH SEMESTER**
1. Arbitration and Conciliation
  2. Civil Procedure Code
  3. Criminal Procedure Code
  4. Taxation / Comparative Law
- OC-35.6.6 (effective from 26<sup>th</sup> September, 2003) SIXTH SEMESTER**
1. Interpretation of Statutes
  2. Labour Law
  3. Land Laws including Ceiling and any other local laws
  4. Optional (any one)
    - a. Criminology
    - b. Law and Medicine
    - c. Intellectual Property Law
    - d. Trusts, Equity and Fiduciary relationships
- OC-35.6.7 (effective from 26<sup>th</sup> September, 2003) COMPULSORY PRACTICAL SUBJECTS**
- a. Practical Paper I – Drafting, Pleading and Conveyancing
  - b. Practical Paper II – Professional Ethics, Accountancy for Lawyers and Bar – Bench relations.
  - c. Practical Paper III – Moot Court, Pre Trial etc.
  - d. Practical Paper IV- Public Interest, Legal Aid and Para legal Services.

The syllabus for the course of in each of the subjects shall be as prescribed by the Board of Studies and approved by the Academic Council of the University.

- OC-35.7 (effective from 26<sup>th</sup> September, 2003) Scheme of teaching of practical papers**
- Practical papers are introduced as part of the syllabus as per the recommendation of the Bar Council of India. The purpose of practical papers is to give practical experience to the students as effectively as possible, since the

four practical papers deal with four different aspects of practice, they are to be taught differently.

- OC-35.7.1 (effective from 26<sup>th</sup> September, 2003) XL)** For the LL.B. Three Year Degree Course, the practical papers are to be taught during the three years without any particular slot. The scheme is such that for each academic year, a duration of 8 lectures per week are to be allotted for each year for practical papers. These 8 lectures per week per year are to be distributed for the four practical papers depending upon the nature of practical work to be done by the students.
- OC-35.8. (effective from 26<sup>th</sup> September, 2003) XL1) Practical paper I**  
Practical Paper I is to be taught through classroom exercise, discussion, presentation of most court cases, observation of trial with the help of practicing lawyer, verification of records of such trial maintained by the students periodically by the subject teachers.
- OC-35.8.1 (effective from 26<sup>th</sup> September, 2003) a) Moot Courts**  
Moot Courts are to be taught through classroom teaching, personal guidance, and presentation of moot court cases by the students in open classroom or on specified dates.
- OC-35.8.2 (effective from 26<sup>th</sup> September, 2003) b) Interview techniques**  
The topic of interview techniques to be taught through stimulated exercises presentation of cases, interview sessions through audio and videotapes.  
Students are required to note their findings, observations and advice and record in their journal.
- OC-35.8.3 (effective from 26<sup>th</sup> September, 2003) c) Attendance at lawyer's office**  
The interview techniques have to be further substantiated by the students attending lawyer's office for a period of 30 days and maintain a diary of their observation or proceedings, manner of handling of clients, manner of case discussion with the clients and review of the advice given to the client. Students are required not to mention the names of the clients. They are required to maintain a diary on a day-to-day basis.
- OC-35.9 (effective from 26<sup>th</sup> September, 2003) XLII) Practical Paper II**  
Practical paper II is related to classroom teaching. In addition to teaching the techniques of drafting and pleading, the students are to be taught by means of classroom lectures, the various specific drafts and kinds of pleadings and conveyancing. They are required to prepare their own draft documents in their journal based on the guidance provided by the faculty in charge of the subject.
- OC-35.10 (effective from 26<sup>th</sup> September, 2003) XLIII) Practical paper III**
- OC-35.10.1 (effective from 26<sup>th</sup> September, 2003) a) Accountancy for lawyers**  
The topic of accountancy for lawyers is to be taught with the help of an accounting expert preferably a chartered accountant. The students are to be taught the basic principles of accounting followed by exercise in accounting based on the nature of transactions that may come up before an advocate.
- OC-35.10.2 (effective from 26<sup>th</sup> September, 2003) b) Professional ethics**  
Professional ethics is to be taught by classroom lectures stimulated exercises use of audio and video etc. The aim of teaching this topic is to ensure their understanding of the need and importance of professional ethics for a

practitioner of law. The students are required to prepare various exercises based on various situations/problems provided by the faculty.

- OC-35.10.3 (effective from 26<sup>th</sup> September, 2003) C) BAR BENCH RELATIONS**  
The topic has to be taught through classroom teaching, study of disciplinary cases before the Bar Council of India and appeal to the Supreme Court. The students are required to prepare summary of 10 such cases allotted to them by the faculty in charge.
- OC-35.11 (effective from 26<sup>th</sup> September, 2003) XLIV) Practical paper IV**
- OC-35.11.1 (effective from 26<sup>th</sup> September, 2003) a) Public interest Lawyering**  
Public interest Lawyering is to be taught by classroom lectures followed by exercises where the students are trained to identify matters of public interest. They are required to study PIL's that have come up before the Supreme Court and High Court. They should be encouraged to identify public causes and even file public interest litigation wherever possible. All the activities carried out under this have to be recorded in the journal.
- OC-35.11.2 (effective from 26<sup>th</sup> September, 2003) b) Legal Aid**  
Students are required to attend legal aid cells with the guidance of faculty members and render free legal service to the public. The activity may be carried out by a regular legal aid cells activity or by special legal aid programmes.
- OC-35.11.3 (effective from 26<sup>th</sup> September, 2003) c) Para Legal Service**  
This activity is carried out under the guidance of a faculty by organizing legal awareness programmes in high schools, colleges, public places, markets, gram sabhas etc.
- The students are required to maintain a record of the activities and the cumulative effect of their activity has to be evaluated at the practical examination.
- OC-35.12 (effective from 26<sup>th</sup> September, 2003) Scheme of Examination**  
Theory Paper  
There shall be an examination for each of the paper at the end of each of the semester for a maximum of 100 marks of 3 hour duration.
- The paper setters and the examiners for each of the theory paper shall be appointed by the University from the panel of examiners approved by the Board of Studies in Law and the Academic Council.
- There shall be two paper setters one internal and one external for each of the theory papers.
- The internal paper setter shall be a person who is teaching the subject or has taught the respective subject. The examination paper shall be set by the external paper setter and sent to the internal paper setter to verify that the questions are within the syllabus and as per the approved pattern, who shall submit it to the Controller of Examinations.
- OC-35.12.1 (effective from 14<sup>th</sup> July, 2005) Evaluation of answer scripts**  
Evaluation of answer scripts shall be by an examiner appointed from the panel prepared by the Board of Studies in Law.
- OC-35.12.2 (effective from 24<sup>th</sup> October, 2005) Standard of Passing**



To pass in a subject the candidate shall obtain minimum 40% marks in each of the papers / subjects in each of the semester examination. The candidate shall be exempted, from appearing for a particular paper in the subsequent examination if he/she obtains 40% of the maximum marks in that subject.

The arrangement for class shall be as follows:

Aggregate  $\geq$  40% and  $<$  50% Pass Class

Aggregate  $\geq$  50% and  $<$  60% Second Class

Aggregate  $\geq$  60% and  $<$  70% First Class

Aggregate  $\geq$  70% and above First Class with distinction.

The class for each academic year shall be based on the performance of the candidate in the two semesters of that academic year Semester I and II, Semester III and IV, Semester V and VI.

**OC-35.12.3 (effective from 26<sup>th</sup> September, 2003) Scheme of teaching of practical papers**

The scheme of practical papers shall be announced at the beginning of the semester. The four practical papers shall be taught concurrently along with the theory papers from the First to the Sixth Semester. The colleges shall evolve their own scheme for teaching of the practical papers during each of the semester. The students shall maintain a practical journal for each of the practical papers. The examination for the four practical papers shall be conducted by the college before the end of the Sixth Semester. As per the scheme of marking provided here below.

**OC-35.12.4 (effective from 26<sup>th</sup> September, 2003) Scheme of Practical examination**

The practical examination for the 4 practical papers shall be as per the scheme prescribed by the Bar Council of India and approved by the University. At the end of the Sixth Semester there shall be a practical examination conducted by the concerned college. For the purpose of conducting the practical examination, the colleges may levy such fees and pay such remuneration to the examiners as approved by the Board of Studies in Law and the Academic Council. The scheme of practical examination and the allotment of marks shall be as follows:

**OC-35.13 (effective from 26<sup>th</sup> September, 2003) PRACTICAL PAPER I**

(Moot court, Pre Trial Preparations and participation in pre trial proceedings, detailed as below:)

This paper will have three components of 30marks each and a viva for 10 marks.

**OC-35.13.1 (effective from 26<sup>th</sup> September, 2003) a) Moot Court (30 marks)**

Every student will do at least 3 moot courts in a year with 10 marks for each. The moot court work will be on assigned problems and it will be evaluated for 5 marks for written submissions and 5 marks for oral advocacy.

**OC-35.13.2 (effective from 26<sup>th</sup> September, 2003) b) Observance of trial in two cases, one civil and one criminal (30 marks)**

Students will attend two trials in the course of the last 2 or 3 years of L.L.B. studies. They will maintain a record and enter the various steps observed during their attendance on different days in the Court assignment. This scheme will carry 30 marks

**OC-35.13.3 (effective from 26<sup>th</sup> September, 2003) c) Interviewing techniques and Pre trial preparations (30 marks)**

Each student will observe two interviewing sessions of clients at the Layer's Office / Legal aid Office and record the proceedings in a diary which will carry 15 marks. Each student will further observe the preparation of documents and court papers by the Advocate and the procedure for the filing of the suit / petition. This will be recorded in the diary, which will carry 15 marks.

**OC-35.13.4 (effective from 26<sup>th</sup> September, 2003)** d) The fourth component of this paper will be Viva Voce examination on all the above 3 aspects. This will carry 10 marks.

**OC-35.14 (effective from 26<sup>th</sup> September, 2003)\_PRACTICAL PAPER II**  
(Drafting, Pleading and Conveyancing.)  
The students shall maintain a record in their journal of drafting of documents of the following types based on topics assigned by the college.

**OC-35.14.1 (effective from 26<sup>th</sup> September, 2003) a) Drafting**  
General principles of drafting and relevant substantive rules shall be taught.

**OC-35.14.2 (effective from 26<sup>th</sup> September, 2003) b) Pleadings:**  
Civil  
(i) Complaint  
(ii) Written Statement  
(iii) Interlocutory Application  
(iv) Original Petition  
(v) Affidavit  
(vi) Execution Petition and  
(vii) Memorandum of Appeal and revision  
(viii) Petition under Article 226 and 32 of the Constitution of India

**OC-35.14.3 (effective from 26<sup>th</sup> September, 2003) c) Criminal**  
(i) Complaints  
(ii) Criminal Miscellaneous petition  
(iii) Bail Application and  
(iv) Memorandum of Appeal and Revision

**OC-35.14.4 (effective from 26<sup>th</sup> September, 2003) d) Conveyancing**  
(i) Sale Deed  
(ii) Mortgage Deeds  
(iii) Lease Deeds  
(iv) Gift Deed  
(v) Promissory Note  
(vi) Power of Attorney  
(vii) Will

The candidate shall be evaluated for a maximum of 40 marks based on the various exercises on the above-mentioned topics recorded in the journal. There shall be a written examination of 50 marks only, followed by Viva of 10 marks.

**OC-35.15 (effective from 26<sup>th</sup> September, 2003) PRACTICAL PAPER III**  
(Professional Ethics, Accountancy for Lawyers and Bar Bench Relations)

The students shall maintain a journal of their findings at the lawyer's office for 30 working days or training at an industrial concern or such trading house for a period of 30 days. They shall maintain a day-to-day journal. They are also required to record the selected judgments of the Bar Council and the Supreme Court of India on Professional Ethics and Disciplinary Proceedings. There shall

be Viva at the end of the semester. The distribution of marks shall be attendance at a lawyers office/industrial house 50 marks. The record of selected judgments 40 marks, Viva 10 marks.

- OC-35.16 (effective from 26<sup>th</sup> September, 2003) PRACTICAL PAPER IV**  
(Public Interest Lawyering, Legal Aid and Para Legal Services)  
The student shall maintain a journal of their attendance at Legal Aid Cell, Legal Aid Camp, Legal Literacy and Para Legal Training. They are also encouraged to undertake public interest Lawyering. The record of their activities shall be maintained in a specified practical journal under the close supervision and guidance of a faculty member. The candidate shall be assessed for a maximum of 100 marks for the work done under this at the practical examination.
- OC- 35A (Effective from 27<sup>th</sup> July, 2011) ORDINANCE RELATING TO THREE YEAR LL.B DEGREE PROGRAMME IN LAW**
- OC-35 -A GENERAL**
- In order to provide professional legal education by conducting the law degree programme, there is a need to revise the existing LL.B. Degree programme as per the recommendations of the Bar Council of India (vide Resolution No. 110/2008 of 14/9/2008). This ordinance shall come into effect for students who are admitted to the programme from academic year 2011-12 onwards.
- OC-35A.1 DURATION OF THE PROGRAMME:** The duration of the Programme shall be 3 years of 6 semesters.
- OC-35 A.1.1 DEGREE TO BE AWARDED:** The candidate who completes the 6 semester Programme successfully shall be awarded the degree of LL.B.
- OC-35 A.1.2 MEDIUM OF INSTRUCTION:** The medium of instruction shall be English.
- OC-35A.1.3 ELIGIBILITY FOR ADMISSION:**
- (i) **ELIGIBILITY FOR ADMISSION TO FIRST YEAR OF LL.B.**
- a) **(Notified on 25<sup>th</sup> July, 2017)** Any person who has graduated in any discipline from Goa University or any other university recognized as equivalent by Goa University and has obtained a minimum of 45% marks in aggregate (40% in case of SC/ST applicants and 42% in case of OBC applicants) at the final year of the Degree examination or an equivalent grade point shall be eligible for admission to the First Year LL.B. provided students from other than Goa University should obtain the necessary eligibility certificate from Goa University before seeking admission.

b) **(effective from 6<sup>th</sup> November, 2015)** – Deleted –

**OC-35A.1.3(ii) (Notified on 16<sup>th</sup> October, 2017) ELIGIBILITY FOR ADMISSION TO SECOND YEAR OF LL.B.**

Candidates who are eligible to appear for Semesters I and II shall be automatically eligible for admission to Second Year LL.B. irrespective of backlogs in Semesters I and II.

**OC-35A.1.3(ii)A (Notified on 16<sup>th</sup> October, 2017) -- Deleted --**

**OC-35A.1.3(iii) (Notified on 16<sup>th</sup> October, 2017) ELIGIBILITY FOR ADMISSION TO THIRD YEAR OF LL.B.**

Only those candidates, who have passed Semesters I and II, fulfilled the requirement of the Semesters III and IV and have not more than five papers as backlog from Semesters III and IV taken together, shall be considered eligible for admission to the Third Year LL.B.

**OC-35A.1.3(iii)A (Notified on 16<sup>th</sup> October, 2017) -- Deleted --**

**(iv) ELIGIBILITY FOR CANDIDATES FROM OTHER UNIVERSITIES**

University may grant eligibility to students migrating from other Universities depending on the nature of Programme and the Programme passed by them to a particular year/semester on a case to case basis.

**OC-35A.1.3(v) (Notified on 16<sup>th</sup> October, 2017)** In respect of the students who appear for more than one semester, the result of the higher semester(s) can be declared irrespective of the performance in the lower semester(s). However, if there is a backlog in the preceding semester(s), the remark 'Not Cleared Lower Examinations' (NCLE) shall be shown in the remark column of the higher semester in which the student is successful.

**OC-35A.2 SEMESTER PROGRAMME**

The LL.B. Programme shall be a semester Programme of six semesters. Each academic year shall consist of two semesters. Each semester shall consist of five courses of 100 marks each including the practical courses.

- (i)** Every student should undergo 12 weeks compulsory internship during the three years, such internship shall not be more than 4 weeks in an academic year or at a time.
- (ii)** The student shall also undergo training at the legal aid clinic established by the College for a minimum duration of 150 hours during the Programme of three years.
- (iii)** The students shall be divided into batches of 30 for the purpose of internship and legal aid work. The batches may differ for legal aid and internship as per the convenience and arrangement of the college.
- (iv)** For the purpose of legal aid, the students shall be divided into batches of 30 and each such batch shall be allotted to a faculty to monitor, guide and certify their work. Such legal aid guidance shall be considered as part of workload of a teacher calculated @ one lecture per week for every batch.

- (v) For the purpose of compulsory internship, the students shall be divided into batches of 30, each such batch shall be allotted to a faculty to monitor, guide and certify their work. Such internship guidance shall be considered as part of workload of a teacher calculated @ one lecture per week for every batch.

### **OC-35A.3 CONTACT HOURS**

- (i) There shall be minimum of 8 contact hours per week in each of the 5 courses of a semester which would include lectures, seminars, workshops and other related classroom and practical activities.
- (ii) Each contact hour shall be of 50 minutes.
- (iii) The teaching schedule shall be arranged in such a way that five courses shall be taught during each semester. In addition, workload for teaching and guidance of a) legal aid and b) internship shall be calculated separately @ one lecture per week for a batch of 30 students.
- (iv) The number of students per class/ division shall be limited to 60. If the intake of students exceeds 60 for a semester, the College should arrange for additional class / division.
- (v) The programme shall be of 6 semesters i.e. 3 years. Each academic year shall consist of 2 semesters. Each semester shall consist of 5 courses of 100 marks each including practicals.
- (vi) Every student shall undergo 12 weeks compulsory internship spanning the entire programme. However, such internship shall not be more than 4 weeks in an academic year or at a time.
- (vii) In addition, the student shall undergo training at the legal aid clinic established by the college for a minimum duration of 120 hours during the 3 years.
- (viii) The students shall be grouped into batches of 30 for the purpose of internship and legal aid work. The batches may differ for legal aid and internship as per the convenience and arrangement of the college.
- (ix) For the purpose of legal aid, the students shall be grouped into batches of 30 and each such batch shall be allotted to a faculty to monitor, guide and certify their work. Such legal aid guidance shall be considered as part of work load of a teacher calculated @ one lecture per week for every batch.
- (x) For the purpose of compulsory internship, the students shall be grouped into batches of 30, each such batch shall be allotted to a faculty to monitor, guide and certify their work. Such internship guidance shall be considered as part of work load of a teacher calculated @ one lecture per week for every batch.

### **OC-35A.4 SCHEME OF EXAMINATION:**

- (i) There shall be a semester end University examination in each theory course of every semester for a maximum of 100 marks .
- (ii) The semester end practical examination shall be of 100 marks. The semester end practical examination for each such practical course shall be conducted by the College towards the end of the semester but before the beginning of the theory examination of the semester. Marks to be submitted to University in the input Form.

#### **OC-35A.4.1 CONDUCT OF SEMESTER END EXAMINATION**

- (i) **Theory examination:** The theory examination for each of the papers at the end of their respective semesters shall be a university examination as notified by the University.
- (ii) The practical examination in each of the practical course shall be conducted by a panel of three examiners of which one may be an external examiner. In case of non-availability of the third examiner, the other two examiners shall conduct the practical examination.
- (iii) The practical examination shall include scrutiny and verification of the journals and other records maintained by the students and a viva and written examination if necessary. The College should notify the scheme of allotment of marks at the beginning of the semester.

#### **(effective from 19<sup>th</sup> July,2019)**

**iv)** All Semester end Examinations shall be valued by two examiners and the average score of the two shall be the final score of the candidate. There shall be no revaluation.

#### **OC-35A.4.2 STANDARD OF PASSING**

To pass in a programme a student shall obtain minimum 40% marks. The student shall be declared pass in a semester only if the student passes in all the courses of the semester.

#### **OC-35A.4.3 ELIGIBILITY FOR AWARD OF CLASS**

A class for passing examination shall be awarded at the end of each academic year examination, provided the candidate does not have any backlog and passes in all the courses of the semester in the first attempt.

First year: based on marks in semester I and semester II.

Second year: based on marks in semester III and semester IV.

Third year: based on marks in semester V and semester VI.

Class for the degree is based on marks obtained in semester V and semester VI.

Aggregate in a year (2 semesters): ≥40% and <50%: Pass Class.

Aggregate in a year (2 semesters): ≥50% and <60%: Second Class

Aggregate in a year (2 semesters): ≥60% and <70%: First Class

Aggregate in a year (2 semesters): ≥70%: Distinction

#### **OC-35A.4.4**

#### **RANKS/AWARDS**

For the award of ranks/awards, the two semesters of the final year, i.e. fifth and sixth shall be taken into consideration, course to other general conditions of the University. If an award is instituted for a particular programme, marks scored in such programme in the first attempt shall be considered course to other general conditions of the University.

#### **OC-35A.4.5**

#### **IMPROVEMENT OF CLASS**

A candidate shall be permitted to improve his result in the final year Class of LL.B. Programme. The candidate shall have one more opportunity to appear for the V and VI semester in one and same sitting, subject to the following conditions:

(i) The candidate has to pass in the V and VI semester of LL.B.

(ii) The candidate shall appear for improvement within two years of the declaration of the LL.B. results i.e. the VI semester results.

(iii) If the candidate fails to improve upon the performance the earlier marks shall be retained.

#### **OC-36**

**(effective from 26<sup>th</sup> September, 2003) Ordinance relating to the Foundation course and the Bachelor of performing Art Degree Course in Hindustani Classical Music.**

#### **OC-36.1**

**(effective from 26<sup>th</sup> September, 2003) Aims and Objectives of the Courses:-** The aims of the courses are to impart a full time professional training in Hindustani classical Vocal Music & Instrumental Music such as Sitar, Harmonium and Tabla / Pakhawaj, etc. leading to the Degree of Bachelor of Performing Art.

#### **OC-36.2**

**(effective from 26<sup>th</sup> September, 2003) Duration of the Courses:**

1. Foundation Course in Music : 2 Years.
2. Bachelor of Performing Art (BPA) : 4 Years.

#### **OC-36.3**

**(effective from 26<sup>th</sup> September, 2003) Admission and Eligibility:**

#### **OC-36.3.1**

**(effective from 26<sup>th</sup> September, 2003) A – Foundation Course**

#### **OC-36.3.1.1**

**(effective from 26<sup>th</sup> September, 2003) 1)** Students who have passed S.S.C. or above and having Musical background shall be admitted to the First Year of the Foundation Course.

#### **OC-36.3.1.2**

**(effective from 26<sup>th</sup> September, 2003) 2)** Students who have passed XI Std. and possessing a diploma "Sangeet Madhyama" or higher or its equivalent diploma of the recognized Music Institution or those completing basic training

in Music, from a qualified Guru / Teacher shall be admitted to IInd year of Foundation Course directly.

**OC-36.3.1.3 (effective from 26<sup>th</sup> September, 2003)** 3) In addition to above, to be eligible for admission to the course a candidate has to pass the entrance test conducted by the College concerned with minimum 40% marks.

**OC-36.3.2 (effective from 26<sup>th</sup> September, 2003) B – Bachelor of Performing Art (B.P.A)**

**OC-36.3.2.1 (effective from 26<sup>th</sup> September, 2003)** 1) Students passing Foundation Course in Music of Goa University shall be eligible for admission to First Year of Bachelor of Performing Art Degree Course.

**OC-36.3.2.2 (effective from 26<sup>th</sup> September, 2003)** 2) Students passing Second Year B. Music (Old Course) of Goa University shall be eligible for admission to First Year of Bachelor of Performing Art Degree Course.

**OC-36.3.2.3 (effective from 26<sup>th</sup> September, 2003)** 3) Students who have passed H.S.S.C. Examination i.e. 10+2 with Music in + two shall be admitted to First Year of Bachelor of Performing Art Degree Course.

**OC-36.3.2.4 (effective from 26<sup>th</sup> September, 2003)** 4) Students who have passed H.S.S.C.E. or above and who have also passed Sangeet Madhyama or Higher Examination or any other equivalent diploma of the recognized Music Institution or having minimum three years foundational training in Music from a qualified Guru / Teacher shall be admitted to the First Year of B.P.A. Course.

**OC-36.3.2.5 (effective from 26<sup>th</sup> September, 2003)** 5) In addition to above, to be eligible for admission to the B.P.A. Degree Course a candidate has to pass the entrance test conducted by the College concerned with minimum 40% marks.

**OC-36.4 (effective from 26<sup>th</sup> September, 2003) Structure of the Courses:**

**OC-36.4.1 (effective from 26<sup>th</sup> September, 2003) A – Foundation Course:**

There shall be 3 papers in theory and 2 papers in practicals for the First and Second Year and the titles of the papers shall be as decided by the Board of Studies from time to time. The number of lectures/ periods for the different papers for a week shall be as under:

**A**

	<b>Paper</b>	<b>No. of Lectures / Periods for a week</b>
Ist Year and	English	3 periods each for 45 minutes duration.
IInd Year	Hindi	3 periods each for 45 minutes duration.
	Music Theory	1 periods for 45 minutes duration.
	Practical (Music)	6 periods each for 45 minutes duration per batch of maximum 6 students for each subject.
	Elected / Minor paper in Music	



		2 periods each for 45 minutes duration in Music per batch of maximum 6 students for each elected paper (Subject).
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Students who have passed H.S.S.C. examination or higher examination shall be exempted from appearing for language papers English and Hindi at the examination of First and Second Year of Foundation Course. The students who have failed in H.S.S.C. Examination but passed in Language papers English and Hindi at the said examination shall be also exempted from appearing for above language papers at the examination of First and Second Year of Foundation Course.

**OC-36.4.2 (effective from 31<sup>st</sup> May, 2010) B – Bachelor of Performing Art:**

**OC-36.4.2.1 (effective from 31<sup>st</sup> May, 2010) 1) Ist Year B.P.A.:**

There shall be 5 papers in theory and 1 paper in Practical for First year B.P.A. and the title of the paper shall be as decided by the Board of Studies from time to time. The number of lectures/ periods per week shall be as under:

<b>Paper</b>	<b>No. of Lectures / Periods per week</b>
English	3 periods each of 45 minutes duration
Hindi	3 periods each of 45 minutes duration
Indian Culture and Art	2 periods each of 45 minutes duration
Environmental Studies	2 periods each of 45 minutes duration
Music Theory(Gen. & Applied)	1 period of 45 minutes duration
Music Practical	6 periods each of 45 minutes duration per batch of 6 students per subject.

**OC-36.4.2.2 (effective from 31<sup>st</sup> May, 2010) 2) IInd and IIIrd Year B.P.A.:**

There shall be 1 paper in music theory, 1 paper in subsidiary (Theory and Practical) and 2 papers in Music Practicals for IInd & IIIrd Year B.P.A. and the title of the papers shall be as decided by the Board of Studies from time to time. The number of lectures/ periods per week shall be as under:

<b>Paper</b>	<b>No. of Lectures/ Periods per week</b>
Music Theory	1 period of 45 minutes duration
Subsidiary	2 periods each of 45 minutes duration
Theory and /Practical Music Practicals	10 periods each of 45 minutes duration per batch of 6 students per subject.

**OC-36.4.2.3 (effective from 31<sup>st</sup> May, 2010) IVth Year B.P.A.:**

There shall be one paper in music theory, one paper in Special Assigned Project and two papers in music Practicals for IVth Year B.P.A. and the title of the papers shall be as decided by the Board of Studies from time to time. The number of lectures/periods per week shall be as under:

<b>Paper</b>	<b>No. of Lectures/ Periods per week</b>

Music Theory	1 period of 45 minutes duration
Special Assigned Project	To be completed within the academic year.
Music Practicals	10 periods each of 45 minutes duration per batch of maximum 6 students per subject.

The candidates are permitted to answer their theory papers either in English, Hindi, Konkani or Marathi. However, the candidate shall answer the paper in one language only and the candidate shall notify the choice of language at the time of admission. However, the question paper shall be set in Hindi only. The language paper shall be in the respective language only.

**OC-36.5 (effective from 26<sup>th</sup> September, 2003) (1) – Scheme of Examination :**  
The candidates shall be examined in the following subjects and the duration of papers and marks allocation shall be as under:

**OC-36.5.1 (effective from 26<sup>th</sup> September, 2003) A – Foundation Course : First and Second**

<b>Year Examination</b>		Vocal & Instrumental Music	Marks	Duration
Paper No. 1	English		100	3 hrs.
Paper No. 2	Hindi		100	3 hrs.
Paper No. 3	Music Theory		100	3 hrs.
Paper No. 4	Music Practical-1 (Major Music)	150	----	
Paper No. 5	Music Practical – II (Minor Music)		150(75+75)	in two elected Subject

**OC-36.5.2 (effective from 31<sup>st</sup> May, 2010) B – Bachelor of Performing Art (B.P.A) in Vocal and Instrumental Music.**

**OC-36.5.2.1 (effective from 31<sup>st</sup> May, 2010)**

<b>Ist Year BPA Vocal and Instrumental Music</b>		<b>Marks</b>	<b>Duration</b>
Paper No.1	English	75	2½ hrs.
Paper No.2	Hindi	75	2½ hrs.
Paper No.3	Indian Culture & Art	50	2 hrs.
Paper No.4	Environmental Studies	100	3 hrs.
Paper No.5	Theory(Applied and General)	75	2½ hrs.
Paper No.6	Practical	225	30 minutes per candidate
	a) Viva voce	100	
	b) Other forms of		
	<b>Music and Talas</b>	<b>75</b>	
	c) Stage Performance	50	

**OC-36.5.2.2 (effective from 31<sup>st</sup> May, 2010)**

<b>IIInd &amp; IIIrd Year B.P.A. Vocal &amp; Instrumental- Music</b>		<b>Marks</b>	<b>Duration</b>
Paper No.1	Theory (Applied & General)	100	3 hrs.
Paper No.2	Subsidiary Practical/Theory in Tabla/ Harmonium	100	
	a) Practical 50		15 minutes per candidate
	b) Theory 50		2 hrs
Paper No.3	Practical-I	250	35 to 40 minutes per candidate
	a) Viva-Voce 150		(together for both)
	b) Other forms 100		
Paper No.4	Practical-II	100	20 minutes per candidate
	Stage Performance		
	Internal (Continuous) Assessment	50	

**OC-36.5.2.3 (effective from 31<sup>st</sup> May, 2010)**

<b>IVth Year B.P.A. Vocal &amp; Instrumental Music</b>		<b>Marks</b>	<b>Duration</b>
Paper No.1	Theory (Applied & General)	100	3 hrs.
Paper No.2	Special Assigned Project	100	To be completed within the academic year.
Paper No.3	Practical-I	250	40 to 50 minutes per candidate
	c) Viva-Voce 150		(together for both)
	d) Other forms 100		
Paper No.4	Practical-II	100	30 to 40 minutes per candidate
	Stage Performance		
	Internal (Continuous) Assessment	50	

**OC-36.5.3 (effective from 31<sup>st</sup> May, 2010) (2) – Setting of question papers and the number of examiners for the various examinations:**

The question papers for Second Year Foundation Course as well as Second, Third and Fourth (Final) Year Bachelor of Performing Arts Degree Course shall be set by Internal Examiner in consultation with the External Examiners. Internal Examiner shall be convenor of the Board of Examiners for the respective paper. Same teacher may be appointed as Convenor for more than one paper, if required. The Practical examinations of both the above courses shall be conducted jointly by the Internal and External Examiner. Practical examinations pertaining to Paper No.3 and Paper No. 4 of Second, Third and Fourth Year B.P.A. shall be conducted by the same examiner. The Internal and External Examiners shall be appointed as per the provision of OB-4.

The setting of question papers and conducting practical examinations of the Annual Internal examination of First year of Foundation Course and First year of B.P.A. shall be executed by the College on behalf of the Goa University by appointing Internal Examiners.

The number of Examiners to be appointed for the Examination in Music courses shall be as follows :

**OC-36.5.3 (effective from 31<sup>st</sup> May, 2010) A-Foundation Course:**

**OC-36.5.3.1 (effective from 31<sup>st</sup> May, 2010) 1) No. of Examiners:**

<b>Theory Examination</b>	<b>Practical Examination</b>
Internal - 1	Internal - 1
External - 1	External - 1

**OC-36.5.3.1.2 (effective from 31<sup>st</sup> May, 2010) Eligibility for External Examiner:**

- a) Master's Degree in relevant subject of recognized University or its equivalent Diploma.
- b) Minimum three years teaching experience at undergraduate Level.

**OR**

- a) & b) A performing artist having excellence in the subject concerned and having minimum five years experience as a performer.

**OC-36.5.3.2 (effective from 31<sup>st</sup> May, 2010) B-Bachelor of Performing Art (B.P.A.) Degree Course:**

**OC-36.5.3.2.1 (effective from 31<sup>st</sup> May, 2010) No. of Examiners:**

<b>Theory Examination</b>	<b>Practical Examination</b>
Internal -1	Internal - 1
External -1	External - 1

**OC-36.5.3.2.2(effective from 31<sup>st</sup> May, 2010) 3) Eligibility for External Examiner:**

- (a) Master's Degree in relevant subject with minimum 55% marks of recognized University or its equivalent Diploma.
- (b) Minimum three years teaching experience at Post Graduate Level.

**OR**

- (a) & b) A performing artist of professional standard having commendable achievement in the subject concerned with minimum ten years experience as a Performer.

**OC-36.6 (effective from 26<sup>th</sup> September, 2003) Pattern of Examination**

**OC-36.6.1 (effective from 26<sup>th</sup> September, 2003) (i) Examination shall be conducted annually :** The IInd Year Examination of Foundation Course and IInd, IIIrd and IVth Year examination of B.P.A. course shall be conducted by Goa University and Ist Year examination of Foundation Course as well as First Year B.P.A. examination shall be Internal and conducted by the College on behalf of the University.

**OC-36.6.2 (effective from 26<sup>th</sup> September, 2003) (ii) Eligibility for Annual Examination :**To be eligible to qualify for appearing at the annual examination a student shall have attendance of at least 75% of the total during the

academic year and have appeared the terminal examination conducted by the College.

**OC-36.6.3 (effective from 26<sup>th</sup> September, 2003) (iii) Standard of Passing :**

**OC-36.6.3.1 (effective from 26<sup>th</sup> September, 2003) A - Foundation Course:**  
To pass the examination, a candidate must obtain a minimum of 35% of the full marks in each paper both theory and practical examinations i.e. 17 out of 50, 26 out of 75, 35 out of 100 and 53 out of 150 marks.

**OC-36.6.3.2 (effective from 26<sup>th</sup> September, 2003) B - Bachelor of Performing Art :**  
To pass the examination of B.P.A. a candidate must obtain a minimum of 40% of full marks in each paper of Theory and Practical Examination respectively.

**OC-36.6.3.3 (effective from 26<sup>th</sup> September, 2003) C – Grace marks shall be awarded as per the University rules.**

**OC-36.6.4 (effective from 26<sup>th</sup> September, 2003) Award of Classes :**

**OC-36.6.4.1 (effective from 26<sup>th</sup> September, 2003) 1) Class shall be awarded on the following basis to the successful candidates:**

**Foundation Course**

(A) Distinction	.. 70% marks and above
(B) First Class	.. 60% marks and above but below 70%
(C) Second Class	.. 50% and above but below 60%
(D) Pass Class	.. 35% and above but below 50%

**Bachelor of Performing Art:**

(A) Distinction	.. 70% marks and above
(B) First Class	.. 60% marks and above but below 70%
(C) Second Class	.. 50% and above but below 60%
(D) Pass Class	.. 40% and above but below 50%

**OC-36.6.5 (effective from 26<sup>th</sup> September, 2003) Advancement to the next year and conditions for A.T.K.T. (Allowed to keep terms) :**

Candidates who have passed in all the heads of passing in the theory and practical papers of the previous year shall be eligible for promotion to the next year of study. However, a candidate who has failed in not more than two theory papers shall be allowed to keep terms for the next year. The result of the next year examination shall not be declared unless he/she has cleared the remaining theory papers of previous year examination.

However the candidates failing in practical examination shall not be eligible for proceeding for the next year.

**OC-36.6.5.1 (effective from 26<sup>th</sup> September, 2003) (a) A student failing in Final Year Foundation Course/Bachelor of Performing Art Examination shall be eligible to appear in the next examination as an external candidate and complete the course within a period of next three years.**

- OC-36.6.5.2 (effective from 26<sup>th</sup> September, 2003)** (b) A student who obtains minimum passing marks prescribed in each theory paper shall be exempted from reappearing for that paper only.
- OC-36.7 (effective from 26<sup>th</sup> September, 2003)** The syllabi for various subjects of the Course shall be subject to such revision, modification etc. as may be made by the Academic Council from time to time on the recommendations of the Board of Studies in the subject.
- OC-37 (effective from 26<sup>th</sup> September, 2003) Ordinance relating the Post Graduate Degree Course – Master of Performing Art and a Bridge course in Hindustani Classical Music.**
- OC-37.1 (effective from 26<sup>th</sup> September, 2003) Aims and objectives of the Courses:** - The aims of the courses are to impart a full time professional and advanced training in Hindustani Classical Vocal Music and Instrumental Music such as Sitar, Harmonium, Tabla/Pakhawaj etc. leading to the Post Graduate Degree Course i.e. Master of Performing Art, with a special emphasis on developing performing ability to professional standard, in the respective subject by the students.
- OC-37.2 (effective from 26<sup>th</sup> September, 2003) The Duration of the Courses:-**
- |                                    |           |
|------------------------------------|-----------|
| 1. Master of Performing Arts (MPA) | - 2 years |
| 2. Bridge Course                   | - 1 year  |
- The Bridge Course shall be for the students passing three years B.A. (Hons.) in Music and B.Music degree for becoming them eligible for admission to Master of Performing Arts and the same shall be conducted by the University if required.
- OC-37.3 (effective from 26<sup>th</sup> September, 2003) Admission and Eligibility:**
- OC-37.3.1 (effective from 26<sup>th</sup> September, 2003) A – Bridge Course:**
- OC-37.3.1.1 (effective from 26<sup>th</sup> September, 2003)** i) The graduate passing B.A. (Hons) in Music, B.Mus. (Hons) with 50% and above marks of recognized Universities and other graduates of recognized Universities diploma with 50% and above marks of recognized Institutions shall be eligible for admission to Bridge Course.
- OC-37.3.1.2 (effective from 26<sup>th</sup> September, 2003)** ii) The graduate passing B.Music (Old Course) of Goa University with 50% and above marks shall be eligible for admission to Bridge Course.
- OC-37.3.1.3 (effective from 26<sup>th</sup> September, 2003)** iii) In addition to above, to be eligible for admission to the Bridge Course a candidate has to pass an entrance test conducted by the College concerned with minimum 50% marks.
- OC-37.3.2 (effective from 26<sup>th</sup> September, 2003) B – Master of Performing Art (M.P.A):**
- OC-37.3.2.1 (effective from 26<sup>th</sup> September, 2003)** i) Students passing the Degree of Bachelor of Performing art with 50% and above marks shall be eligible for admission to the Post – graduate Degree of Master of Performing Art.

**OC-37.3.2.2 (effective from 26<sup>th</sup> September, 2003)** ii) The graduate passing in B.A. (Hons) in Music and B.Mus. (Hons) with 50% and above marks shall be eligible for admission to M.P.A. on passing a Bridge Course with 50% and above marks in respective subject conducted by the University.

**OC-37.3.2.3 (effective from 26<sup>th</sup> September, 2003)** iii) The graduates in other academic subject having passed Diploma Sangeet Visharad of Akhil Bhartiya Gandharv Mahavidyalaya Mandal or its equivalent diploma with 50% and above marks of recognized institution shall be eligible for admission to M.P.A. on passing a Bridge Course with 50% and above marks in respective subject conducted by the University.

**OC-37.3.2.4 (effective from 26<sup>th</sup> September, 2003)** iv) The graduates passing B.Music (Old Course) with 50% and above marks of Goa University shall be eligible for admission to M.P.A. on passing a Bridge Course with 50% and above Marks in respective subject conducted by the University.

**OC-37.3.2.5 (effective from 26<sup>th</sup> September, 2003)** v) In addition to above, to be eligible for admission to Master of Performing Arts (M.P.A.) Course, a candidate has to pass the entrance test conducted by the college concerned, with minimum 50% marks.

**OC-37.4 (effective from 26<sup>th</sup> September, 2003) Structure of the Courses**

**OC-37.4.1 (effective from 26<sup>th</sup> September, 2003) A – Bridge Course:**  
There shall be 2 paper in Theory and 2 papers in Practical and the title of the papers shall be decided by the Board of Studies from time to time. The number of lectures / periods for different papers for a week shall be as under:

<b>Subject</b>	<b>No. of lectures/periods for a week</b>
	One year duration      1 period for 45 minutes duration (subject wise).
Practical	10 periods each for 45 minutes duration per batch of maximum 6 students for each subject.
Subsidiary practical	2 period for 45 minute duration.

**OC-37.4.2 (effective from 31<sup>st</sup> May, 2010) B – Master of Performing Art (MPA)**

There shall be one paper in theory, two papers in Practical and one paper in Project work for both First and Second year M.P.A. and the title of the papers shall be as decided by the Board of Studies from time to time . The number of lectures for theory and practical per week shall be as under:

<b>Subject</b>	<b>No. of Lectures/ Periods per week</b>
<b>Ist Year and IInd Year</b>	
Theory (Music)	1 period of 45 minutes of duration(subject wise)
Practical	12 periods each of 60 minutes duration per batch of 3 students per subject.

The candidates are permitted to answer their theory papers either in English, Hindi, Konkani or Marathi. However, the candidate shall answer the paper in one language only and the candidate shall notify the choice of language at the time of admission. However, the question paper shall be set in Hindi only. The language paper shall be in respective language only.

**OC-37.5 (effective from 26<sup>th</sup> September, 2003) The Scheme of Examination:-**  
1. The candidate shall be examined in the following subject. The duration of papers and marks allocation will be as under:

**OC-37.5.1 (effective from 26<sup>th</sup> September, 2003) A – Bridge Course:**

Vocal & Instrumental Music		Marks	Duration
Paper No.1	Applied Theory	75	2 ½ hrs.
Paper No. 2	General Theory	75	2 ½ hrs.
Paper No. 3	Practical (Including Viva-Voce other forms in Music and Manch Pradarshan.	350	
	Internal (Continous) Assessment		50
Paper No.4	Subsidiary Practical (Tabla / Vocal)		50

**OC-37.5.2(i) (effective from 31<sup>st</sup> May, 2010) B – Master of Performing Art:**

**First Year Examination Vocal & Instrumental Music**

		Marks	Duration
Paper No.1	Theory	100	3 hrs.
Paper No.2	Practical-I a) Viva-voce. . 100 b)Other forms..100	200	45 to 50 minutes per candidate (together for both)
Paper No.3	Practical –II Stage Performance	100	30 to 40 minutes per candidate
Paper No.4	Project work	100	To be completed within the academic year.

**OC-37.5.2 (ii) (effective from 31<sup>st</sup> May, 2010)**

**Second Year Examination Vocal & Instrumental Music**

		Marks	Duration
Paper No.1	Theory	100	3 hrs.
Paper No.2	Practical- I a)Viva-voce 100 b)Other forms 100	200	55 to 60 minutes per candidate (together for both)
Paper No.3	Practical –II Stage Performance	200	55 to 60 minutes per candidate.
Paper No.4	Project Work	200	To be completed within the academic year.



**OC-37.6 (effective from 31<sup>st</sup> May, 2010) 2. Setting of question papers and number of Examiners for the various Examinations:**

The question papers for Bridge Course and Master of Performing Arts Course shall be set by internal Examiner in consultation with the External Examiners. Internal Examiner shall be Convenor of the Board of Examiners for the respective paper. Same teacher may be appointed as Convenor for more than one paper, if required. The Practical examination of both the above courses shall be conducted jointly by the Internal and External examiners. Practical examinations pertaining to Paper No.2 and Paper No.3 of the First and Second Year M.P.A. shall be conducted by the same examiners. The Internal and External examiners shall be appointed as per the provision of OB-4.

The number of Examiners to be appointed for the Examinations of Bridge Course in Music and Examination at Post graduate level (M.P.A.) shall be as follows:

**OC-37.6.1 (effective from 26<sup>th</sup> September, 2003) A – Bridge Course:**

**1) No. of Examiners:**

**Theory Examination**

Internal – 1  
External - 1

**Practical Examination**

Internal – 1  
External – 1

**OC-37.6.2 (effective from 26<sup>th</sup> September, 2003) 2) Eligibility for External Examiner:**

**OC-37.6.2.1 (effective from 26<sup>th</sup> September, 2003)** a) The Examiner shall possess Master's Degree in relevant subject with minimum 55% marks, of recognized University or its equivalent Diploma.

**OC-37.6.2.2 (effective from 26<sup>th</sup> September, 2003)** b) Minimum three years teaching experience at Post Graduate Level

**OR**

a) & b) A performing artist of professional standard having commendable achievement in the subject concerned with minimum ten years experience as a performer.

**OC-37.6.3 (effective from 31<sup>st</sup> May, 2010) B – Master of Performing Art (M.P.A)**

**Theory Examination**

Internal -1  
External - 1

**Practical Examination**

Internal -1  
External -1

**OC-37.6.3.1 (effective from 26<sup>th</sup> September, 2003) Eligibility for External Examiner:**

**OC-37.6.3.2 (effective from 26<sup>th</sup> September, 2003)** a) Master's degree in relevant subject with minimum 55% marks of recognized University or its equivalent Diploma

**OC-37.6.3.3 (effective from 26<sup>th</sup> September, 2003)** b) Minimum five years teaching experience at Post Graduate Level.

**OR**

a) & b) A performing artist of professional standard having commendable achievement in the subject concerned with minimum fifteen years experience as a Performer.

**OC-37.7 (effective from 26<sup>th</sup> September, 2003) Pattern of Examination:-**

**OC-37.7.1 (effective from 26<sup>th</sup> September, 2003)** i) Examination shall be conducted annually by the University

**OC-37.7.2 (effective from 26<sup>th</sup> September, 2003)** ii) Eligibility for Annual Examination: to be eligible to qualify for appearing for annual examination a student shall have attendance of at least 75% of the total during the academic year and have appeared the terminal examination conducted by the college.

**OC-37.7.3 (effective from 26<sup>th</sup> September, 2003) iii) Standard of Passing:**

**OC-37.7.3.1 (effective from 26<sup>th</sup> September, 2003) a) Bridge Course :-** To pass the examination a candidate must obtain a minimum of 40% of marks in Theory and 50% of marks in Practical aggregating 50% in both theory and practical, at the examination of the Bridge Course.

**OC-37.7.3.2 (effective from 26<sup>th</sup> September, 2003) b) Master of Performing Art:-** To pass the examination a candidate must obtain a minimum of 50% of the full marks in each paper both theory and practical at the examination of M.P.A.

**OC-37.7.3.3 (effective from 26<sup>th</sup> September, 2003) c)** Grace marks shall be awarded as per the University rules.

**OC-37.7.3.4 (effective from 26<sup>th</sup> September, 2003) d)** The passing certificate of all the University Examination I be issued by the University yearly and the final Post Graduate Degree Certificate by aggregating, the total mark of two years M.P.A. Examination.

The mark sheet of the Final Year examination shall include the Marks of both the years of M.P.A. examinations and the percentage shall be awarded on the basis of total marks secured in all the papers during the two examinations i.e. out of 1200 marks.

**OC-37.7.4 (effective from 31<sup>st</sup> May, 2010) iv) Award of Class:**

Class shall be awarded on the following basis to the successful candidate:

- a) Second Class - 50% and above but less than 60%
- b) First Class - 60% and above but less than 70%
- c) Distinction - 70% and above

**OC-37.7.5 (effective from 26<sup>th</sup> September, 2003) v)** Advancement to the next year and conditions for A.T.K.T.  
**(Allowed to keep term)**

- OC-37.7.5.1** **(effective from 26<sup>th</sup> September, 2003)** (1) Candidate passing in the practical papers shall be allowed to keep terms for the next year. The result of the next year examination shall not be declared unless he / she has cleared the remaining papers of previous year examination .
- OC-37.7.5.2** **(effective from 26<sup>th</sup> September, 2003)** (2) A student failing in Final Year M.P.A. examination shall be eligible to appear in the next examination as an external candidate and complete the course within a period of next three years.
- OC-37.7.5.3** **(effective from 26<sup>th</sup> September, 2003)** (3) A student who obtains minimum passing marks prescribed in each theory paper shall be exempted from reappearing for that paper only.

**OC-37.8** **(effective from 26<sup>th</sup> September, 2003)** The syllabi for various subjects of the Course shall be subject to such revision, modification etc. as may be made by the Academic Council from time to time on the recommendations of the Board of Studies in the subject.

**OC-38** **(effective from 26<sup>th</sup> September, 2003)** **ORDINANCE FOR POST-GRADUATE DEGREE COURSES IN HOMEOPATHY M.D. (Hon) – DOCTOR OF MEDICINE IN HOMOEOPATHY.**

**GENERAL**

**OC-38.1** **(effective from 26<sup>th</sup> September, 2003)** The objective of the Course is to produce excellent professionals, thinkers, practitioners, researchers and teachers in Homoeopathy with special emphasis on the applied aspects of the subject.

**OC-38.2** **(effective from 26<sup>th</sup> September, 2003)** The Course shall be called as M.D. (Hom). – Doctor of Medicine in Homoeopathy in concerned speciality. The Post-Graduate Degree Courses shall be in the following subjects.

- i) Organon of Medicine with Homoeopathic Philosophy.
- ii) Materia Medica including applied aspects.
- iii) Repertory.
- iv) Homoeopathic Pharmacy.
- v) Practice of Medicine.
- vi) Pediatrics.
- vii) Psychiatry.

**Eligibility**

**OC-38.3** **(effective from 26<sup>th</sup> September, 2003)** A candidate for being eligible for admission to M.D. (Hom) of Goa University:

**OC-38.3.1** **(effective from 26<sup>th</sup> September, 2003)** i) Shall have passed Bachelor of Homoeopathic Medicine & Surgery or equivalent qualification in Homoeopathy included in the Second Schedule of the Homoeopathy Central Council Act 1973 (Act 13 of 1973) obtained after undergoing a Course of Studies in Homoeopathy of not less than 5 ½ years duration including the period of compulsory internship.

**OR**

**OC-38.3.2** **(effective from 26<sup>th</sup> September, 2003)** ii) Shall possess Bachelor of Homoeopathic Medicine & Surgery (Graded Degree) or equivalent qualification in Homoeopathy included in the Second Schedule of the Homoeopathy Central

Council act 1973 (Act 13 of 1973) obtained after undergoing a Course of Studies in Homoeopathy of not less than 2 years duration.

**OC-38.4.1** **(effective from 26<sup>th</sup> September, 2003)** i) Candidate for M.D. shall be selected on merit. Preference shall be given to a candidate who has worked in rural area for at least 2 years, in respect of one seat in each subject as per merit.

**OC-38.3.2** **(effective from 26<sup>th</sup> September, 2003)** ii) Seats left unfilled in any academic year cannot be carried forward to the next or subsequent years.

#### **Duration of the Course**

**OC-38.5** **(effective from 26<sup>th</sup> September, 2003)** The medium of instruction for the Courses shall be English.

**OC-38.6** **(effective from 26<sup>th</sup> September, 2003)** Every candidate seeking admission to M.D. (Hom.) Course shall undergo a course of studies extending over a period of 3 years including 1 year of house job during which the candidate shall be a resident in the campus.

**OC-38.6.1** **(effective from 26<sup>th</sup> September, 2003)** i) Candidate shall be in the campus and shall be given added responsibility in the management and treatment of patients entrusted to his/her care.

**OC-38.6.2** **(effective from 26<sup>th</sup> September, 2003)** ii) The Candidate should participate in the training and teaching of undergraduate students and interns.

**OC-38.7** **(effective from 26<sup>th</sup> September, 2003)** **Students enrolled for this Course:**

**OC-38.7.1** **(effective from 26<sup>th</sup> September, 2003)** i) shall not be permitted to register simultaneously for any other Course conducted by Goa University.

**OC-38.7.2** **(effective from 26<sup>th</sup> September, 2003)** ii) shall not be permitted to register simultaneously for Post-Graduate Course in Homoeopathy or any other course in other University.

**OC-38.7.3** **(effective from 26<sup>th</sup> September, 2003)** iii) shall not be permitted to change from one subject to any other once he/she is registered in a particular subject.

**OC-38.8.1** **(effective from 26<sup>th</sup> September, 2003)** i) The candidate pursuing a course should work in his/her concerned department of the institution for the entire period of the course as full time student.

**OC-38.8.2** **(effective from 26<sup>th</sup> September, 2003)** ii) The candidate should have an attendance of not less than 80% in aggregate.

**OC-38.8.3** **(effective from 26<sup>th</sup> September, 2003)** iii) Each candidate shall present his/her papers in seminars & symposium and also present cases in clinical meeting held during the course of training.

**OC-38.9.1** **(effective from 26<sup>th</sup> September, 2003)** i) The College shall have a department of the concerned speciality and shall also have the following additional facilities namely;

- a) One full time Professor in the department of speciality.
- b) One Reader/ Assistant Professor.
- c) Staff such as Attendant, Technician etc., as deemed necessary depending upon the department.
- d) Departmental Library
- e) Out Patient Department and In Patient Department with all facilities including separate Clinical Laboratory.
- f) Three beds shall be earmarked per students for each clinical subject of speciality.

**OC-38.9.2** **(effective from 26<sup>th</sup> September, 2003)** ii) The student – guide ration shall be 3:1, three students for one guide.

**OC-38.9.3** **(effective from 26<sup>th</sup> September, 2003)** iii) Criteria for selection of Guide shall be as per the guidelines of Central Council of Homoeopathy.

**OC-38.10** **(effective from 26<sup>th</sup> September, 2003)** The Thesis/Dissertation is compulsory for the Post-Graduate student enrolled for this course.

**OC-38.10.1** **(effective from 26<sup>th</sup> September, 2003)** i) The student has to submit a thesis comprising not less than 10,000 words, embodying his/her own work, the conclusion arrived at etc. under the supervision of the guide.

**OC-38.10.2** **(effective from 26<sup>th</sup> September, 2003)** ii) The thesis shall be submitted to the University 6 months earlier to the Final M. D. Part-II Examination of the University.

**OC-38.10.3** **(effective from 26<sup>th</sup> September, 2003)** iii) The candidate shall submit the title of the thesis / dissertation along with a synopsis to the University within 6 months of registration duly countersigned by the Guide and the Principal of the Institute and the University may accord their approval within a period of 3 months.

**OC-38.10.4** **(effective from 26<sup>th</sup> September, 2003)** iv) The subject and plan of work of thesis / dissertation shall not be the same as that of a thesis accepted by the University during the past 5 years. the concerned University / Guide shall not permit any duplication in writing thesis / dissertation by the candidates.

**OC-38.10.5** **(effective from 26<sup>th</sup> September, 2003)** v) The subject of thesis / dissertation should reflect the Research priorities of the Post-Graduate department where the work is being done.

**OC-38.10.6** **(effective from 26<sup>th</sup> September, 2003)** vi) The University may consider the Co-guide, if necessary with recommendation of the Guide and Principal of the Institute.

**OC-38.10.7** **(effective from 26<sup>th</sup> September, 2003)** vii) The thesis/dissertation must be satisfactory as regards to Literary presentation and suitable for publication either as such or in abridged form.

**OC-38.10.8** **(effective from 26<sup>th</sup> September, 2003)** viii) The working on thesis / dissertation should be well utilised for learning, searching the literature and its critical study. The work should reflect a good power of observation and capacity to draw conclusion on the basis of his study and work.

- OC-38.10.9** (effective from 26<sup>th</sup> September, 2003) ix) In no case papers written or published in joint names of two or more persons be accepted as thesis or dissertation. The candidate may however, submit in support of thesis any published work of which the candidate is either author or co-author.
- OC-38.10.10** (effective from 26<sup>th</sup> September, 2003) x) The thesis / dissertation should contain at the end a summary of not more than 1500 words embodying the conclusions arrived by the candidate.
- OC-38.10.11** (effective from 26<sup>th</sup> September, 2003) xi) The thesis should not exceed 250 typed pages including charts, diagrams, photographs and bibliography. Four copies duly bounded be submitted to the Controller of Examinations of the University through the Guide and the Principal of the Institute. The Controller of Examinations shall send one copy to the guide and other to the external examiner for evaluation, at least 6 months before the Examination.
- OC-38.10.12** (effective from 26<sup>th</sup> September, 2003) xii) The thesis / dissertation should have the certificate from the Guide that the candidate has done the Research & Clinical work under his guidance and up to his satisfaction.
- OC-38.10.13** (effective from 26<sup>th</sup> September, 2003) xiii) The thesis shall be examined for acceptance by the three examiners of which one will be the Guide, who shall also be the Internal examiner.
- OC-38.10.14** (effective from 26<sup>th</sup> September, 2003) xiv) Approval of thesis / dissertation is a pre-condition to appear for the M.D. Part-II Examination.
- OC-38.10.15** (effective from 26<sup>th</sup> September, 2003) xv) If the thesis is rejected by both the external Examiners, the candidate will be asked to revise and resubmit the same through the Guide within a period of six months.
- OC-38.10.16** (effective from 26<sup>th</sup> September, 2003) xvi) If the thesis is rejected by one external examiner, the University shall forward the thesis to alternate examiner.
- OC-38.10.17** (effective from 26<sup>th</sup> September, 2003) xvii) The alternate examiner rejects the thesis, the candidate will be asked to revise and resubmit the same through the guide within a period of six months.

**OC-38.11** (effective from 26<sup>th</sup> September, 2003) **SPECIAL PROVISION FOR EXTERNAL CANDIDATES**

Notwithstanding anything contained in these regulations, the University may allow admission as external candidates to appear in the M.D. examination for a period of eight years from the commencement of the Homoeopathy (Post Graduate Degree Course) M.D. (Hom.) (Amendment) Regulations 2001, for three subjects namely, Materia Medica, Homoeopathic Philosophy and Repertory, subject to the fulfillment of the following conditions.

**1. Admission to the examination**

I. A candidate who has passed the final examination of a diploma course in Homoeopathy of not less than four years during shall be eligible for admission to the examination as an external candidate, if such candidate:

- a) holds full time regular post not below the rank of Assistant Registrar,

b) has teaching experience of not less than seven years in a recognised Homoeopathic Medical College.

II. The candidate shall register his name two years before the final examination.

III. The candidate shall prepare and submit to his Supervisor / Guide a dissertation nine months prior to the holding of the final examination. The Supervisor / Guide shall approve the same six months prior to the holding of the final examination.

## **2. Papers for examination:**

The Examination shall comprise of the following papers namely:-

- a) Materia Medica (Materia Medica Pura and Applied)
- b) Homoeopathic Practice of Medicine (including Gynaecology and Obstetrics)
- c) Organon of Medicine and Philosophy.
- d) Repertory.

## **3. Examiners:**

The criteria for selection of examiners shall be the same as that of guide as prescribed by Central Council of Homoeopathy.

### **OC-39 (effective from 27<sup>th</sup> May, 2005) Amendment to Ordinance relating to the Three Year Degree Course B.Sc. (Home Science).**

This ordinance shall come into effect for F.Y. B.Sc. (Home Science) from the academic Year 2005-2006, for the S.Y. B.Sc. (Home Science) from the academic Year 2006-2007 and for T.Y. B.Sc. (Home Science) from the academic Year 2007-2008.

#### **OC-39.1 (effective from 27<sup>th</sup> May, 2005) Nomenclature of the Degree**

The Nomenclature of the degree awarded by the Goa University shall be Bachelor of Science in Home Science i.e. B.Sc. Home Science.

#### **OC-39.2 (effective from 27<sup>th</sup> May, 2005) Eligibility for admission**

(a) A candidate for being eligible for admission to the First Year B.Sc.(Home Science) must have passed the Higher Secondary School Certificate Examination of the Goa Board or an equivalent Examination as recognized by the Goa University.

(b) Students coming from Examination Boards other than the HSSC Examination Board Goa shall obtain an "Eligibility Certificate" from the Registrar, Goa University for being considered for admission.

#### **OC-39.2.1 (effective from 27<sup>th</sup> May, 2005) Mode of admission**

Admission for B.Sc. (Home Science) Degree programme shall be made strictly according to the merit. The merit shall be based on the percentage of marks obtained in the respective qualifying examination and aptitude test, if any, notified by the University from time to time.

Reservation of admission to F.Y. B.Sc. (Home Science) for the students coming from SC/ST/OBC will be as per the existing rules in force of Govt. of Goa.

**OC-39.2.2 (effective from 27<sup>th</sup> May, 2005) Eligibility for admission to the subsequent academic years.**

- a) Candidates who have passed in all the subjects in the annual / supplementary examination shall be eligible for admission to the next year.
- b) Deleted.

**OC-39.3 (effective from 27<sup>th</sup> May, 2005) Duration of the course**

The course of study for B.Sc. (Home Science) shall be a three years full time course. Each academic year shall consist of two terms having a minimum of ninety instructional days per term.

**OC-39.4 (effective from 27<sup>th</sup> May, 2005) Attendance**

A candidate shall not be eligible to appear for the annual / supplementary examination of the academic year unless he / she has a minimum of 75% attendance in each of the theory and practical papers.

**OC-39.5 (effective from 27<sup>th</sup> May, 2005) Courses of study**

**A. F.Y .B.Sc (Home Science)**

- a) There shall be eight theory papers carrying **100** marks each with **30** marks for continuous internal assessment (CIA) during the year and **70** marks for the annual examination to be held at the end of the academic year.
- b) There shall be three practical papers carrying **50** marks each with **20** marks for CIA during the year and **30** marks for the annual examination to be held at the end of the academic year

**B. S.Y. B.Sc. (Home Science)**

- a) There shall be eight theory papers carrying **100** marks each with **30** marks for CIA during the year and **70** marks for the annual examination to be held at the end of the academic year.
- b) There shall be three practical papers carrying **50** marks each with **20** marks for CIA during the year and **30** marks for the annual examination to be held at the end of the academic year.

**Fourth Semester Group B. (effective from 27<sup>th</sup> May, 2005) -Deleted-**

**Fourth Semester Group C (effective from 27<sup>th</sup> May, 2005) -Deleted-**

**T.Y.B.Sc. (Home Science)**

The college may offer any one or more of the following areas of specialization:

- A) Food, Nutrition & Dietetics (FND)**
- B) Textiles & Clothing (TC)**
- C) Human Development (HD)**
- D) Community Resource Management (CRM)**

Students are required to opt for any one of the areas of specialization that are offered by the college for the academic year.

**A) Food Nutrition and Dietetics**



a) There shall be six theory papers of **100** marks each with **30** marks for CIA during the year and **70** marks for the University examination to be held at the end of the academic year.

b) There shall be four practical papers carrying **50** marks of which 2 papers shall have **20** marks for CIA during the year and **30** marks for the University examination to be held at the end of the academic year, and the remaining two shall have 50 marks of CIA only.

c) There shall be one paper of **100** marks with CIA (Seminar / Project) of which **30** marks shall be assigned for the seminar and **70** marks for the project.

### **B) Textiles and Clothing**

a) There shall be five theory papers of **100** marks each with **30** marks for CIA during the year and **70** marks for the annual examination to be held at the end of the academic year.

b) There shall be six practical papers of **50** marks each with **20** marks for CIA during the year and **30** marks for the annual examination to be held at the end of the academic year.

c) There shall be one paper of **100** marks with CIA (Seminar / Project) of which **30** marks shall be assigned for the seminar and **70** marks for the project.

### **C) Human Development**

a) There shall be seven theory papers of **100** marks each with **30** marks for CIA during the year and **70** marks for the annual examination to be held at the end of the academic year.

b) There shall be Field Work carrying **100** marks with CIA.

c) There shall be one paper of **100** marks with CIA (Seminar / Project) of which **30** marks shall be assigned for the seminar and **70** marks for the project.

#### **D) Community Resource Management**

a) There shall be six theory papers of **100** marks each with **30** marks for CIA during the year and **70** marks for the annual examination to be held at the end of the academic year.

b) There shall be two practical papers carrying **50** marks each and Field work carrying **100** marks with CIA.

c) There shall be one paper of **100** marks with CIA (Seminar / Project) of which **30** marks shall be assigned for the seminar and **70** marks for the project.

For each year of study there shall be a minimum of **25** contact hours per week.

The workload of each teacher guiding a batch of 5-7 students for seminar / project shall be considered as 4 periods / week. If there are upto 4 students in a batch per teacher, it shall be considered as 2 periods / week.

The duration of each lecture period shall be of **45** minutes for F.Y. / S.Y. /T.Y. B. Sc. (Home Science).

**Fifth Semester  
Group E.**

**(effective from 27<sup>th</sup> May, 2005) -Deleted-**

**Sixth Semester  
Group A.**

**(effective from 27<sup>th</sup> May, 2005) -Deleted-**

**Sixth Semester  
Group D**

**(effective from 27<sup>th</sup> May, 2005) -Deleted-**

**OC-39.5.1**

**(effective from 27<sup>th</sup> May, 2005) Batches for practicals**

A batch for practicals shall not ordinarily exceed 25 students (except in the case of seminar / project / field work.)

**OC-39.6**

**(effective from 27<sup>th</sup> May, 2005) Conduct of examinations**

**A) Conduct of examinations of F.Y. and S.Y. B.Sc. (Home Science).**

The examinations of the FY/SY B.Sc.(Home Science) programme shall be conducted by the College on behalf of Goa University.

a) Paper setting as well as the assessment of the answer books of theory and practical papers shall be done by a teacher of the concerned paper or related paper in the college.

## **B) Conduct of Examination of Third Year B.Sc. (Home Science) Examination.**

The Third Year Final B.Sc. (Home Science) Examination of theory and practical papers (except CIA) shall be conducted by Goa University

### **OC-39.6.1 (effective from 27<sup>th</sup> May, 2005) Scheme of Examination of F.Y./S.Y./T.Y. B.Sc. (Home Science)**

A) Scheme of Examination including duration and marks of examination, CIA and periods of instruction per week of F.Y. / S.Y. / T.Y. B.Sc. (Home Science) shall be as per schedule I, II & III - a, b, c, d. These schedules may be revised, as required from time to time subject to the recommendation of the Board of Studies in Home Science and approval by the Academic Council.

**OC-39.6.1.1 (a) (effective from 27<sup>th</sup> May, 2005) -Deleted-**

**OC-39.6.1.1 (b) (effective from 27<sup>th</sup> May, 2005) -Deleted-**

### **OC-39.6.1.2 (effective from 27<sup>th</sup> May, 2005) Final Examination:**

The entire syllabus of each paper shall be included for the final examination of FY / SY.TY. B.Sc. (Home Science), which shall be held at the end of the respective academic year.

### **OC-39.6.2 (effective from 27<sup>th</sup> May, 2005) Pattern of Question Papers for examination**

Pattern of Question Paper will be as per the model question paper prepared by the BOS.

### **OC-39.6.2.1 (effective from 27<sup>th</sup> May, 2005) Setting of question papers and assessment of answer books For FY/SY/TY B.Sc. (Home Science) examination.**

a) In the case of FY/SY B.Sc. (Home Science) examinations, paper setting and assessment of theory and practical papers shall be done in the college by an internal examiner (a teacher from the college who teaches / has taught the paper).

b) In the case of T. Y. B.Sc. (Home Science) examination each theory as well as practical paper (except CIA) shall have two examiners appointed:

i) an internal examiner i.e. a teacher from the college who teaches / has taught the paper and

ii) an external examiner (from the panel of examiners recommended by the BOS in Home Science and approved by the Academic Council) who is not a member of the teaching staff of the college.

The two examiners appointed shall communicate with each other, and set three sets of question papers.

The external examiner shall send the question paper sets to the internal examiner who shall be the convenor / moderator who in turn shall send the final question paper sets duly sealed to the Chairman for onward submission to the COE, Goa University.

In the case of theory papers of T.Y.B.Sc. (Home Science) examination, one of the two sections shall be assessed by the External Examiner and the other, by the Internal Examiner.

In the case of practical papers of T.Y. B.Sc. (Home Science) having annual examination, assessment shall be jointly carried out by both the Internal and External examiners.

**OC-39.6.3 (effective from 27<sup>th</sup> May, 2005) Standard of passing B.Sc. (Home Science)**

To pass the examination of F.Y./S.Y./T.Y.B.Sc. (Home Science) examinations a candidate shall obtain a minimum of 40% of the total marks assigned to each theory and practical paper (including internal work) separately each head of passing.

All marks of CIA shall be carried forward for both the theory and practical papers for those candidates appearing for the supplementary examination / reappearing for the final examination.

A candidate who secures the minimum percentage of marks prescribed for passing in any paper shall at his / her option, be exempted from appearing in that paper provided that in the case of a subject which consists of theory and practical components, a candidate has obtained the minimum number of marks required for passing in both the components.

**OC-39.6.4 (effective from 27<sup>th</sup> May, 2005) Award of Class**

The Final University examination result will be on the basis of the Third Year Examination.

Class/Distinction will be awarded based on the percentage of marks scored/worked out on the aggregate / weighted aggregate, as per the scheme given below:

70% and above	- Distinction
60% and above but below 70%	- First Class
50% and above but below 60%	- Second Class
40% and above but below 50%	- Pass Class

**OC-39.6.4.1 (effective from 27<sup>th</sup> May, 2005) Improvement of Class**

Candidates at their option are permitted to appear for improvement of class / percentage at the T.Y.B.Sc. (Home Science) examination within a period of 2 year since the last appearance at the said examination, provided the candidate appear for all the papers including practicals (except CIA).

**OC-39.6.5 (effective from 27<sup>th</sup> May, 2005) Supplementary Examination**

Supplementary examination for F.Y./ S. Y. B.Sc. (Home Science) shall ordinarily be conducted shortly after the declaration of the result of F.Y./S.Y. B.Sc. (Home Science) examination and before the commencement of the academic year.

The following categories of students shall be eligible to appear for the supplementary examination.

- a) Unsuccessful candidates of F.Y./S.Y. B.Sc. (Home Science) examination.
- b) Candidate/s who did not appear in some or all the papers at the F.Y./S.Y.B.Sc.(Home Science) examination on medical grounds or for representing the College/ University/ State/Nation in Cultural/Sports/NSS/NCC activities.

**OC-39.7 (effective from 27<sup>th</sup> May, 2005) Examination Unfair Means and Grievance Committee**

The Examination Committee, which shall function as the Grievance and Unfair Means Committee as well, under the control and supervision of the Principal, shall consist of at least two members of the teaching staff. The Committee constituted for one academic year shall work as per the general ordinance of the Goa University.

In case, Grievance concerns any member of the Committee, the Principal shall re-constitute the committee by excluding the concerned member.

**OC-39.8 (effective from 27<sup>th</sup> May, 2005) Grace Marks and revaluation**

General Ordinance of Goa University shall apply for the award of grace marks and revaluation.

**OC-39.9 (effective from 27<sup>th</sup> May, 2005) -Deleted-**

**OC-39.10 (effective from 27<sup>th</sup> May, 2005) Time limit for completion of Degree Programme:-**

A student admitted to B.Sc. (Home Science) Course of Goa University should complete the degree programme within a maximum time limit of an equal number of years over and above the normal period.

**COURSE SUMMARY****F.Y. B.Sc. (Home Science)**

Subject	T/P	Exam hrs.	Exams marks	CIA	Total	Periods of class / week / batch
Introductory Biochemistry	T	3	70	30	100	3
Introductory Biochemistry	P	2	30	20	50	2
Food, Nutrition & Dietetics Paper I: Food Science	T	3	70	30	100	3
Food Science	P	3	30	20	50	4
Textiles and Clothing Paper I: Fibre to Fabric	T	3	70	30	100	3
Fundamentals of Clothing and Children's Wear	P	3	30	20	50	4
Human Development Paper I: Child Development	T	3	70	30	100	3
Paper II: Psychology	T	3	70	30	100	3
Community Resource Management Paper I: Introduction to Resource Management	T	3	70	30	100	3
Paper II: Principles of Design	T	3	70	30	100	3
Communication Skills	T	3	70	30	100	3
<b>TOTAL</b>					<b>950</b>	<b>34</b>

1: Students will have to compulsorily undergo a practical course in Basic Computer Applications with 3 periods of instruction per week, comprising 50 marks with CIA which they should satisfactorily pass before admission to the Third Year.

## **SCHEME OF CIA**

### **A) THEORY PAPERS - (30 MARKS)**

	Ist Periodic Test	IInd Periodic Test	Total	Average
Marks	30	30	60	30
Duration	1 hour	1 hour	--	--

### **B) PRACTICAL PAPERS - (20 MARKS)**

One practical test in the 2 <sup>nd</sup> term of 1 hour duration	– 15 marks
Years work (including journal if any)	- 25 marks
Total	– 40 marks
Scaled to	– 20 marks

No retests shall be conducted except on grounds of Sports/NSS/Cultural activities/Medical Grounds.

### **Schedule -II**

#### **COURSE SUMMARY** **S.Y. B.Sc. (Home Science)**

Paper	T/P	Exam hrs.	Exams marks	CIA	Total	Periods of class/ week/batch
Food, Nutrition & Dietetics Paper II: Nutrition & Meal Planning	T	3	70	30	100	3
Paper III: Food Microbiology & Preservation	T	3	70	30	100	3
Food & Nutrition	P	4	30	20	50	4
Textiles and Clothing Paper II: Textile Processing & Laundry Science	T	3	70	30	100	3
Paper III: Traditional Indian Textiles & Costumes	T	3	70	30	100	3
Fundamentals of Clothing and Women's Wear	P	3	30	20	50	4
Textile Colouration and Laundry Science	P	2	30	20	50	2
Human Development Paper II: Adolescent Development	T	3	70	30	100	3

Paper III: Marriage & Family Relations	T	3	70	30	100	3
Community Resource Management Paper III: Health and Hygiene	T	3	70	30	100	3
Paper IV: Applied Economics	T	3	70	30	100	3
					950	34

**Note:**

Orientation for students before selection of specialization at the end of the year.

**SCHEME OF CIA**

**A) THEORY PAPERS - (30 MARKS)**

	Ist Periodic Test	IInd Periodic Test	Total	Average
Marks	30	30	60	30
Duration	1 hour	1 hour	--	--

**B) PRACTICAL PAPERS - (20 MARKS)**

One practical test in the 2 <sup>nd</sup> term of 1 hour duration	– 15 marks
Years work (including journal if any)	- 25 marks
Total	– 40 marks
Scaled to	– 20 marks

No retests shall be conducted except on grounds of Sports/NSS/Cultural activities/Medical Grounds.



**COURSE SUMMARY****T.Y. B.Sc. (Home Science)****A: Food, Nutrition and Dietetics**

Subject	T/P	Univ. Exam hrs.	Univ. Exams marks	CIA	Total	Periods Per week/ batch
Paper IV: Human Nutrition	T	3	70	30	100	3
Paper V: Community Nutrition	T	3	70	30	100	3
Nutritional Assessment & Education	P	-	-	50	50	2
Paper VI: Food Technology	T	3	70	30	100	3
Food Analysis & Clinical Biochemistry	P	3	30	20	50	3
Paper VII: Nutritional Biochemistry	T	3	70	30	100	3
Paper VIII: Food Service Systems	T	3	70	30	100	3
Paper IX: Clinical Nutrition & Diet Therapy	T	3	70	30	100	4
Quantity Cooking & Diet Therapy	P	3	30	20	50	3
Diet Planning	P	-	-	50	50	2
Seminar/Project	P	-	-	100	100	6
Internship						
Total					900	35

\* Orientation: Students shall be oriented towards the following topics

1. Research Methods and Statistics at the beginning of the academic year
2. Entrepreneurship in the second term
3. Professional practice/work culture/ethics at the end of the academic year

\* Students are expected to undergo internship for a period of one month at the end of the academic year, after completion of the final examination.

**SCHEME OF CIA****A) THEORY PAPERS - (30 MARKS)**

	Ist Periodic Test	IInd Periodic Test	Total	Scaled to
Marks	30	70	100	30
Duration	1 hour	3 hours	--	--
Time Frame	End of the Ist Term	End of the IInd Term	--	--

**B -1) PRACTICAL PAPERS - (20 MARKS)**

One practical test in the 2 <sup>nd</sup> term of 1 hour duration	- 15 marks
Years work (including journal if any)	- 25 marks
Total	- 40 marks
Scaled to	- 20 marks

No retests shall be conducted except on grounds of Sports / NSS / Cultural Activities /Medical Grounds.

B-2) Scheme of CIA for practicals with CIA only shall be as recommended by the BOS in Home Science.

C) Seminar/Project – 100 marks

Seminar	– 30	marks
Project	– 70	marks
Total	– 100	marks

a) **Seminar**

Each student shall present one seminar during the course of the third year on a topic related to the field of specialization but not specifically covered in the syllabus. The seminar presentation shall carry 30 marks and shall be assessed by the guide/teacher from the college and other faculty members.

The Principal shall specify the time frame and the scheme of marking for the seminar.

b) **Project**

Each student shall carry out a project at the T.Y.B.Sc. (Home Science) on any topic related to the syllabus prescribed in the field of specialization.

Project work shall be based on field work/laboratory work/library work/combination of these. The student shall submit a report of the same.

The project shall carry 70 marks and shall be assessed by the guide/teacher from the college and another teacher from the college appointed by the Principal.

The Principal shall specify the time frame and the scheme of marking for the project.

**COURSE SUMMARY**  
**T.Y. B.Sc. (Home Science)**  
**B: Textiles and Clothing**

Subject	T/P	Exam hrs.	Univ. Exams marks	CIA	Total	Periods of class/ week/ batch
Paper IV: World Historic Textiles and Costumes	T	3	70	30	100	3
Paper V: Dyeing and Printing	T	3	70	30	100	3
Dyeing and Printing	P	3	30	20	50	3
Paper VI: Textile Testing	T	3	70	30	100	3
Textile Testing	P	3	30	20	50	2
Paper VII: Fabric Structure and Construction	T	3	70	30	100	3
Fabric Structure and Construction	P	3	30	20	50	3
Paper VIII: Marketing, Merchandising & Consumer Education	T	3	70	30	100	3
Pattern Drafting	P	3	30	20	50	3
Garment Construction & Introduction to Draping	P	4	30	20	50	4
Textile Design and Illustration	P	3	30	20	50	2
Seminar/Project	P	-	-	100	100	6
Internship						
<b>Total</b>					<b>900</b>	<b>38</b>

\* Orientation: Students shall be oriented towards the following topics

1. Research Methods and statistics at the beginning of the academic year.
2. Entrepreneurship in the second term
3. Professional practice/work culture/ethics at the end of the academic year.

\* Students are expected to undergo internship for a period of one month at the end of the academic year, after completion of the final examination.

**SCHEME OF CIA**

**A) THEORY PAPERS - (30 MARKS)**

	Ist Periodic Test	IInd Periodic Test	Total	Scaled to
Marks	30	70	100	30
Duration	1 hour	3 hours	--	--
Time Frame	End of the Ist Term	End of the IInd Term	--	--

**B) PRACTICAL PAPERS - (20 MARKS)**

One practical test in the 2 <sup>nd</sup> term of 1 hour duration	– 15 marks
Years work (including journal if any)	- 25 marks
Total	– 40 marks
Scaled to	– 20 marks

No retests shall be conducted except on grounds of Sports/NSS/Cultural activities/Medical Grounds.

C) Seminar/Project – 100 marks

Seminar	– 30 marks
Project	– 70 marks
Total	– 100 marks

a) Seminar

Each student shall present one seminar during the course of the third year on a topic related to the field of specialization but not specifically covered in the syllabus. The seminar presentation shall carry 30 marks and shall be assessed by the guide/teacher from the college and other faculty members.

The Principal shall specify the time frame and the scheme of marking for the seminar.

b) Project

Each student shall carry out a project at the T.Y.B.Sc. (Home Science) on any topic related to the syllabus prescribed in the field of specialization.

Project work shall be based on field work/laboratory work/library work/combination of these. The student shall submit a report of the same.

The project shall carry 70 marks and shall be assessed by the guide/teacher from the college and another teacher from the college appointed by the Principal.

The Principal shall specify the time frame and the scheme of marking for the project.

**Schedule - III(c)****COURSE SUMMARY****T.Y. B.Sc. (Home Science)****C: Human Development**

Subject	T/P	Univ. Exam hrs.	Univ. Exams marks	CIA	Total	Periods Per week
Paper V: Psychological Testing	T	3	70	30	100	3
Paper VI: Early Childhood Care and Education	T	3	70	30	100	3
Paper VII: Adulthood & Ageing	T	3	70	30	100	3
Paper VIII: School Administration	T	3	70	30	100	3
Paper IX: Social Welfare	T	3	70	30	100	3
Paper X: Guidance & Counselling	T	3	70	30	100	3
Paper XI: Exceptional Children	T	3	70	30	100	3
Field Work	P	-	-	100	100	6
Seminar/Project	P	-	-	100	100	6
Internship						
<b>Total</b>					<b>900</b>	<b>33</b>

\* Orientation: Students shall be oriented towards the following topics

1. Research Methods and statistics at the beginning of the academic year.
2. Entrepreneurship in the second term
3. Professional practice/work culture/ethics at the end of the academic year.

\* Students are expected to undergo internship for a period of one month at the end of the academic year, after completion of the final examination.

## **SCHEME OF CIA**

### **A) THEORY PAPERS - (30 MARKS)**

	Ist Periodic Test	IInd Periodic Test	Total	Scaled to
Marks	30	70	100	30
Duration	1 hour	3 hours	--	--
Time Frame	End of the Ist Term	End of the IInd Term	--	--

No retests shall be conducted except on grounds of Sports/NSS/Cultural activities/Medical Grounds.

B) Scheme of CIA for practicals with CIA only shall be as recommended by the BOS in Home Science.

### **C) Seminar/Project – 100 marks**

Seminar	– 30 marks
Project	– 70 marks
Total	– 100 marks

#### a) **Seminar**

Each student shall present one seminar during the course of the third year on a topic related to the field of specialization but not specifically covered in the syllabus. The seminar presentation shall carry 30 marks and shall be assessed by the guide/teacher from the college and other faculty members.

The Principal shall specify the time frame and the scheme of marking for the seminar.

#### b) **Project**

Each student shall carry out a project at the T.Y.B.Sc. (Home Science) on any topic related to the syllabus prescribed in the field of specialization.

Project work shall be based on field work/laboratory work/library work/combination of these. The student shall submit a report of the same.

The project shall carry 70 marks and shall be assessed by the guide/teacher from the college and another teacher from the college appointed by the Principal.

The Principal shall specify the time frame and the scheme of marking for the project.

**COURSE SUMMARY****T.Y. B.Sc. (Home Science)****D: Community Resource Management**

Subject	T/P	Univ. Exam hrs.	Univ. Exams marks	CIA	Total	Periods Per week
Paper V: Housekeeping Management	T	3	70	30	100	3
Paper VI: Marketing & Entrepreneurship Management	T	3	70	30	100	3
Paper VII: Human & Environment Resource Management	T	3	70	30	100	3
Paper VIII: Home Furnishing & Interior Design	T	3	70	30	100	3
Paper IX: Community Health	T	3	70	30	100	3
Paper X: Introduction to Ergonomics	T	3	70	30	100	3
Interior Design	P	-	-	50	50	2
Housekeeping	P	-	-	50	50	3
Field work	P	-	-	100	100	6
Seminar/Project	P	-	-	100	100	6
Internship						
<b>Total</b>					<b>900</b>	<b>35</b>

\* Orientation: Students shall be oriented towards the following topics

1. Research Methods and statistics at the beginning of the academic year.
2. Entrepreneurship in the second term
3. Professional practice/work culture/ethics at the end of the academic year.

\* Students are expected to undergo internship for a period of one month at the end of the academic year, after completion of the final examination.

## **SCHEME OF CIA**

### **A) THEORY PAPERS - (30 MARKS)**

	Ist Periodic Test	IInd Periodic Test	Total	Scaled to
Marks	30	70	100	30
Duration	1 hour	3 hours	--	--
Time Frame	End of the Ist Term	End of the IInd Term	--	--

No retests shall be conducted except on grounds of Sports/NSS/Cultural activities/Medical Grounds.

B) Scheme of CIA for practicals with CIA only shall be as recommended by the BOS in Home Science.

### **C) Seminar/Project – 100 marks**

Seminar	– 30 marks
Project	– 70 marks
Total	– 100 marks

#### **a) Seminar**

Each student shall present one seminar during the course of the third year on a topic related to the field of specialization but not specifically covered in the syllabus. The seminar presentation shall carry 30 marks and shall be assessed by the guide/teacher from the college and other faculty members.

The Principal shall specify the time frame and the scheme of marking for the seminar.

#### **b) Project**

Each student shall carry out a project at the T.Y.B.Sc. (Home Science) on any topic related to the syllabus prescribed in the field of specialization.

Project work shall be based on field work/laboratory work/library work/combination of these. The student shall submit a report of the same.

The project shall carry 70 marks and shall be assessed by the guide/teacher from the college and another teacher from the college appointed by the Principal.

The Principal shall specify the time frame and the scheme of marking for the project.



**Ordinance OC-39A relating to the Three Year Choice Based Credit System Programme of Bachelor of Science (Hons.) Home Science Degree** (Under Section 24(1) of Goa University Act 1984) (Applicable for the Academic Year 2017-18 onwards).

**OC-39A.1 General**

Choice Based Credit System (CBCS) provides choice for students to select from the prescribed courses. Under the CBCS, the requirement for awarding a Degree is prescribed in terms of number of Credits to be completed by the students.

An Academic Year shall comprise two consecutive Semesters (one odd + one even in that order).

**OC-39A.2 Objectives**

1. To understand and appreciate the role of interdisciplinary sciences in the development and well-being of individuals, families and communities.
2. To learn about the sciences and technologies that enhance quality of life of the people.
3. To acquire professional and entrepreneurial skills for economic empowerment of the student in particular, and community in general.
4. To develop professional skills in food, nutrition, textiles, housing, product making, communication technologies and human development.
5. To take science from the laboratory to the people.

**OC-39A.3 Degree to be awarded**

Bachelor of Science (Hons.) Home Science.

**OC-39A.4 Duration of the Programme**

The afore-mentioned Degree Programme shall have duration of three academic years. Every academic year shall consist of two semesters.

**OC-39A.5 Admission and Eligibility**

Eligibility for admission leading to the Degree of Bachelor of Science (Hons.) Home Science shall be as follows.

**1. Eligibility for admission to Semester-I and II (in the First Year) B. Sc. (Hons.) Home Science Course:**

(A) To be eligible for admission to the Semester-I, the candidate should have passed

- (i) the Higher Secondary School Certificate (Std. XII) examination conducted by the Goa Board of Secondary and Higher Secondary Education in the Arts/ Science/ Commerce Stream,

**OR**

- (ii) The Higher Secondary School Certificate (Std. XII) examination conducted by the Goa Board of Secondary and Higher Secondary Education in the Vocational stream in the subjects notified by the University under this clause from time to time,

**OR**

- (iii) Std. XII (Arts/ Science/ Commerce) or similar examination of another body, equivalent to Goa Board of Secondary and Higher Secondary Education, Goa, and recognized as such by Goa University.
- (iv) A candidate not covered under any of the above categories but desirous of seeking admission to the said course may apply to the College. However, the Registrar, Goa University, along with the Dean of Faculty and the Chairperson of Board of Studies shall decide the eligibility.
- (v) A candidate admitted for Semester-I shall be deemed eligible for admission to Semester-II.
- (vi) A candidate migrating from another recognized University and desirous of direct admission to Semester-II may be considered for admission provided he/she has cleared/ passed First Term/ Semester-I examination of that University with Home Science subjects for which admission is sought and undertakes to successfully complete the other Compulsory Courses of Semester-I.

**2. Eligibility for admission to Semester-III and Semester-IV (in the Second Year) of B. Sc. (Hons.) Home Science Course:**

- (i) A candidate who has registered and have requisite attendance for Semester-I and Semester-II shall be eligible for admission to Semester-III.
- (ii) A candidate migrating from any other recognized University may be considered for admission to Semester-III of the B. Sc. (Hons.) Home Science provided:
  - (a) He/she has passed the First Year B. Sc. Home Science examination in all subjects from that University,
  - (b) He/she had offered at the First Year the same subjects as prescribed under Home Science category available under the Course structure of this Programme,
  - (c) He/she undertakes to successfully complete the compulsory English/ Environmental Studies syllabus prescribed for Semesters-I and II, if he/she has not already done so in the previous University; result of Semester IV examination shall be withheld if the candidate fails to fulfill this undertaking.
- (iii) A candidate admitted for Semester-III shall be deemed eligible for admission to Semester-IV.
- (iv) A candidate from another recognized University may be considered for direct admission to Semester IV provided he/she fulfills the conditions in (a), (b) and (c) at (ii) above and, in addition, has passed/ cleared Semester-III/ First Term examination of the Second Year B. Sc. Home Science of that University. However, the result of Semester IV shall be withheld if the candidate does not fulfill these conditions.

**3. Eligibility for admission to Semester-V (in the Third Year) B. Sc. (Hons.) Home Science Course:**

- (i) A candidate who has been declared passed in Semester-I to Semester-IV examinations shall be eligible for admission to Semester-V.
- (ii) A candidate admitted for Semester-V shall be deemed eligible for admission to Semester-VI.
- (iii) A candidate migrating from any other recognized University may be considered for admission to Semester-V of the B. Sc. (Hons.) Home Science Course provided:

- (a) He/she has passed the Second Year B. Sc. (Hons.) Home Science examination in all subjects from that University, and
- (b) He/she had offered at the Second Year the same subjects as prescribed under Home Science category available under the Course structure of this Programme. A candidate fulfilling these conditions shall be eligible for admission to Semester- V.

**4. Eligibility for admission to Semester-VI (in the Third Year) B. Sc. (Hons.) Home Science Course:**

- (i) A candidate already admitted for Semester-V shall be deemed eligible for admission to Semester-VI.
- (ii) Direct admission to Semester-VI shall not be permitted.

**OC-39A.6 Class strength:**

Maximum number of students in a class/division shall not exceed sixty.

**OC-39A.7 Programme Structure**

1. The Programme shall be based on a system of time-integrated Units called Credits, under the CBCS.
2. The Programme shall comprise Courses such as Core, Elective and Ability Enhancement Courses.
3. A Credit consists of 15 clock hours of Theory or 15 Practical classes of 2 hours duration each, or its equivalent; field work and such other as recommended by Board of Studies (BoS), shall be considered under Practical category for calculating Credits and Workload.
4. A student shall be eligible for the award of Bachelor's Degree on successful completion of minimum of 148 Credits, to be completed over a minimum of six Semesters.

**OC-39A.8 Course Structure**

1. Each Course may carry different weightage in terms of number of Credits. Each Course should define learning objectives and learning outcomes. A Course may be designed so as to comprise any or combination of lectures/ tutorials/ laboratory work/ field work/ outreach activities/ project work/ vocational training/ viva/ seminars/ term papers/ assignments/ presentations/ self-study and such other.
2. Core Course  
A Core Course (CC) shall be of 6 Credits and may consist of Theory component and a Practical component, in which case the Theory component will be of 4 Credits and the Practical component will be of 2 Credits, or as prescribed by BoS and approved by the Academic Council.
3. Elective Course  
An Elective Course can be chosen from a pool of Courses, which may be very specific/ specialized/ advanced/ supportive to the discipline/ subject of study or which provides an extended scope, or which enables an exposure to some other discipline/ subject/ domain or nurtures the candidate's proficiency/ skill. An Elective Course may be Discipline Specific Elective Course or Generic Elective Course.

### 3.1 **Discipline Specific Elective Course**

Discipline Specific Elective (DSE) Courses, which may be also of interdisciplinary nature, shall be offered in the main discipline/ subject of study. Each DSE shall be of 6 Credits and may consist of only Theory component or Theory and Practical component, in which case the Theory component shall be of 4 Credits and the Practical component shall be of 2 Credits or as prescribed by BoS and approved by the Academic Council.

### 3.2 **Project**

A Project work of 6 Credits, may be opted for *in lieu* of a DSE Course in Semester VI and shall be designed to acquire special/ advanced knowledge; it shall be a specialized course involving application of knowledge in solving / analyzing/ exploring a real life situation / difficult problem. A student shall undertake such a Project under the guidance of a teacher/ faculty member. The topic for the Project work shall be given in Semester V. The candidate shall be required to carry out work for the Project during Semesters V and VI. The assessment of the Project will be carried at the end of Semester VI.

### 3.3 **Generic Elective Course**

A Generic Elective (GE) Course shall be of 6 Credits, and may be chosen from an unrelated discipline/ subject, with an intention to seek exposure. A Core Course offered in a discipline/ subject may be treated as a GE Course for another discipline/ subject and vice versa, and may consist of only Theory component, or Theory and Practical component, in which case, the Theory component will be of 4 Credits and the Practical component will be of 2 Credits, or as prescribed by BoS and approved by the Academic Council. ECA/ General Interest/ Hobby/ Sports/ NCC/ NSS/ Cultural activities/ such related courses, shall be treated under Generic Electives.

## 4. **Ability Enhancement Courses**

The Ability Enhancement (AE) Courses may be of two kinds: Ability Enhancement Compulsory Courses (AEC) Courses and Skill Enhancement Courses (SE) Courses.

- 4.1 AEC Courses are based upon the content that leads to knowledge enhancement. Environmental Studies as AEC Course is mandatory for all disciplines. Each Course shall have only Theory component of four Credits or two separate Courses of 2 Credits each.
- 4.2 SE Courses are value-based and/ or skill-based and are aimed at providing hands-on-training, competencies, skills. These Courses may be chosen from a pool of Courses designed to provide value-based and/or skill-based knowledge. Each Course will be of four Credits.

Subject	Course Code	I	II	III	IV	V	VI	Total
Subject 1	CC	6			6			12
Subject 2	CC	6			6			12
Subject 3	CC	6			6			12
Subject 4	CC		6	6				12
Subject 5	CC		6	6			6	18
Subject in FY	CC		6					6
Subject in SY	CC			6				6
Subject in TY	CC					6		6
English	AECC	2	2					4
ENV Studies	AECC	2	2					4
Subject in SY/TY	GE			6	6	6	6	24
Subject in SY	SEC			4	4			8
Subject in TY	DSE					6 x 2	6 x 2	24
+ Project (in lieu of a DSE)	DSE							
Total		22	22	28	28	24	24	148

## NOTE:

- (i) Roman numbers in the first row refers to Semester. Subjects refer to specializations in Home Science.
- (ii) The Codes in the second column refer to the type of Courses [Core Course (CC), Discipline Specific Elective (DSE) Course, Generic Electives (GE) Course, Ability Enhancement Compulsory (AEC) Course and Skill Enhancement (SE) Course].
- (iii) Each Course is of 6 Credits (including Practical wherever applicable) except Environmental Studies, English, and Skill Enhancement Course which are of 4 Credits each.
- (iv) Numbers refer to Credits under Semester I, II, III, IV, V and VI. If there are two numbers separated by a multiply sign the first one is Credit per Course, and second one refers to Courses from specializations of Home Science.
- (v) A Project is in lieu of a DSE, the Credits are not shown here separately.

1. **SEMESTER-I**

There shall be:

- (i) Three Compulsory Core Courses from each specialization in Home Science (CC).
- (ii) Two Compulsory Courses, one in English and one in Environmental Studies (AEC).

The CC Courses in (i) above shall carry 100 marks each (75 marks for Theory and 25 marks for Practical component). The Course in English and in Environmental Studies shall carry 50 marks each.

2. **SEMESTER-II**

There shall be:

- (i) Two Compulsory Core Courses from each specialization in Home Science (CC).
- (ii) One Compulsory Core Course in Life Science (CC).
- (iii) Two Compulsory Courses, one Course in English and one in Environmental Studies (AEC).

The CC Courses in (i) and (ii) above shall carry 100 marks each (75 marks for Theory and 25 marks for Practical component). The Course in English and in Environmental Studies shall carry 50 marks each.

### 3. SEMESTER-III

There shall be:

- (i) Two Compulsory Courses from each specialization in Home Science (CC).
- (ii) One Compulsory Core Course in Physical Science (CC).
- (iii) One Course each from Generic Elective (GE) and Skill Enhancement (SE) Course. The SE Course shall be either Theory or Practical.

The CC Courses in (i), (ii) and (iii) above shall carry 100 marks each (75 marks for Theory and 25 marks for Practical component). The SE Course shall carry 100 marks.

### 4. SEMESTER-IV

There shall be:

- (i) Three Compulsory Core Courses from each specialization in Home Science (CC).
- (ii) One Course each from Generic Elective (GE) and Skill Enhancement (SE) Course. The SE Course shall be either Theory or Practical.

The CC Course in (i) and (ii) above shall carry 100 marks each (75 marks for theory and 25 marks for practical component). The SE Course shall carry 100 marks.

### 5. SEMESTER-V

There shall be:

- (i) One Compulsory Core Course in Research Methodology (CC).
- (ii) Two Courses of Discipline Specific Elective (DSE).
- (iii) One Course from Generic Elective (GE).

The four Courses in (i), (ii) and (iii) above shall carry 100 marks each (75 marks for Theory and 25 marks for Practical component).

### 6. SEMESTER-VI

There shall be:

- (i) One Compulsory Core Course from specialization in Home Science (CC).
- (ii) Two Courses of Discipline Specific Elective (DSE).
- (iii) One Course from Generic Elective (GE).

The four Courses in (i), (ii) and (iii) above shall carry 100 marks each (75 marks for Theory and 25 marks for Practical component).

## OC-39A.10 Scheme of Examination

- 1.(a) The evaluation for the Courses, shall comprise of the Intra-Semester Assessment (ISA) and Semester End Examination (SEE).
- (b) The ISA tests shall carry 20% of maximum marks allotted for the Course, and SEE shall carry 80% marks. A Course of only Theory carrying 100 marks shall have ISA component of 20 marks and a SEE component of 80 marks. A Theory Course having both Theory and Practical component, shall have ISAs only for Theory component for total of 15 marks, and SEE for Theory component of 60 marks and Practical component of 25 marks. A Theory Course carrying 50 marks shall have ISA component of 10 marks and SEE component of 40 marks.
- 2.(a) The ISA for the Theory component of a Course shall be conducted twice in a given Semester, once through a written test, and the other by using alternate modes of evaluation including assignment/ presentation/ orals/ such other. There shall not be any averaging of ISA marks.
- (b) Generally, ISA for a given Course shall be conducted by the teacher(s) teaching that Course.
- (c) The schedule for the ISAs shall be notified at the beginning of the Semester.
- (d) The marks of ISA shall be communicated to the students within two weeks.
- (e) ISA written test shall preferably be completed by the end of July for odd Semesters and end of January for even Semesters. Students who fail to appear for the test due to a genuine reason shall be given another opportunity by the end of August/ February respectively, on a date pre-determined by the College. The other mode of ISA will be completed as decided by the teacher but before the end of the Semester.
- (f) Every College shall appoint a three member committee to monitor the ISA in the college. There will be no remission in workload or remuneration for carrying out this work.
- 3.(a) The SEE shall be conducted at the conclusion of a given Semester, and shall cover the entire syllabus prescribed for the respective Course.
- (b) A candidate shall be considered to have successfully fulfilled the requirements of a Semester to be eligible to appear for the SEE, provided he/she has appeared for two ISAs of the Course, and fulfills the minimum attendance requirements (75%) as per the relevant rules of the University. A candidate, failing to fulfill these conditions, shall have to repeat the Semester.
- (c) A tentative schedule of SEE examination, evaluation and declaration of results shall be prepared by the College, preferably at the beginning of each Academic Year for the first two years, and shall be notified to the students, with a copy to the University.
- (d) Setting of the question papers, assessment and evaluation of answer-scripts for SEE from Semester I-IV shall be done by the teachers teaching the Course and declaration of results shall be done by the College itself.
- (e) The pattern of question paper(s) to be set for the SEE in a given Course and the scheme of marking shall be decided by the BoS in that Course. For this purpose, the Board of Studies shall frame specimen question paper(s) in the concerned Course for each Semester, for the information of the students. Similarly, for Practical examinations, the number of laboratory exercises, marks distribution for each exercise and other relevant details shall be decided by the BoS.

- (f) The schedule of the Examination and the setting of the question paper(s), evaluation of answer-scripts for SEE from Semester- V to Semester- VI shall be done Centrally by the Goa University.
  - (i) For the SEE, a Panel of Paper-Setters and Examiners shall be recommended by the BoS, approved by the Academic Council, and the examiners shall be appointed by the University.
  - (ii) The Paper-Setters shall finalize the question paper(s); there shall be no objective type of questions at SEE; however short answer questions may be set. There shall be a blue print in each Course.
  - (iii) They shall also prepare a key for answers to all question/ sub-questions and the scheme of marking of the paper set at the examination. In case of descriptive type of answers, important points to be expected may be highlighted.
  - (iv) The Chairperson shall personally hand over the sealed set of question papers and answer keys to the Controller of Examinations in the prescribed manner.
  - (v) Photocopies of this key and the marking scheme for each of the Course of the concerned Semester V and VI shall be given to the examiners assessing the papers.
  - (g) The duration of SEE Theory Course carrying 80 marks will be of two and half hours, Theory Course carrying 60 marks shall be of two hours, Theory Course carrying 40 marks shall be of one and half hours; Practical examination of 40 marks shall be of two hours duration and of 20 marks shall be of one and half hour duration.
- 4.(a)(i) Examination(s) for Courses having Practical component shall have marks allotted for journal/ lab record book, field work, experiment assigned to the candidate and orals, and may be broadly as follows: Experiment 60%, Journal 20%, Orals 20%. The final break-up of marks shall be as recommended by the BoS, approved by the Academic Council and notified by the University to the College(s).
- (ii) For assessing the candidate's performance in the assigned experiment, the examiner shall take into account the planning, the procedure and the technique followed by the candidate along with the readings/ observations, the results and the presentation.
  - (iii) Examiner(s) shall take into account the regularity of the candidate in attending the Laboratory Course and presentation of the journal. For subjects having field work component, the candidate shall be required to submit the report of such field excursion(s) along with the journal(s) for assessment. The examiner(s) shall consider the report along with journal(s) while allotting the marks.
  - (iv) In oral examination, the examiner(s) shall assess the knowledge of the candidate in the Course as well as the experiment(s) performed by the candidate.
- (b) Record of the breakup of marks thus obtained by the candidate for Semesters I to IV, shall be maintained by the respective College in a sealed envelope for a minimum period of 4 years.
  - (c) The Practical examination shall be treated as an independent head of passing.



- (d) A candidate may be permitted, strictly on medical or other genuine grounds, to appear for the Practical examination out of turn, irrespective of the timetable and the batch allotted to him/her, in the examination Programme for Semester-V and Semester-VI issued by the University. Such permission may be granted by the University if so recommended by the Principal of the College. The candidate shall be required to remit the requisite fee for being examined out of turn.
- 5.(a) (i) A Project Course in the area/ field of subject/s may be opted for by the student in lieu of a DSE Course in Semester VI, which shall be carried out during Semesters V – VI.
- (ii) Project work and the Report shall be based on field work/ library work/ laboratory work /on-the-job training / similar work assigned by the teacher.
- (iii) Project work shall be assigned to individual students; no group project shall be permitted.
- (iv) The teachers shall be assigned according to the requirement of the Subject.
- (v) The Project Report shall be submitted at the end of Semester VI for evaluation.
- (b) (i) A teacher shall be permitted to guide a maximum of 8 students.
- (ii) The Project vacancies shall be decided by the College based on the available guides and their interest.
- (iii) In case more number of students are opting for Project, the College shall select the students based on the criteria developed by the College, which shall be notified to the students well in advance.
- (c) The assessment of the Project Course shall be done equally by the Internal Examiner (Project Supervisor for 50 marks) and the External Examiner (for 50 marks) as per the guidelines defined in the Project Manual.
- (d) A remission in work load per week to the teacher for guiding students shall be distributed over Semesters V – VI. The remission shall be calculated as 1 lecture hour for every 2 students, an odd number of students being rounded up to the next higher even number, for calculation of this remission.
- 6.(a) (i) Revaluation of answer books of the candidates at Semesters V and VI shall be permitted as per the existing provisions of OA-5.15 for revaluation/ verification.
- (ii) However, revaluation at Semesters I to IV examinations shall not be permitted. Personal verification of marks shall be granted to the candidate in the presence of Principal/ Vice-Principal and the concerned Examiner, provided he/she has applied for the same along with payment of prescribed fees, within one week of the declaration of result.
- (b) The following shall be the procedure for the verification of marks:
- (i) On a notified day and time, which should be not later than 10 days after the receipt of application from the candidate, the candidate shall be shown the answer book in the chamber of the Principal/Vice-Principal in the presence of the Examiner concerned.
- (ii) If the candidate is not satisfied with the result on personal verification of answer book, he may apply to College Grievance Committee within a week.

- (iii) The College Grievance Committee shall take appropriate action as per the relevant Ordinance and inform the candidate of the decision taken accordingly.
- 7. A supplementary examination shall be conducted, preferably after 15 days from the declaration of results of Semesters II and IV examinations. Students who have a backlog of any, or all of the Courses (Theory / Practical) of Semesters I, II, III and IV are eligible to appear for this examination.
- 8.(a) (i) Improvement of performance/total score shall be permitted to a candidate who has passed the B.Sc. Degree examination, in which case he/she shall be required to appear again only in the SEE component of the Courses of Semester V and/or Semester VI examinations, excluding the Project Course. For this purpose, the marks scored at the first appearance in the Project Course, and also in ISA component of the other Courses, shall be carried forward for tabulation of the result under "Improvement of Performance".
- (ii) A candidate shall not be permitted to reappear for improvement of performance at Semesters I, II, III and IV.
- (iii) The facility to reappear "under improvement" shall be available during the immediately subsequent regular Semester-V and Semester-VI examinations, but within double the duration period.
- (iv) The performance of a candidate, who appears under this provision and fails to improve, shall be ignored.
- (b)(i) The candidate availing of this provision shall be considered to have passed Semesters V and/or VI "under improvement" and this fact shall be recorded on his/her Statement of Marks and other relevant documents.
- (ii) The candidate shall be required to surrender the original Statement of Marks and other relevant documents at the time of receiving the fresh statement of marks in the event of improvement of performance/ total score.
- (iii) A candidate can appear only once under this clause.
- (iv) To be eligible for Rank the student shall be required to complete the Programme in the minimum prescribed period and shall be required to pass each of Semesters I to VI, in a single attempt. The Rank shall be awarded on the basis of the provisions formulated by the University.

### **OC-39A.11 Award of Grades**

1. Marks awarded in each Course shall be represented in the form of Grades in the grade sheet issued at the end of each Semester.
2. Letter Grade shall be the index of the performance of students in a said Course, denoted by letters O, A+, A, B+, B, C, P and F, and calculated based on Grade Point and marks obtained for each Course, as shown in the Table below. A candidate registered for the three years B.Sc. Degree Programme, to be declared successful, shall be required to obtain a minimum Pass Grade (P) in all Courses.
3. The conversion of marks into Grade and Grade Point shall be as shown below;

<b>Marks %</b>	<b>Letter Grade</b>	<b>Grade Point</b>
85 – 100	O (Outstanding)	10
75 – <85	A+(Excellent)	9
65 – <75	A (Very Good)	8
55 – <65	B+(Good)	7
50 – <55	B (Above Average)	6
45 – <50	C (Average)	5
40 – <45	P (Pass)	4
0 – <40	F (Fail)	0
---	Ab (Absent)	0

4. A student shall be required to score a minimum of 'P' grade in ISA, SEE and Practical components taken together to pass in a Course in Semesters I to VI. Marks secured by the student in ISA shall be carried forward even if he/she fails in the paper.
5. A Semester-end Grade Point Average (SGPA) Certificate shall be issued to all the registered students after every Semester, based on the Grades earned. The Certificate will display the Course details (code, title, number of credits, grade secured).
6. Provision for gracing or entitlement marks shall be as specified under OA-5.16; once allotted, these marks shall neither be permitted to be withdrawn, nor transferred.

#### **OC-39A.12 Cumulative Grade Point Average (CGPA)**

1. The Final result shall be declared as CGPA, earned at the end of the Programme, which shall be a measure of overall cumulative performance of a student over Semesters V – VI.
2. The CGPA shall be the ratio of Total Credit Points secured by a student in all Core Courses and best of DSEs to the maximum number of Credits required in the T. Y. Semesters V and VI, calculated as specified under Ordinance OA-16.4.6.
3. In case a candidate has accumulated more than required number of Credits, the CGPA shall be calculated taking into accounts all the Core Courses at T. Y. and the best of Discipline Specific Elective (DSE) Courses, without forgoing the minimum number of DSEs required under each Subject.
4. Additional DSEs offered if any will be shown on the grade sheet. CGPA shall be expressed up to two decimal places.

5. The CGPA shall be converted to the Final Letter Grade, as shown in the table below:

<b>CGPA</b>	<b>Grades</b>
10.0	O(Outstanding)
9.0 – <10	A+ (Excellent)
8.0 – <9.0	A (Very Good)
7.0 – <8.0	B+ (Good)
6.0 – <7.0	B (Above Average)
5.0 – <6.0	C (Average)
4.0 – <5.0	P (Pass)
Less than required credits or CGPA <4.0	F (Fail)

**OC-39A.13.1 College Examination Committee, College Unfair Means Committee and College Grievance Committee**

The following committees shall be constituted by the Principal of the College and shall work under the supervision of the Principal, for the terms mentioned against each of these:

- (A) College Examination Committee - 3 years
- (B) College Unfair Means Inquiry Committee (CUMIC) - 3 years
- (C) College Grievance Committee - 3 years

**(A) The College Examination Committee shall consist of :**

- (i) A senior teacher who shall be the Chairperson
- (ii) Two to four regular teachers (In addition to the Chairperson)
- (a) There shall be no remission in work-load.
- (b) This Committee shall be generally in charge of all matters pertaining to B.Sc. Examinations in the College.
- (c) The Committee shall prepare the examination time-table, arrange to get the question paper sets printed and answer books assessed.
- (d) The Committee shall arrange to get the results prepared, settled, announced and individual statement of marks prepared and issued to the candidates.

**(B) The (CUMIC) shall be constituted with the following members**

- (i) Vice-Principal or a senior teacher as Chairman
- (ii) Two members of the College Examination Committee
- (a) The Committee shall inquire into the cases of unfair means and malpractices reported in a manner prescribed by OC-39A.13.2 and shall recommend to the Principal a course of action as prescribed in OA-5.14.

**(C) The College Grievance Committee shall be constituted as under :-**

- (i) Vice-Principal/Senior member of teaching staff as Chairman, provided that he is not the Chairman of CUMIC.
- (ii) Two regular teachers, preferably not members of CUMIC and the College Examination Committee.

- (iii) In case the grievance concerns any member of the Committee, the Principal shall reconstitute the Committee for the concerned grievance, excluding the concerned member.
- (a) The Committee shall inquire into written complaints from the students, referred to the Committee by the Principal, in the conduct of examinations and recommend a course of action to the Principal as prescribed in OC-39A.13.3 and OA- 5.14

### **OC-39A.13.2 Inquiry into cases of unfair means**

The following procedure shall be followed for inquiring into the cases of candidates alleged to have used unfair means at the F. Y. and/or S. Y. B.Sc. examinations.

1. The candidate shall be served with a show cause notice and be made aware of the charges/allegations reported against him/her so as to enable him/her to prepare his defense at the time of this appearance before the CUMIC and inform him/her thereby of the proposed action to be taken in his/her case, directing him/her to reply to the show cause notice as to why the action proposed should not be taken against him/her.
  - (a) The reply received by the Committee from the candidate when he/she appears before it will be considered by the Committee and the final recommendation in the matter be taken and reported to the Principal for approval.
  - (b) The punishment finally awarded can be equal to, or less than, what is mentioned in the show cause notice, but not more than what is mentioned therein.
  - (c) The CUMIC is a recommendatory body. The Principal will exercise his/her power under Statute SB-13(iv) of the University and issue the final order.
  - (d) The broad category of malpractice and the quantum of punishment for each category thereof shall be as given in Ordinance on malpractices OA-5.14.19. Besides these provisions, each case may be examined in detail and punishment awarded on the merit of each case.

### **OC-39A.13.3 Investigation of Grievance by the College Grievance Committee**

1. The Committee shall consider the written complaint submitted by a student on the conduct of examination provided that
  - (i) the complaint is submitted within 15 days after the declaration of results;
  - (ii) the complaint is accompanied with a fee of Rs.200/- (refundable if the complaint is found genuine); and
2. The matter is referred to the Committee by the Principal.
  - (i) The Committee shall invite a reply to the allegations, if any, made by the student from the concerned party.
3. After considering the reply of the concerned party, the Committee shall recommend a course of action in writing to the Principal.
4. The Principal may inform the student about the findings of the Committee and shall take appropriate action including reassessment of the said answer book. However, if the marks are reduced after revaluation of the said answer book, the original marks shall be retained and shall be communicated that there is no change in his/her result.

A minimum fine of Rs.200/- which shall not exceed Rs.500/-, shall be imposed on the student complainant, if the said allegation(s) is (are) found to be a deliberate attempt at casting aspersions on the teacher(s) concerned. If the allegations are found to be genuine and the same is recorded giving reasons, the action shall be taken as provided under OA-5.2.6.

**OC-39A.14 Academic Audit Committee (AAC)**

1. There shall be an AAC to assess the manner in which classes are conducted and the method as well as the content of evaluation of each Course of each Semester.
2. The Committee shall be appointed by the Vice-Chancellor for a period not exceeding three years, for each College, from a master panel recommended by the BoS and approved by the Academic Council. The Committee shall consist of at least three members of which at least two will be from outside the College, as the case may be.
3. The AAC shall meet at least once in two years and submit the report to Vice-Chancellor. Vice-Chancellor may forward the same to BoS for consideration.

**OC-40 (effective from 26<sup>th</sup> September, 2003) Ordinance of the MBA (Logistics Management Programme) conducted by INS Hamla.**

**Sl. No Provision/Regulations**

**OC-40.1 (effective from 26<sup>th</sup> September, 2003) Objective of the Programme**

To build competence in students to effectively undertake mid level managerial jobs in Logistics Management.

**OC-40.2 (effective from 5<sup>th</sup> October, 2009) Duration of the Programme**

A five term programme to be covered over 64 weeks. The first four terms shall consist of intensive in-class learning sessions and the last term shall be assigned for Dissertation and On the Job Training. Each term shall be of 10 to 12 weeks duration.

**OC-40.3 (effective from 26<sup>th</sup> September, 2003) Admission and Eligibility for Admission**

Service Officers including those from the Coast Guard and friendly foreign navies who are graduates in any subject such as Arts, Commerce, Science, Engineering etc. having undergone the 10+203 or more than 3 scheme to graduate, are eligible for admission to MLM, provided they satisfy the eligibility conditions of the University as per its Statutes and Ordinances. In case of graduates from foreign countries, the eligibility will be as per the Statutes and Ordinances of Goa University. The Directorate of Personnel of the respective services will nominate the candidates for the Programme.

**OC-40.4 (effective from 5<sup>th</sup> October, 2009) Structure of the Programme**

**OC-40.4.1 (effective from 5<sup>th</sup> October, 2009) Term wise Programme Structure: as laid down by the Board of Studies and approved by the Academic Council**

**OC-40.4.2 (effective from 5<sup>th</sup> October, 2009) Subject LM9 comprises of 'On the Job Training' (OJT) to be done in Naval Establishments. At the end of the 5th term student's ability to apply the knowledge gained from the programme on areas of Logistics Management shall be assessed by the respective heads of the organizations where they are deputed for OJT.**

**OC-40.4.3 (effective from 5<sup>th</sup> October, 2009)** Subjects LM10 and LM11 comprise of a single Dissertation and shall be undertaken in one of the Naval Establishments primarily in the field of Supply Chain / Logistics Management, under the guidance of a regular Directing Staff or Contributory/ Guest Faculty of INS Hamla.

At the end of the 5<sup>th</sup> term students shall present a Seminar on the report to a committee headed by a teacher from the Faculty of Management Studies of Goa University and consisting of a representative from the corporate sector, both nominated by the Vice Chancellor of Goa University with co-opted members from the panel of experts to be identified and recommended by INS Hamla. For students from foreign countries, the presentation and the question answer session shall be conducted using the facility of email, chat or such other suitable technologies.

**OC-40.4.4 (effective from 26<sup>th</sup> September, 2003)** The Council of Directing Staffs of the Faculty of Management Studies, INS Hamla will have the freedom to reallocate courses across terms.

**OC-40.4.5 (effective from 26<sup>th</sup> September, 2003)** For non elective subjects other than dissertation and OJT, the syllabi will be same as those for the MBA programme of Goa University.

**OC-40.5 (effective from 5<sup>th</sup> October, 2009) Electives**  
The council of Directing Staff of the Faculty of Management Studies, INS Hamla shall design and periodically revise the syllabi of Logistics Management electives LM1 to LM8 mentioned in 4.1 above, subject to the condition that they comprise of 18 to 20 credits.

**OC-40.6 (effective from 5<sup>th</sup> October, 2009) Evaluation, Grading and Pass requirements.**

**OC-40.6.1 (effective from 5<sup>th</sup> October, 2009)** Each subject or component of evaluation is split into certain number of credits as given in 4.1 above. The number of credits shall be approximately the number of minimum contact hours divided by 15. The Directing Staff teaching the subject, with the consent of the Council of Directing Staff of the Faculty of Management Studies, INS Hamla shall decide the method as well as the content of evaluation of each subject. No component of evaluation shall exceed 40% weightage in the total evaluation of the subject.

For each subject, detailed course outlines shall be obtained from the Directing Staff. It shall include objectives in terms of competencies to be developed, broad outline of topics to be covered, pedagogical and evaluation methods to be used and minimum reading stipulated. The format for the Course Outline shall include session by session topics to be covered, reference of essential reading for each session, session by session assignments, components of evaluation, rationale for each component of evaluation, weights for each component of evaluation, and will be as per Schedule I and Schedule II.

The course outlines shall be submitted to the Faculty Council of the Faculty of Management Studies of INS Hamla before the beginning of each Term.

The faculty council shall consist of all the members of the teaching staff.

Dissertation Seminars shall be organized at INS Hamla, where only the naval audience and examiners can ask questions. INS Hamla shall retain the dissertation reports after evaluation by the Committee.

**OC-40.6.2 (effective from 5<sup>th</sup> October, 2009)** The content, the method of conduct and evaluation methods of the MBA (LM) programme shall be audited by an Academic Audit Committee of examiners, on completion of the 2<sup>nd</sup> and 5<sup>th</sup> terms of every batch and shall submit its report to the Board of Studies of the Faculty of Management Studies of Goa University. The committee shall be appointed by the Vice Chancellor, from a panel of examiners to be forwarded by INS Hamla. The committee shall consist of at least three examiners, of which at least one shall be from the Department of Management Studies of Goa University and preferably at least one from the corporate sector. The Committee shall use Schedule III for Academic Audit.

**OC-40.6.3 (effective from 5<sup>th</sup> October, 2009)** After evaluation, each student shall be graded for each subject, as per the following scheme of grades and grade points.

Grade

A: Excellent 8.00 upwards

B: Good 6 to < 8

C: Satisfactory 5.5 to < 6

D: Low Pass 5 to < 5.5

F: Failed 0 to < 5

Teachers shall use the following grades (and not Grade Points) with equivalent grade points for individual items of evaluation such as answers to individual questions in a question paper.

A+: 10, A: 9, A-: 8, B+: 7.5, B: 6.75, B-: 6, C+: 5.9, C: 5.7, C-: 5.5, D+: 5, D: 3.4, D-: 1.7, F: 0

The grade points awarded for a subject shall be rounded off to two decimals for determining grades for the subject.

**OC-40.6.4 (effective from 5<sup>th</sup> October, 2009)** To obtain a pass in MBA (LM), the student should have obtained (i) a weighted average grade point (weighted by the number of units of each subject of 5.00 for the subjects of Terms 1 to 5 taken as a whole, (ii) should not have obtained F grades for any subject.

The results of each Term shall be handed over to the Examinations Department of Goa University for tabulation and release of final mark lists after Term 5 within a period of 5 weeks from the date of completion of term 5.

Normally, grades or grade points will not be converted to marks, class, distinctions, etc. In exceptional cases, where an employer or an entity insists on specifying equivalent marks or such classifications, the following scheme will be used.

Equivalent Marks = Grade Point Average multiplied by 10.

A: Distinction

B: First Class

C and D: Second Class

F: Failed

**OC-40.7 (effective from 5<sup>th</sup> October, 2009)** The Board of Studies of the Faculty of Management Studies of Goa University shall resolve ambiguities and interpretation arising from this Ordinance.



(Effective from 5<sup>th</sup> October, 2009)

**Annex**

**Term wise Programme Structure**

**Term 1**

Subject Code	Credits	Contact Hours per Week
101	1.5	2
102	1	1
103	1.5	2
104	1.5	2
105	1.5	2
106	1.5	2
107	1.5	2
108	1.5	2
111	1	2 in a Fortnight
113	1	2
301	1.5	2
LM1	1	1
LM2	1	1

**Term 2**

Subject Code	Credits	Contact Hours per Week
302	1.5	2
303	1.5	2
305	1.5	2
306	1.5	2
308	1.5	2
310	1	2 in a Fortnight
312	1	2
LM3	3.5	5
LM4	2	3

**Term 3**

Subject Code	Credits	Contact Hours per Week
304	1.5	2
307	1.5	2
308	1.5	2
401	2	2 Hours in Class and Field Work
406	1	2
503	1.5	2
507	1	2 in a Fortnight
505	1.5	2
LM5	2	3
LM6	3	4

**Term 4**

Subject Code	Credits	Contact Hours per Week
502	1.5	2
701	1.5	2
LM7	3	4
LM8	5.5	8
509	1	2
705	1	2 in a Fortnight
703	1.5	2

**Term 5**

Subject Code	Credits	Contact Hours per Week
LM9	5.5	
LM10	5	
LM11	2 (1 hour per student)	

**(Effective from 5<sup>th</sup> October, 2009)****Schedule I Scheme of Evaluation**

Subject:

Instructor:

Term:

Year:

College / Institute:

**Objectives**

At the end of the course, the students will have competence in:

<b><i>Objective in Terms of Competence to be Developed</i></b>	<b><i>Learning Methodology Planned for each of the Competencies in Column 1: The Activities will Involve Case Discussions, Presentations, Project/s, Article Critiques, Problem Solving Sessions, Other Experiential Sessions, etc.</i></b>	<b><i>Implemented</i></b>	<b><i>Reasons for Deviations</i></b>

**(Effective from 5<sup>th</sup> October, 2009)**

Items		Planned	Planned	Implemented	Implemented	Reasons for Deviations
Competence Assessed	Evaluation Methodology Planned	Group / Individual Evaluation	Weight: Total 100	Group / Individual Evaluation	Weight: Total 100	

**(Effective from 5<sup>th</sup> October, 2009)**

**Schedule II Course Outline Form**

Term:            Subject:            Instructor:            Year:            College / Institution:

Item	Planned	Implemented
Session No <sup>1</sup>	Date	
Objective		
Reading Material		
Learning Methodology		

Item	Planned	Implemented
Session No	Date	
Objective		
Reading Material		
Learning Methodology		

Item	Planned	Implemented
Session No	Date	
Objective		
Reading Material		

Learning Methodology		

<sup>1</sup> One Table for each Session

**(Effective from 5<sup>th</sup> October, 2009)**

Schedule III

Form for AAC (Academic Audit Committee) Report on Conduct of Sessions and Evaluation<sup>1</sup>

Batch		Program	
Term		Institution	
Subject Code		Subject	
Credits		Instructor	

Documents required are in the footnote.<sup>4</sup> The Process to be adopted is outlined in the footnote.<sup>5</sup>  
The comments and action plans, against each item below, are to be filled up based on these inputs.

No	Item	Comments / Suggestions / Decisions by AAC	Status of Implementation for the Subsequent Batch
1	Whether the Evaluation Scheme clearly articulates the Competencies to be developed in Behavioural Terms.		
2	Whether the Competencies to be developed are consistent with the Objectives of the Syllabus.		
3	Whether the topics dealt with were adequate to develop the required competencies.		
4	Whether the Course Outline clearly articulates the Competencies to be developed in Behavioral Terms for each Session.		

<sup>4</sup> Documents Required (These are to be submitted through a File or Files numbered Volume I, II, III, etc.):

1. Syllabus
2. Course Outline with Implemented Column filled up
3. Evaluation Scheme with Implemented Column filled up
4. Hard / Soft copies of Materials discussed other than Text Books prescribed
5. Attendance Sheet with Number of Hours Engaged with % Attendance for each Student
6. Grade Sheet with Item wise and Overall Grades
7. Question Papers for Assignments and Tests
8. Answer Sheets of Assignments (Soft / Hard) / Tests
9. Feedback Rating by Students and Qualitative Comments

<sup>5</sup> Process to be Adopted:

1. Perusal of above Documents
2. Discussions with the Batch Coordinator, Instructor and Students
3. Random Check of Sample Answer Sheets
4. Random Check of Grade Sheets, etc.

5	Whether each session had experiential (active rather than passive learning) exercises such as cases, problems, exercises etc. rather than pure theoretical / conceptual discussions.		
6	Whether the exercises were spelt out in specific terms (such as Problem Numbers, Case Title, etc.) in the Course Outline		
7	Whether these exercises were reality or practice oriented rather than purely conceptual or theoretical.		
8	Whether these exercises were adequate to develop the envisaged competencies.		
9	Whether reading materials for each session for prior reading were given with page numbers specified in the Course Outline.		
10	Whether executives were invited for some of the Sessions as per the Ordinance, wherever applicable.		
11	Was the workload for the student realistic?		
12	If a textbook other than the one recommended is followed, whether it is appropriate for the subject.		
13	Whether the measures of evaluation chosen to assess the competencies were appropriate.		
14	Whether the assessment was evenly spread during the Term.		
15	Whether weight for any Item of Evaluation exceeds limits (except for 1 Credit Subjects with prior permission) given by the Ordinance		
16	Whether the questions were appropriate for open book examinations.		
17	Whether the Assignments were appropriate for developing the required competencies (In contrast to those where cut and paste and copying could be adopted)		
18	Whether qualitative comments were given in Answer Sheets / assignments.		

19	Whether grades rather than marks were adopted for individual items of evaluation.		
20	Whether Grades are available against each Competency.		
21	Whether the full spectrum of grades was used. (Was grading too liberal or too conservative?)		
22	Whether grading was fair (based on sample check of answer sheets and grievances expressed, if any, by the students).		
23	Whether AAC recommends any change in the grades awarded. (Give reasons)		
24	On the whole, does the Committee feel the Instructor succeeded in developing the required competence on the part of the students?		
25	Overall comments and instructions to Instructor for further action.		
26	Action required at the level of the Institution		
27	Action required at the level of the University		

Names and Signatures of AAC Members with Date

**OC-41 (effective from 26<sup>th</sup> September, 2003) Ordinance for the proposed Post Graduate Diploma in Journalism and Mass Communication (PGDJMC) (approved from 13/8/2004)**

**OC-41.1 (effective from 26<sup>th</sup> September, 2003) Objective of the Programme**  
To build competence in students to effectively undertake careers in journalism and mass communication.

**OC-41.2 (effective from 26<sup>th</sup> September, 2003) Duration of the Programme**  
One Year full time programme consisting of two terms of 250 contact hours. The programme consists of 10 papers approved by the B.O.S. from time to time.

**OC-41.3 (effective from 26<sup>th</sup> September, 2003) Admission and Eligibility for admission**  
Graduate in any subject such as arts, commerce, science, engineering etc. are eligible for admission. The Admission Committee constituted for the purpose shall conduct entrance test and merit list the candidates if necessary.

**OC-41.4 (effective from 26<sup>th</sup> September, 2003) Appointment of Monitoring Committee**  
A Monitoring Committee shall be constituted by the College and shall consist of the Head of the Institution, a teacher of the University to be nominated by the Vice-Chancellor and a member of the PGDMC faculty preferably from the media, to monitor the programme.

**OC-41.5 (effective from 26<sup>th</sup> September, 2003) Structure of the Programme**

**OC-41.5.1 (effective from 26<sup>th</sup> September, 2003) Term wise Programme Structure**

**TERM 1**

Code	Subject / Component of Evaluation	Marks	
		Theory	Term work (Assignment or Practicals)
C1	News Reporting and Writing	50	25
C2	News Editing	50	25
C4	Current Affairs and Political Issues	50	25
C5	Basic Writing Skills	--	25
C6	Computer Application in Journalism	--	25
B1	Essentials of Mass Communication	50	--
B2	History of the press & Indian Independence movement	50	--
A2	Internship	--	--
A3	Experimental Journal	--	--
A4	Viva – Voce	--	25
	Total	250	150

**TERM 2**

Code	Subject / Component of Evaluation	Marks	
		Theory	Term work (Assignment or Practicals)
C1	News Reporting and Writing	50	25
C2	News Editing	50	25
C3	Feature and Editorial Writing	50	50
C4	Current Affairs and Political Issues	50	25

C5	Basic Writing Skills	--	25
C6	Computer Applications in Journalism	--	25
B3	Constitution of India, Media Laws, Ethics and Issues	50	--
A1	Advertising and Public Relations	50	--
A2	Internship	--	25 (for terms I & II together)
A3	Experimental Journal	--	75 (for terms I & II together)
A4	Viva-Voce		25
	Total	300	300
	Grand Total for Term I & II	550	450

**OC-41.5.2** (effective from 26<sup>th</sup> September, 2003) Subject allocations to Terms are only indicative. The institution offering the PGDJMC may reallocate courses across Terms with the approval of the Committee as per 4 above.

**OC-41.5.3** (effective from 26<sup>th</sup> September, 2003) For A3: Experimental Journal, there shall be 5 issues of 4 page tabloids presented during the entire programme.

**OC-41.5.4** (effective from 26<sup>th</sup> September, 2003) There shall at least be 5 submission per term for each of the Term work component of each subject.

**OC-41.5.5** (effective from 26<sup>th</sup> September, 2003) The Institution offering the course will also submit a brief resume of teachers teaching each subject or guiding term work for approval by the Committee.

**OC-41.6** (effective from 26<sup>th</sup> September, 2003) Evaluation, Grading and Pass Requirements

**OC-41.6.1** (effective from 26<sup>th</sup> September, 2003) Evaluation shall be conducted by instructors of the concerned subject and as per BOS guidelines.

**OC-41.6.2** (effective from 26<sup>th</sup> September, 2003) All answer sheets, assignments, term work lists, etc. shall be available for the scrutiny of the Monitoring Committee. The results of the term shall be finalized after the approval of the committee. Viva-Voce examination shall be conducted by a board of evaluators constituted for the purpose by the Monitoring Committee.

**OC-41.6.3** (effective from 26<sup>th</sup> September, 2003) To be declared successful in any subject a student should obtain 40% marks in theory and term work considered separately.

**OC-41.6.4** (effective from 26<sup>th</sup> September, 2003) The following grades will be awarded on the basis of the aggregate percentage:

70% and above	: Distinction
60% to 69%	: First Class
50% to 59%	: Second Class
40% to 49%	: Pass Class

**OC-41.6.5** (effective from 26<sup>th</sup> September, 2003) The results of the examination along with the record of marks of all the candidates appearing for the



examination shall be submitted to the University within 30 days of the last date of the examination of that term.

## **OC-42 - Relating to the award of Bachelor of Architecture Degree of Goa University**

**Scope: The provision of ordinance from OC-42.1 to OC-42.11.3 are applicable to B. Arch. Programs offered by Colleges affiliated to Goa University.**

**OC-42.1 (effective from 22<sup>nd</sup> July, 2004) Nomenclature of the Degree:** The nomenclature of the degree by Goa University in Architecture shall be Bachelor of Architecture (B.Arch.) degree.

**OC-42.2 (effective from 22<sup>nd</sup> July, 2004) Eligibility for Admission to B. Arch. Program:**

**OC-42.2.1 (effective from 14<sup>th</sup> June, 2012) Eligibility for Admission to First Year B. Arch.**

In general, norms suggested by AICTE and the Council of Architecture (CoA) shall govern admission to B. Arch. Program.

A candidate to be eligible for admission to the B. Arch. Course must have:

(i) passed the Higher Secondary School Certificate (Std. XIIth) examination of the Goa Board of Secondary and Higher Secondary Education or its equivalent examination with Mathematics as one of the subjects and secured at least 50% marks in aggregate (45% aggregate marks for applicants belonging to SC/ST/OBC).

**OR**

passed 10+3 Diploma (any stream recognised by Central/State Governments with 50% aggregate marks.

**OR**

passed International Baccalaureate Diploma, after 10 years of Schooling, with not less than 50% marks in aggregate and with Mathematics as compulsory subject of examination.

(ii) scored minimum 80/200 at the National Aptitude Test in Architecture (NATA) conducted by the Council of Architecture.

**OC-42.2.2 (effective from 22<sup>nd</sup> July, 2004)** In case of SC/ST candidates the minimum required marks in the aggregate of all subjects in the qualifying examination at one and the same sitting shall be 40%.

**OC-42.2.3 (effective from 22<sup>nd</sup> July, 2004)** In addition to the above all candidates (including GOI nominees) should have passed the aptitude test conducted by the Goa College of Architecture or N.A.T.A. (National Aptitude Test in Architecture) of Council of Architecture and secured no less than 50% marks in the aptitude test.

**OC-42.2.4 (effective from 22<sup>nd</sup> July, 2004)** The final selection for admission to the B.Arch. program will be determined by the merit list prepared on the basis of aggregate marks in the qualifying examination viz. H.S.S.C. or any equivalent

reduced to 50% and total marks obtained in the Aptitude test reduced to 50%. The sum total of these (100%) will determine the position on the merit list provided a candidate meets the above criteria listed in OC-42.2.1 to OC-42.2.3.

- OC-42.3 (effective from 22<sup>nd</sup> July, 2004) Minimum duration of the Degree Program:** The program for the B.Arch. degree shall be of ten semesters equivalent to five academic years duration. Each academic year shall have two semesters. The first semester being from July to December and the second semester from January to April. Each semester shall be of 16 weeks duration. Each semester will be a unit of academic work with the provision for examination / assessment at the end of the semester.
- OC-42.4 (effective from 22<sup>nd</sup> July, 2004) Stages of the Degree Program:** The ten semester program will be in two stages. Stage one will be six semester duration (from semester one to semester six). The second stage will be of four semester duration (from semester seven to ten) inclusive of one semester (@ 20 weeks) of practical training in a professional office.
- OC-42.5 (effective from 22<sup>nd</sup> July, 2004) Credits:** Each course within the program, either theory based or project based, will have a number of credits assigned to the course. One credit will reflect 1 hour of lecture / week (theory course) and 1.5 hour / week of studio project work. Each semester will have 24 credits of work spanning @ 30 hours of work / week.
- OC-42.6 (effective from 22<sup>nd</sup> July, 2004) Categories of courses:** Design Studio and Construction courses are 'Core' course. Successfully passing in these courses shall be the minimum requirement for promotion to the next semester. All other courses are 'non-core' courses.
- OC-42.7 (effective from 22<sup>nd</sup> July, 2004) Eligibility for promotion to the next semester:** A candidate may be promoted to the next semester if s/he has a backlog of not more than five credits, in the 'non-core' courses, at any time within each of the stages of the program. A candidate shall have to clear all backlog of the first stage before being promoted to the 8<sup>th</sup> semester of the second stage.
- OC-42.8 (effective from 22<sup>nd</sup> July, 2004) Examinations:** The Viva (Jury) examinations for semester six and 10 will be conducted by the Goa University with external examiners appointed by the University. The results of these examinations will also be declared by the University. All other examinations shall be conducted by and the results declared by the Goa College of Architecture.
- OC-42.8.1 (effective from 22<sup>nd</sup> July, 2004)** The Scheme of Assessment for all internal examinations will be as laid out in the Curriculum document approved by the Board of Studies in Architecture and the Academic Council of Goa University.
- OC-42.9 (effective from 22<sup>nd</sup> July, 2004) Eligibility for award of degree:** A candidate admitted to the B.Arch. program shall have to successfully clear both stages of the program in order to be eligible for award of degree.
- OC-42.10 (effective from 22<sup>nd</sup> July, 2004)** Standard for passing the Examination:
- OC-42.10.1 (effective from 29<sup>th</sup> September, 2008)** A student's performance in each course shall be assessed through (1) internal assessment throughout the semester and (2) external assessment through examination, assignments,

tests, viva voce at the end of the semester. The internal assessment shall carry 50% weightage while the external assessment shall carry 50% weightage. A combined minimum average of 'D' grade in both the assessments shall earn him/her full credits to pass the course, provided she/he at least appeared for the internal assessment of that course. No student shall be given extra time to improve the internal grades after the term ends.

(a) In case a student fails, or fails to appear, in the external assessment alone, she/he shall be given not more than two weeks from the date of declaration of results to complete the assignment and to appear for the supplementary examination, provided the student has earned the minimum grade 'D' in the internal assessment. However, in both such cases, the candidates final grade shall not be higher than their average grade in the internal assessment.

(b) If the candidate fails in the aggregate of the internal and external examinations and does not qualify to appear for supplementary examination in that course, he shall be required to repeat the course when offered.

(c) All candidates who fail in the aggregate of internal and supplementary taken together shall be required to repeat the course when offered.

**OC-42.10.2 (effective from 22<sup>nd</sup> July, 2004)** The work of students will be awarded grades on the basis of "Grade-point average". Each grade represents a level of performance as indicated below:

A 80% and above (First Class with Distinction)

B 70% to 79% (First Class)

C 60% to 69% (Second Class)

D 50% to 59% (Pass Class)

F 49% or less (Fail)

**Note:** All fractions will be rounded to nearest zero.

**OC-42.10.3 (effective from 22<sup>nd</sup> July, 2004)** A candidate who has successfully passed a course will be awarded all the credits for that course irrespective of the grade received (A to D). No credits will be awarded to a candidate who has secured F grade.

**OC-42.10.4 (effective from 22<sup>nd</sup> July, 2004)** During the continuous assessment throughout the semester, if a student has acquired an average of any one of the four grades (A, B, C, or D) but, due to his / her inability to satisfactorily complete the work at the final stage of the continuous assessment, is likely to be in the next lower grade, such students are given reasonable extra time to complete the work before the final assessment. However, in such cases, their final grade will not be higher than that of a candidate who has secured the lowest in that grade.

**OC-42.11 (effective from 22<sup>nd</sup> July, 2004) Conduct of Examinations:**

**OC-42.11.1 (effective from 22<sup>nd</sup> July, 2004)** All examinations in the form of written / practical / viva-voce / juries etc. for various subjects as mentioned in the Scheme of Assessment shall be conducted by the Goa College of Architecture on behalf of the Goa University except as mentioned in OC-42.8. For these examinations there shall be examiners internal to the College.

**OC-42.11.2 (effective from 22<sup>nd</sup> July, 2004)** For the Sixth and tenth semesters, the examination shall be in two parts namely internal and external. The internal part for all courses shall be evaluated by the examiners internal to the College. The External part shall be in the form of a viva-voce for the Design Project / Dissertation and will be evaluated by a panel/s of examiners appointed by the

University. Each panel shall consist of two internal and one external member. An aggregate of all the internal grades, reduced to 50%, and the external grade, reduced to 50% will shall be the final grade.

- OC-42.11.3 (effective from 22<sup>nd</sup> July, 2004)** An aggregate of grades of Semesters six to tenth shall determine the award of class of the final tenth semester results. The detailed 'Scheme of Assessment' is attached as Annexure 1.

## **Annexure I**

### **Scheme of Assessments**

1. The Credit / Grades System will be the method of assessment for all ten semesters.
2. All subjects are categorized as either Lecture based or Project based (a few use both formats). All Project based courses are assessed continuously throughout the semester at various stages of the projects. Each assessment will be based on a series of criteria, such as 1) conceptual clarity, 2) ability to express ideas through required medium, 3) use of information gained in other courses, 4) resolution, etc). These will be jointly arrived at by the team of the faculty in consultation with the Principal (these criteria may be different for each stage of the project depending upon the focus and emphasis of that particular stage). The final, end of semester, assessment will take all these periodic assessments into consideration to assess the progress of the student.
3. The lecture based courses will be assessed through at least two tests or quizzes in addition to the final examination or assignment paper (approx. 1500 to 2000 words). In case of an assignment paper, the topic/s of the papers will be declared six weeks before due date and students will be encourages to undertake research through library, internet etc. The teacher in charge will help and guide he students in articulating their ideas. The final assessment will be based on a series of criteria as above.
4. The Goa College of Architecture will constitute an internal 3 members Examination Committee from among the full-time faculty. This Committee will be responsible for 1) scheduling of all examination, 2) co-ordination with Goa University for semester 9 and 10 examination and 3) final tabulation and verification and preparation of grade sheets of all examination. The Committee will be chaired by a senior faculty not below the rank of Asstt. Prof. The Committee may co-opt other faculty for any specific examination related work if needed.

Only for semesters Six and Ten, Goa University will appoint the panel of examiners, including the external examiners, from among the names suggested by the Board of Studies.

5. In the case of College Examinations, the assessment sheet is transcribed, signed by the Principal, and displayed on the College Notice Board.
6. Goa University will constitute panel/s of assessors to conduct viva-voce evaluation for semester 6 & 10 only. The number of panels will be determined by the number of students. In general each panel will assess @ 15-20 students (not more than 10 per day).
7. Each panel will have at least two internal and one external members. Internal members will be from the teaching faculty (Full-time or Visiting) of the Goa College of Architecture and one of the internal, full-time, members will be the Chairperson of the panel. In general the

relevant ordinances of the Goa University will apply for the selection of members of both internal and external panels.

8. For **Semester 6** of the panel/s will assess, within the studio project, the integration of all theory courses of the semester into the project work consisting of all 24 credits. The related theory courses will be assessed internally only.
9. If more than one panel is constituted, there will be a 'harmonization' session after all panels have arrived at their conclusions. The Principal will chair this session. During this process of awarding the 'external' grades, the panel's will not be informed about the 'internal' grades. Only after the 'external' grades have been finalized and recorded with signatures of the experts, that the following will commence.
10. The Examination Committee of GCA will prepare the final grade sheet consolidating all internal as well external grades (see the sample grade sheet). This will be signed by the chairperson/s of the panel and the Principal. This grade sheet will be forwarded to the Goa University who will certify and prepare the 'Result Sheet' in their standard format and return it to the college for display.
11. For **semester 10**, where the students are doing independent work each, the constitution of panel/s by Goa University and the process of assessment will be as follow:
  - There will be one common panel for all **design projects**. It will consist of two architects of eminence not connected with the Goa College of Architecture (preferably from outside Goa), Principal of GCA, two senior members of the teaching faculty (one may be visiting faculty) and the guide of the project under review. The Principal will chair the panel.
  - A similar panel will be constituted for the **Dissertations**. However, the profiles of the external expert will depend upon the topics of dissertation on hand at any given semester and will be suggested by GCA Board of Studies from time to time.
  - The assessment will be at three levels. 1) Internal (Continuous assessment + guide's grades). This will be given to the weightage. 2) External (Pre-presentation grade + Viva (presentation and discussion) grade. This will carry the remaining 50% weightage. During this process of awarding the 'external' grades, the panel/s will not be informed about the 'internal' grades. Only after the 'external' grades have been finalized and recorded with signatures of the experts, that the compilation of final grade sheet will be carried out by the Examination Committee of GCA.
  - One copy each of the dissertation documents will be sent to the experts at least a month before the assessment session for them to thoroughly read and make their pre-presentation comments / grades.
  - GCA will prepare the grade sheet (as indicated by the sample attached). This grade sheet will be forwarded to the Goa University who will certify and prepare the 'Result Sheet' in their standard format and return it to the College for display.
  - For the purpose of awarding the final 'Class' the results of VI, VIII, IX and X semesters will be amalgamated with equal weightage. The classes will be as follows:
    - A First Class + Distinction
    - B First Class
    - C Second Class
    - D Pass Class

**OC-42A**                    **Ordinance relating to the Degree of Bachelor of Architecture (B.Arch.) of Goa University** (effective from the Academic year 2013-2014)

**OC-42A 1.0**                **GENERAL**

**OC-42A 1.1**                **Objective:** To impart education in the field of Architecture.

**OC-42A 1.2**                **Nomenclature of the Degree:** The nomenclature of the degree shall be Bachelor of Architecture (B. Arch.), as recognized by the Council of Architecture, New Delhi.

**OC-42A 1.3**                **Duration of the Degree Programme:** The programme shall comprise ten semesters equivalent to five academic years' duration. Each academic year shall have two semesters. The Odd Semesters shall commence in July and the Even Semesters in January. Each semester shall comprise 90 days of teaching (18 weeks) duration.

**OC-42A 1.4**                **Admission to the B. Arch. Programme:**

**OC-42A 1.4.1**              **Eligibility :** The norms suggested by AICTE and the Council of Architecture (CoA) shall govern admission to B. Arch. Programme.

A candidate, must have:

(i) Passed the Higher Secondary School Certificate (Std. XII) examination of the Goa Board of Secondary and Higher Secondary Education or its equivalent examination with Mathematics as one of the subjects and secured at least 50% marks in aggregate or 45% aggregate marks for applicants belonging to SC/ST/OBC categories.

**OR**

Passed 10+3 Diploma (any stream recognised by Central/State Governments with minimum 50% aggregate marks)

**OR**

Passed International Baccalaureate Diploma, after 10 years of Schooling, with not less than 50% marks in aggregate and with Mathematics as compulsory subject of examination.

(ii) Secured minimum qualifying score at the State level Aptitude Test or National Aptitude Test in Architecture (NATA) as may be applicable.

**OC-42A 1.4.2**              **Merit List**

The merit list shall be prepared on the basis of total marks computed from the aggregate marks obtained at the qualifying examination (50% weightage) and the marks obtained in the Aptitude Test (50% weightage).

## **OC-42A 2.0            PROGRAMME STRUCTURE**

### **OC-42A 2.1            Structure of the Programme**

The programme shall comprise ten semesters in two parts. Part I shall comprise Semester One to Semester Six. Part II shall comprise Semester Seven to Semester Ten.

### **OC-42A 2.2            Courses**

The Programme shall comprise Core and Non-Core Courses comprising Lecture, Studio, Field Work, Seminar, Elective Courses and Practical Training, as specified in Schedule I. Each Semester shall have one Core and other Non-Core Courses.

Each course shall have credits assigned, equivalent to the number of teaching hours per week in each semester. The course wise credits shall be as specified in Schedule I. Each Semester shall have a total of 30 credits.

## **OC-42A 3.0            SCHEME OF EXAMINATION**

### **OC-42A 3.1            Evaluation Scheme:**

The performance of a student in each course shall be evaluated through assessment as defined in the Schedule I. There shall be:

- (1) **Sessional Assessment(SA)** shall be a continuous assessment throughout the semester. The assessment shall be carried out by the internal course faculty.
  
- (2) **Semester End Examination (SEE)** The assessment shall be carried out by a team of an external examiner who is an expert in the field and internal course faculty.

However, the Electives courses shall be evaluated only through SA. The examinations at Semesters VI, IX and X shall be conducted by the University.

**OC-42A 3.2      Scheme of Assessment:**

The Scheme of Assessment for all courses shall be as follows:

**OC-42A 3.2.1**      There shall be a Grading System with GPA for all ten semesters.

**OC-42A 3.2.2**      All Design Studio Core courses shall be assessed through SA at various stages of the projects. Each assessment shall be based on a set of criteria, such as:

- 1) Conceptual clarity and innovation
- 2) The ability to express or communicate ideas through appropriate media
- 3) The synthesis or application of the knowledge gained in other courses
- 4) Degree of resolution

Assessment shall be done by the team of the faculty in consultation with the Principal for each stage of the project depending upon the focus and emphasis.

The SEE shall also take all these periodic assignments into consideration to assess the work of the student based on the criteria of innovation and progress through the semester and the degree of resolution achieved in the final product for the award of grade.

**OC-42A 3.2.3**      The lecture based Non-Core courses shall be assessed through SA such as Term Papers, Seminar Presentations, Field/ research based Assignments, the time given for which shall be commensurate to the credits assigned as given in Schedule I for that particular course of study. In case of an assignment/ Term paper, the topic/s of the papers shall be declared within the six weeks of the beginning of the Semester. The SEE shall be through written examination and/or viva-voce.

**OC-42A 3.2.4**      The Practical Training shall be undertaken for a minimum duration of 18 weeks. The student shall have to obtain a certificate from the architectural firm indicating that he/she has satisfactorily completed the required training. There shall be an SEE in the form of a viva-voce examination at the end of the Practical Training.

**OC-42A 3.2.5**      The Assessment of Dissertation shall be as follows:

- 1) SA shall be conducted at various stages, by a panel comprising internal faculty and experts approved by the Board of Studies. This shall have 40% weightage.
- 2) SA shall be conducted by the Guide, of the final Report. This shall



have 10% weightage.

3) SEE shall comprise an evaluation of the Report and a Viva-voce, which shall carry 25% weightage each. The Dissertation Report shall be sent to the examiner(s) at least fifteen days prior to the SEE for evaluation.

**OC-42A 3.2.6**

The Assessment of Design Thesis shall be as follows:

1) SA shall be conducted at various stages by a panel comprising of internal faculty and experts approved by the Board of Studies. This shall have a weightage of 50%.

2) SEE shall be conducted in the form of a Viva-voce by evaluation of drawings, models and report. This shall have a weightage of 50%.

**OC-42A 3.2.7**

The Goa University shall constitute panel/s of examiners for the SEE of core and non-core courses of Semester VI, IX & X. Each panel shall have two internal and one external member. One of the internal examiners shall be the Convener of the panel. Ordinarily, each panel shall assess not more than 20 students per day.

**OC-42A 3.2.8**

The Conveners of the Examination Panels of the SEE, shall submit the final grade sheet along with the attendance sheet in a sealed envelope to the Principal, who shall forward it to the Controller of Examination, Goa University for declaration of the result.

**OC-42A 3.2.9**

The College shall forward the consolidated Grade-sheet, authenticated by the Convenor of the Examination and the Principal, to the Controller of Examinations, Goa University, for declaration of the results.

**OC-42A 3.2.10**

The Principal shall constitute an internal three member Examination Committee from among the full-time faculty, which shall be chaired by the In-charge of Examinations, who shall be a senior faculty member not below the position of Associate Professor. The Committee may co-opt other faculty members if required. The tenure of this Committee shall be for a period of three years.

This Committee shall undertake the following tasks:

- a) Working out the schedules for all examinations
- b) Conducting the examinations with the help of Internal Faculty and External Examiners appointed for the examinations in various courses.
- c) Co-ordination with the University for the conduct of SEE of Semesters VI, IX and X.
- d) Final tabulation, verification and preparation of Result Sheets of all the semesters for the examinations conducted by the college.

**OC-42A 3.2.11** The work of students shall be awarded grades on the basis of Grading System. A ten point grading system with Grade Value from 0 to 10, shall be as follows:

Description of Grade	Letter Grade	Numerical Grade value
Outstanding	O	10
Excellent	A	9
Very Good	B	8
Good	C	7
Satisfactory	D	6
Average	E	5
Below Average	F	4
Unsatisfactory	G	3
Poor	H	2
Very Poor	I	1
No attempt	NA	0

**OC-42A 3.2.12** The SA and SEE of courses other than elective courses, shall carry 50% weightage each. A student shall obtain a minimum of 5.0 Grade Point Average (GPA) obtained in the aggregate of both the assessments of SA & SEE in a course, in order to earn full credits to successfully complete the course. In case of Elective Courses, the SA shall carry a weightage of 100%. (Schedule I).

*For Studio based courses, the GPA for the SA of a student obtaining grades at different stages shall be calculated as shown in the Illustration below:*

Stage	Weightage % of each stage	Grade Obtained	Corresponding Grade Point	Total Stage-wise Value
Stage I	10	C	7	$10 \times 7 = 70$
Stage II	15	E	5	$15 \times 5 = 75$
Stage III	20	D	4	$20 \times 4 = 80$
Stage IV	25	A	9	$25 \times 9 = 225$
Stage V	30	C	7	$30 \times 7 = 210$

<b>Grand Total</b>	100			660
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Shall obtain a GPA of 6.60 in SA as shown:

$$\text{Total GPA in Sessional Assessment} = \frac{70+75+80+225+210}{100} = \frac{660}{100} = 6.60$$

The student obtaining a Grade of 'B' with a Grade Point value of 8.00 in the SEE for that Course, then the GPA of that Course shall be calculated as follows:

<i>Sessional Assessment (SA) GPA</i>	<i>Semester End Examination (SEE) Grade value</i>	<i>Average GPA</i>
6.60	8.00	$6.60+8.00 = 14.60/2 = 7.30$

**OC-42A 3.2.13**

The average of the GPA of all the Courses calculated at the end of a Semester shall be the Semester GPA (SGPA).

*Illustration:*

**Semester I**

**Total Credits = 30**

<b>Courses</b>	<b>Credits</b>	<b>Grade Point Averages of Courses (GPA) achieved</b>	<b>Course weightage</b>	<b>Grade Point Averages x Course Weightage</b>
Course T	2	8.50	2	$8.50 \times 2=17.00$
Course U	4	7.25	4	$7.25 \times 4=29.00$
Course V	4	8.20	4	$8.20 \times 4=32.80$
Course W	10	7.30	10	$7.30 \times 10=73.00$
Course X	5	8.70	5	$8.70 \times 5=43.50$
Course Y	3	6.50	3	$6.50 \times 3=19.50$
Course Z	2	5.30	2	$5.30 \times 2=10.60$
<b>Total</b>	<b>30</b>		<b>30</b>	<b>224.60</b>

The Semester Grade Point Average (SGPA) shall be obtained by

*multiplying the Grade Point Averages of each course by the course weightage, and then divided by the total number of 30 credits rounded off to the nearest two decimal points, i.e.  $224.6/30 = 7.487$ , i.e. 7.49 for the Semester.*

**OC-42A 3.2.14** The Cumulative Grade Point Average (CGPA) at the completion of Semesters II to X shall be obtained by adding the Semester Grade Point Averages (SGPA) of all semesters and dividing it by the total number of Semesters completed.

**OC-42A 3.3 Eligibility to appear for SEE and Supplementary SEE.**

**OC-42A 3.3.1** A minimum attendance for each course shall be required as per the provisions of OA-17.

**OC-42A 3.3.2** A student shall require to obtain a minimum GPA of 4.5 in SA in the respective course to be eligible to appear for the SEE.

**OC-42A 3.3.3** In case a student fails in the examination, or fails to appear in the SEE alone, he/she shall be given the chance for appearing in the form of a Supplementary SEE (SSEE), provided he/she gets a minimum GPA of 4.5 in the SA. The SSEE shall be conducted after a period of two weeks from the date of declaration of results.

**OC-42A 3.3.4** A student shall be required to successfully complete Semester I & II examinations in a maximum of 4 attempts for each semester within a period of maximum three years from the date of admission to the course, failing which he shall have to discontinue the programme.

**OC-42A 3.4 Minimum requirement for Passing and Grading**

**OC-42A 3.4.1 Successful Completion of the Core Course of Study:**

A student shall be required to secure a minimum GPA of 5.0, in the combined aggregate of the SA and SEE/ SSEE in the Core course, in order to successfully complete the course, failing which, he/she shall have to repeat the course in the subsequent year.

**OC-42A 3.4.2 Successful Completion of a Non-Core Course of Study:**

A student shall be required to secure a minimum GPA of 5.0, in the combined aggregate of the SA and SEE / SSEE in the Non-core course, in order to successfully complete that course. A maximum of two non-

core courses can be carried forward to the subsequent semester at a time and shall have to be cleared in that semester, failing which, he/she shall have to repeat the course in the subsequent year.

**OC-42A 3.4.3** A student shall be required to obtain a minimum Semester GPA (SGPA) of 5.00 in the combined aggregate of Sessional Assessment and the final grade(s) obtained in the Semester End Examinations after availing all the attempts permissible.

**OC-42A 3.4.4** A student shall be required to obtain a minimum GPA of 5.0 in the combined total of SA & SEE / SSEE to earn credits assigned for the course.

**OC-42A 3.5** **Exemption Provision:**  
A student who fails to clear the Non-Core Course(s) shall be allowed to carry forward a maximum of two Non-Core Courses at a given point of time. He/she shall be promoted to the following semester subject to clearing these courses in the subsequent attempt.

**OC-42A 3.6** **Eligibility for award of B. Arch degree:**  
In order to be eligible for the award of B. Arch degree, the student shall be required to successfully complete the programme as per the provisions of OA-16.

**OC-42A 3.7** **Award of class in the Degree Certificate:**  
The CGPA of Semester X shall determine the award of class in the Degree Certificate.

The categories of classification shall be as follows:

1. First Class with Distinction = CGPA of 8.50 and above
2. First Class = CGPA of 6.75 to below 8.50
3. Second Class = CGPA of 5.50 to below 6.75
4. Pass Class = CGPA of 5.00 to below 5.50

**OC-42A 3.8** **Verification and Revaluation:**  
Verification and Revaluation shall be permitted only in case of Written Papers and Drawing Tests, as per OA-5.15

**OC-42A 3.9** (a) **(Effective from 7<sup>th</sup> June, 2016)** A student shall have the option to register for Courses in Colleges / Institutions from other than this University, including Foreign Universities, with the prior approval of the College. In such cases, Credit transfers and the equivalence of Grades and Grade Point Average shall be determined on a case to case basis by the Board of Studies.

(b) Credit transfer shall be limited to a maximum of 25 per cent of the total Credits, except in the case of approved Exchange Programmes.

(c) Credits and Grades obtained by a student shall be transferred to another Institution on request from the Institution as well as from the student.

### Schedule I

#### Scheme of Teaching and Examination for B. Arch Programme

<b>SEMESTER I (18 WEEKS)</b>							
				Scheme of Examination			
Course Code	Core and Non-Core (NC) Courses	Credits	Hours/Week	Sessional Assessment		Semester End Examination	
				Weightage	Form	Weightage	Form
H-I/01	NC Course 1(Theory)	2	2	50%	Assignments	50%	Viva-voce
H-I/02	NC Course 2(Theory)	2	2	50%	Assignments	50%	Viva-voce
H-I/03	NC Course 3 (Studio-includes Orientation Programme 20 hours)	4	4	50%	Sketches Drawings Models	50%	Viva-voce
D-I/01	Core Course 4(Design Studio-includes Orientation Programme 40 hours)	10	10	50%	Sketches Drawings Models	50%	Viva-voce
C-I/01	NC Course 5(Studio)	5	5	50%	Drawing	50%	Test (3hrs.)
C-I/02	NC Course 6(Studio)	5	5	50%	Sketches Drawings Models, Tests	50%	Test (3hrs.) 25% Weightage & Viva-voce 25% Weightage
C-I/03	NC Course 7(Theory)	2	2	50%	Papers & test	50%	Test (3hrs.)
		30	30				

<b>SEMESTER II (18 WEEKS)</b>							
				Scheme of Examination			
Course Code	Core and Non-Core (NC) Courses	Credits	Hours / Week	Sessional Assessment		Semester End Examination	
				Weightage	Form	Weightage	Form
H-II/01	NC Course 8 (Theory)	2	2	50%	Assignments	50%	Viva-voce

H-II/02	NC Course 9(Theory)	2	2	50%	Assignments	50%	Viva-voce
H-II/03	NC Course 10(Studio)	4	4	50%	Sketches Drawings Models etc.	50%	Viva-voce
D-II/01	Core Course 11 ( Design Studio)	10	10	50%	Sketches Drawings Models etc.	50%	Viva-voce
C-II/01	NC Course 12(Theory)	2	2	50%	Paper Drawings	50%	Test (3hrs.)
C-II/02	NC Course 13(Studio)	3	3	50%	Drawings	50%	Test (3hrs.)
C-II/03	NC Course 14(Studio)	5	5	50%	Sketches Drawings Models, Tests	50%	Test ( 3hrs.) 25% Weightage & Viva-voce 25% Weightage
C-II/04	NC Course 15(Theory)	2	2	50%	Paper, Tests	50%	Test (3 hrs.)
		30	30				

<b>SEMESTER III (18 WEEKS)</b>							
				Scheme of Examination			
Course Code	Core and Non-Core (NC) Courses	Credits	Hours/ Week	Sessional Assessment	Semester End Examination		
				Weightage	Form	Weightage	Form
H-III/01	NC Course 16(Theory)	2	2	50%	Paper, Seminar	50%	Viva-voce

H-III/02	NC Course 17(Theory)	2	2	50%	Paper	50%	Test ( 3hrs.)
H-III/03	NC Course 18(Studio)	4	4	50%	Sketches Drawings Models etc.	50%	Viva-voce
D-III/01	Core Course 19(Design Studio)	10	10	50%	Sketches Drawings Models etc.	50%	Viva-voce
C-III/01	NC Course 20(Theory)	2	2	50%	Paper Drawings	50%	Test ( 3hrs.)
C-III/02	NC Course 21(Studio)	3	3	50%	Drawings	50%	Test ( 3hrs.)
C-III/03	NC Course 22(Studio)	5	5	50%	Sketches Drawings Models etc.	50%	Test ( 3hrs.) 25% Weightage & Viva-voce 25% Weightage
C-III/04	NC Course 23(Theory)	2	2	50%	Paper, Tests	50%	Test (3 hrs.)
		30	30				

<b>SEMESTER IV (18 WEEKS)</b>					
				Scheme of Examination	
Course Code	Core and Non-Core (NC) Courses	Credits	Hours/ Week	Sessional Assessment	Semester End Examination



				Weightage	Form	Weightage	Form
H-IV/01	NC Course 24 (Theory)	2	2	50%	Test, Papers, Seminar.	50%	Viva- voce
H-IV/02	NC Course 25 (Theory)	2	2	50%	Paper Seminar	50%	Test (3hrs.)
H-IV/03	NC Course 26 (Studio)	2	2	50%	Paper Seminar	50%	Viva- voce
D-IV/01	Core Course 27 (Design Studio)	10	10	50%	Sketches Drawings Models etc.	50%	Viva- voce
C-IV/01	NC Course 28 (Theory)	2	2	50%	Sketches Drawings Models etc.	50%	Test (3hrs.)
C-IV/02	NC Course 29 (Studio)	3	3	50%	Drawings	50%	Test (3hrs.)
C-IV/03	NC Course 30 (Studio)	5	5	50%	Sketches Drawings Models, Tests.	50%	Test (3hrs.) 25% Weighta ge & Viva- voce 25% Weighta ge
C-IV/04	NC Course 31 (Theory)	2	2	50%	Paper, Tests	50%	Test (3hrs.)
E-IV/01	NC Course 32 (Elective I)	2	2	100%	Assignment s	---	---
		30	30				

<b>SEMESTER V (18 WEEKS)</b>							
				Scheme of Examination			
Course Code	Core and Non-Core Courses (NC)	Credits	Hours/Week	Sessional Assessment		Semester Examination	End
				Weightage	Form	Weightage	Form

H-V/01	NC Course 33 (Theory)	2	2	50%	Papers	50%	Viva-voce
H-V/02	NC Course 34 (Theory)	4	4	50%	Papers	50%	Test (3hrs.)
D-V/01	Core Course 35 (Design Studio)	11	11	50%	Sketches Drawings Models, Tests.	50%	Viva-voce
C-V/01	NC Course 36 (Theory)	4	4	50%	Sketches Drawings Models, Tests.	50%	Test (3hrs.)
C-V/02	NC Course 37 (Studio)	5	5	50%	Sketches Drawings Models, Tests.	50%	Test ( 3 hrs.) 25% Weightage & Viva-voce 25% Weightage
C-V/03	NC Course 38 (Theory)	2	2	50%	Paper	50%	Test (3hrs.)
E-V/01	NC Course 39 (Elective II)	2	2	100%	Assignments	---	---
		30	30				

<b>(Notified on 25<sup>th</sup> July, 2017) SEMESTER VI (18 WEEKS)</b>							
				Scheme of Examination			
Course Code	Core and Non-Core (NC) Courses	Credits	Hours/Week	Sessional Assessment		Semester End Examination	
				Weightage	Form	Weightage	Form
H-VI/01	NC Course 40 (Theory)	2	2	50%	Papers	50%	Viva-voce
H-VI/02	NC Course 41	4	4	50%	Papers	50%	Viva-voce

	(Theory)						
D-VI/01	Core Course 42 (Design Studio)	11	11	50%	Sketches Drawings Models.	50%	Viva-voce
C-VI/01	NC Course 43 (Theory)	6	6	50%	Drawings	50%	Viva-voce
C-VI/02	NC Course 44 (Studio)	5	5	50%	Sketches Drawings Models, Tests.	50%	Test (3 hrs.) 25% Weightage & Viva-voce 25% Weightage
E-VI/01	NC Course 45 (Elective III)	2	2	100%	Assignments	----	---
		30	30				

SEMESTER VII (18 WEEKS)							
				Scheme of Examination			
Course Code	Core and Non-Core (NC) Courses	Credits	Hours/Week	Sessional Assessment		Semester End Examination	
				Weightage	Form	Weightage	Form
PT-VII/01	NC Course 46 (Practical Training)	30	30(Min)	----	-----	100%	Viva-voce
		30	30				

SEMESTER VIII (18 WEEKS)							
				Scheme of Examination			
Course Code	Core and Non-Core (NC) Courses	Credits	Hours/Week	Sessional Assessment		Semester End Examination	
				Weightage	Form	Weightage	Form
H-VIII/01	NC Course 47	2	2	50%	Papers, Documenta	50%	Viva-voce

	(Theory)				tion.		
H- VIII/02	NC Course 48 (Theory)	2	2	50%	Papers	50%	Viva-voce
H- VIII/03	NC Course 49(Theory)	2	2		Papers		Viva-voce
D-VIII/01	Core Course 50 (Design Studio) #	20	20	50%	Sketches Drawings Models.	50%	Viva-voce
D-VIII/02	Core Course 51 (Design Studio) #	20	20	50%	Sketches Drawings Models.	50%	Viva-voce
C-VIII/01	NC Course 52 (Theory)	2	2	50%	Test, Paper, Seminar.	50%	Test (3hrs.)
C-VIII/02	NC Course 53 (Theory)	2	2	50%		50%	Viva-voce
		30	30				

# indicates choice between the two Courses.

SEMESTER IX (18 WEEKS)							
				Scheme of Examination			
Course Code	Core and Non-Core (NC) Courses	Credits	Hours/Week	Sessional Assessment		Semester End Examination	
				Weightage	Form	Weightage	Form
H-IX/01	NC Course 54 (Theory)	2	2	50%	Paper, Seminar	50%	Viva-voce

D-IX/01	Core Course 55 (Dissertation- focus on Architecture) #	24	24	50%	Report, Seminar.	50%	Viva-voce
D-IX/02	Core Course 56 (Dissertation- focus on Construction Technology) #	24	24		Report, Seminar.		Viva-voce
C-IX/01	NC Course 57 (Theory)	2	2	50%	Papers, Report	50%	Test (3 hrs.)
E-IX/01	Core 58 (Elective IV)	2	2	100%	Assignment	—	—
		30	30				

# indicates choice between the two Courses.

SEMESTER X (18 WEEKS)							
				Scheme of Examination			
Course Code	Core and Non-Core (NC) Courses	Credits	Hours/Week	Sessional Assessment		Semester Examination	End
				Weightage	Form	Weightage	Form
E-X/01	NC Course 59 (Elective V)	2	2	100%	Assignments	—	—
E-X/02	NC Course 60 (Elective VI- Seminar based)	2	2	100%	Seminar Presentation	—	—
D-X/01	Core Course 61 (Design Thesis-focus on Architecture) #	26	26	50%	Sketches Drawings Models, Reports.	50%	Viva- voce
D-X/02	Core Course 62 (Design Thesis-focus on Construction Technology) #	26	26	50%	Sketches Drawings Models, Reports.	50%	Viva- voce
		30	30				

# indicates choice between the two Courses.

**OC-43 (effective from 20<sup>th</sup> August, 2004) ORDINANCE RELATING TO THE BACHELOR OF PHYSICAL EDUCATION B.P.Ed. COURSE OF GOA UNIVERSITY.**

**OC-43.1 (effective from 20<sup>th</sup> August, 2004) Eligibility and Admission**

Any candidate who has obtained a Graduate/Post Graduate Degree with a minimum of 45% marks from Goa University or from any other statutory body recognized by University Grants Commission and has passed the entrance test

including the physical efficiency and skills test in two games conducted by the college shall be eligible for admission for B.P.Ed Degree Course.

**OC-43.2 (effective from 20<sup>th</sup> August, 2004) Duration of the Course**

B.P.Ed is a full time course of one-year's duration. A candidate admitted to the B.P.Ed Course shall not be permitted to hold any employment whether full time or part time. Further, a candidate shall not be permitted to enroll for any other degree, diploma or certificate programme conducted by any statutory body or University while doing the course.

**OC-43.3 (effective from 20<sup>th</sup> August, 2004) The B.P.Ed. Curriculum**

The course of Study shall consist of three components :-

PART A Theory,  
PART B Practice Teaching ,  
PART C Practicals.

**PART A Theory Component:-**

Lecture Periods

For each theory subject, there shall be four lectures of 45 minutes duration per week.

Theory subjects shall be:-

Paper I	Principles, Foundations and History of Physical Education and Sports.
Paper II	Anatomy, Physiology and Health Education.
Paper III	Educational and Sports Psychology
Paper IV	Management of Physical Education and Sports
Paper V	Information and Communication Technology and Measurement, Evaluation and Statistical Procedure in Physical Education
Paper VI	Methods in Physical Education

**PART B Practice Teaching Component**

The college shall device such programmes/schemes that each of the students is trained for minimum period of two weeks through the following methods.

1. Peer group teaching  
20 Practice Teaching Lessons
  - a. 5 General Physical Education Lessons
  - b. 5 Lessons in teaching Techniques of Athletics
  - c. 5 Lessons of teaching techniques in team events or individual sports
  - d. 5 Lessons in officiating techniques in team events or individual sports.
2. Block Teaching

## **PART C      Practicals Component**

There shall be practicals for different games mentioned below for a minimum duration of 20 hours per week.

- 1) Six Compulsory Games & Two Optional Games have to be selected by the College from the following  
1. Football 2. Volleyball 3. Basket Ball 4. Handball 5. Kabaddi 6. Kho-Kho 7. Cricket 8. Hockey 9. Badminton 10. Table Tennis 11. Softball 12. Baseball 13. Korfball 14. Tennis.
- 2) Two Combative Events  
1. Judo 2. Taekwando 3. Boxing 4. Wrestling
- 3) Athletics  
1. Sprints and Relay's 2. Jumps 3. Throws 4. Runs and Hurdles
- 4) Gymnastics

A) MEN	B) WOMEN
i) Parallel Bar	i) Gymnastic Position
ii) Horizontal Bar	ii) Vaulting Horse
iii) Vaulting Horse	iii) Balancing Beam
iv) Floor Exercises	iv) Floor Exercises
v) Roman Rings	v) Uneven Bars
- 5) Aquatics (Swimming, Diving & Water Polo)
- 6) Yoga
- 7) Calisthenics
- 8) Weight Training
- 9) Internship

Candidates shall have to fulfill other conditions which are not be evaluated in terms of marks.

Practicals in Test and Measurement  
Practicals in Information and Communication Technology  
Observation of Lessons  
Microteaching  
Preparation of Instructional Materials, for games of specialization/Athletics  
Leadership Training Camp  
First Aid  
Marching and Band

### **Records to be maintained in the college**

The Head of the Institution/Principal shall maintain the following records.

- a) A Report of the Assignments in each of the Theory Papers.
- b) A record of observation of 5 Practice Teaching Lessons of which two Lessons in Teaching Athletics, two Lessons in Teaching techniques in team events or individual sports, one lessons in officiating techniques in team events or individual sports.
- c) A file or such other record of lesson plans/notes of the 20 lessons as may be determined by the Institution.
- d) A file containing a record of the activities conducted during the Internship.
- e) A record of all the marks secured by the students in assignments/ practical work under Part A, B & C mentioned above.

The Head of the Institution/Principal of the college shall certify that the candidate has completed the work as required in Parts A, B and C and forward a statement thereof to the University at the end of the academic year.

**OC-43.4 (effective from 20<sup>th</sup> August, 2004) Eligibility for the Examination**

A candidate to be eligible for the Bachelor of Physical Education Examination shall have

- a) Kept two terms, and the second (Separated over the maximum period of 2 consecutive academic year) in a college of Physical Education with a minimum of 75% attendance of the total working days.
- b) Completed all the internal assessment of Part A and practical work requirement (as detailed in Parts B and C) extending over two academic terms to the satisfaction of the Head of the Institution in which the candidate has enrolled.

**OC-43.5 (effective from 20<sup>th</sup> August, 2004) Scheme of Examination**

The Examination for the degree of B.P.Ed. shall consist of Part A, Theory and Part B, Practice Teaching and Part C Practicals. The total marks allotted are as follows:

Part A	-	600 marks
Part B	-	300 marks
Part C	-	300 marks
		-----
Total	-	1200 marks
		-----

**Part A Theory**

The paper setters and the examiners for each of the theory paper shall be appointed by the University from the panel of examiners approved by the Board of Studies in Physical Education and the Academic Council.

There shall be two paper setters one internal and one external for each of the theory papers.

The internal examiner shall be a person who is teaching the subject or has taught the respective subject. The examination paper shall be set by the external examiners and sent to the internal examiner for review and modification, who shall submit it to the Controller of Examination as a confidential document.

*Evaluation*

Each of the theory paper shall be evaluated by the External Examiner from the panel of examiners approved by the Board of Studies in Physical Education and the Academic Council.

The internal examiner who is teaching the subject or has taught the respective subject will also award the marks for internal assessment of the theory papers by conducting assignment and internal tests as designed by the college for the purpose.

1.	Part A	External Final Theory Examination	:480 marks
	Papers I to VI	80 marks each paper of three hours duration	



	Part A	(Internal Assessment)	:120 marks
	Papers I to VI	One Assignment - 10 marks for each paper	
		One Test - 10 marks for each paper	
2.	Part B	Practice Teaching (Internal Assessment)	:300 marks
		Lessons planning and Lessons Execution. - 20 lessons of 10 marks each.	
		Lessons for final Assessment. - 5 lessons of 20 marks Each.	

The Practice Teaching for lesson planning and lesson execution shall be conducted on a regular basis by the College, which shall evolve its own scheme for the purpose. The students shall maintain a file for each of the 20 lessons and after the completion of every lesson the supervisor who is in-charge of the lesson shall submit the marks scored in each lesson to the Head of the Department.

There shall be five lessons for the final assessment which shall be evaluated by one external examiner and one internal examiner who is teaching the lessons (method). An average of the marks given by the two examiners shall be the marks secured by the candidate.

The total marks scored by each student shall be recorded in a register. After compilation of the total marks secured by each candidate the list shall then be sent to the University by the Principal/ Head of the Institution.

### 3. Part C Other Practical Work (Internal Assessment) 300 marks

- |     |  |          |
|-----|--|----------|
| 1.  | Six Compulsory Games (15 marks each)     | 90 marks |
| 2.  | Two Optional Games (10 marks each)       | 20 marks |
| 3.  | Two Combative Events                     | 20 marks |
| 4.  | Athletics                                | 40 marks |
| 5.  | Gymnastics                               | 20 marks |
| 6.  | Aquatics (Swimming, Diving & Water Polo) | 20 marks |
| 7.  | Yoga                                     | 20 marks |
| 8.  | Calisthenics                             | 20 marks |
| 9.  | Weight Training                          | 20 marks |
| 10. | Internship                               | 30 marks |

## Practical Examination

The practical examinations to test the skills in each game as in part C from 1 to 9 shall be conducted at the end of the academic year by one External Examiner as approved by the Board of Studies in Physical Education and the Academic Council along with an Internal Examiner who is teaching the game / sports or has taught the respective game sport. The internship evaluation will be conducted by the external examiner who is the organizer of the Govt. sponsored sports event or by the Secretary of the recognized Sports Association conducting the events or any such person deputed by the Organizer for the purpose. The teacher accompanying the students will also evaluate the students as an internal examiner and award marks for the same. The average of the marks given by the two examiners shall be the marks secured by the candidate for the entire Part C which will be done at the end of the final assessment to be submitted to the University by the Principal/Head of the Institution.

Directors of Physical Education working in the affiliated colleges may be appointed as External Examiner by the Board of Studies in Physical Education and Academic Council.

The allotment and statement of marks/grades for the Final B.P.Ed. examination will be shown as in the Table given below.

#### Framework of Marks

	Papers	I	II	III	IV	V	VI	Total
A	External	80	80	80	80	80	80	480
A	Internal							
	Assignments	10	10	10	10	10	10	60
	Tests	10	10	10	10	10	10	60
							Total	600

B	Practice Teaching Internal	
	Lessons Planning and Lessons Execution	200
	Lessons for Final Assessment	100
	Total	300

C	Other Practical Work Internal	
1	Six Compulsory Games	90
2	Two Optional Games	20
3	Two Combative Events	20
4	Athletics	40
5	Gymnastics	20
6	Aquatics (Swimming, Diving & Water Polo)	20
7	Yoga	20
8	Calisthenics	20
9	Weight Training	20
10	Internship	30
	Total	300
	Grand Total (A + B + C)	1200

Marks obtained in Part A (Theory and Internal) separately and Parts B and C shall be stated separately in the Mark Sheet.

#### **OC-43.6 (effective from 26<sup>th</sup> June, 2009) Standard of Passing**

**OC-43.6.1** To Pass the examination in Part A, a candidate must obtain at least 30% in internal and at least 40% of the aggregate of internal and external marks taken together in each of the 6 Papers. A candidate who fails to secure 30% marks in internal shall repeat the course and thereby reappear for both the internal and external component of the said course.

#### **OC-43.7 (effective from 20<sup>th</sup> August, 2004) Class/Divisions shall be assigned as follows:**

Range of Marks	Class / Division
70% & above	Distinction
60% - 69%	First Class

50% - 59%	Second Class
40% - 49%	Pass Class
Below 40%	Fail

**OC-43.8 (effective from 20th August, 2004) Exemptions**

**OC-43.8.1 (effective from 20<sup>th</sup> August, 2004)** In case of a candidate who has completed Part B and Part C but has not completed Part A, he/she shall be allowed at his/her option to complete Part A within two subsequent academic years from the year of registration.

**OC -43.8.2 (Effective from 26<sup>th</sup> June, 2009)** A candidate who has passed with 40% in Part A (theory) or B or C of the examination, shall necessary be exempted from appearing in it/them at a subsequent attempt.

**OC-43.8.3 (effective from 20<sup>th</sup> August, 2004)** A candidate who fails in Part B shall give 5 additional lessons and complete other curricular requirements as have been left incomplete by him/her within a period of two academic years from the year of registration. Similarly, a candidate who fails in Part C shall be required to complete the practical.

**OC -43.8.4 (Effective from 26<sup>th</sup> June, 2009)** Deleted

**OC-43.8.5 (effective from 20<sup>th</sup> August, 2004)** A candidate shall not continue to be registered for the B.P.Ed. Course beyond a period of three academic years from and including the year of initial registration.

**OC-43.8.6 (effective from 20<sup>th</sup> August, 2004)** A candidate who passed the B.P.Ed examinations by reappearing with exemptions shall be declared pass class irrespective of the aggregate marks obtained in the programme.

**OC-43.9 (effective from 20<sup>th</sup> August, 2004)** The award of class, revaluation as well as grace marks to the candidates shall be determined by the common ordinances of the University.

**OC-44 (effective from 6th December, 2004) Ordinance relating to the course of study for the degree of Master of Dental Surgery (M.D.S.)**

**OC-44.1 (effective from 6th December, 2004) General**

Every candidate for admission to the M.D.S course (Master of Dental Surgery) must possess a degree of B.D.S. (Bachelor of Dental Surgery) duly recognized by the Dental Council of India. A candidate not possessing a recognized dental qualification for the above purpose should secure the prior approval of the qualification by the Dental Council of India before he/she can be admitted to the M.D.S. course.

**OC-44.2 (effective from June 2018)**

The following shall be the nine areas of specialization in which the M.D.S. degree of course is offered:

1. Prosthodontics and Crown and Bridge
2. Orthodontics and Dentofacial Orthopaedics
3. Oral Medicine and Radiology
4. Periodontology
5. Conservative Dentistry and Endodontics.
6. Oral and Maxillofacial Surgery

7. Oral and Maxillofacial Pathology and Oral Microbiology.
8. Pediatric and Preventive Dentistry
9. Public Health Dentistry

- OC-44.3** The M.D.S. course shall be of three years duration, for all the specialties and no reduction of the duration is permissible. Candidate discontinuing studies shall, on rejoining, complete the remainder of the courses and at the time of final examination, should have put in three calendar years of study, including the period of examination.
- OC-44.4** The candidate should have minimum of eighty percent attendance during each academic year.
- OC-44.5** **(effective from 6th December, 2004)** There shall be a University Examination at the end of three years' in the subject specialty. It shall also comprise of Applied Basic Science subjects consisting of Applied Anatomy, Physiology and Biochemistry and Applied Pathology and Microbiology.
- OC-44.6** All the candidates enrolled for the M.D.S Programme shall register themselves in the University within a period of three months from the date of admission, under the approved postgraduate guide. They shall also register the dissertation topic with the subject of study, supervising teacher and co-guide if any, within a period of six months.
- OC-44.7** There shall be periodic evaluation of the students during the Programme.
- OC-44.8** No candidate shall be admitted to the M.D.S degree examination Part II by the University unless s/he produces a course requirement completion certificate (CRCC) of having completed the MDS course to the satisfaction of the Head of the institution, based on the recommendation of the concerned Head of the Department
- OC-44.9** The criteria for issuing of the CRCC shall be:
- a. Satisfactory completion of the M.D.S degree course duration of three years with eighty percent attendance in each academic year;
  - b. Fulfilling the course requirements as prescribed; and
  - c. Fulfilling the Dissertation requirement.
- OC-44.10** The syllabus for the M.D.S course in Applied Basic Sciences shall vary according to the particular specialty. It shall consist of the following compulsory subjects:
- OC-44.10.1** **Compulsory subjects:**
1. Applied Anatomy
  2. Applied Physiology
  3. Applied Pathology
- OC-44.10.2** **Other subjects:**
1. Biostatistics
  2. Nutrition and Dietetics
  3. Teaching and testing methodology
  4. Research methodology
  5. Behavioral science and practice management
  6. Comparative metallurgy

7. Dental materials including metallurgy
8. Pharmacology
9. Computer application and photography
10. Forensic odontology Jurisprudence and Ethics including Dentist Act  
General and Local anesthetics

**OC-44.11** The students will pursue the course prescribed for the M.D.S. examination by participating in case presentations, Seminars, Clinics, Didactic lectures, Journal Review meetings, Conferences, Symposia etc. in the concerned Speciality.

**OC-44.12** The University shall hold the M.D.S. Degree Examinations twice a year with a minimum gap of six months between the two examinations. The Part II Examination shall consist of: -

- a) Dissertation
- b) Written Examination – 300 marks
- c) Clinical/ Practical Examination – 200 marks.
- d) Viva Voce/Oral Examination and Pedagogy – 100 marks.

**OC-44.13** Part I shall be a written University Examination of 3 hours duration (Basic Sciences). The paper shall consist of 10 questions of 10 marks each (Total = 100 marks). The setting of the paper as well as evaluation shall be by 1 External and 1 Internal Examiner of the respective Department/Speciality. Out of the total of 100 marks allotted to this paper, the candidate shall have to secure a minimum of 50% in the Basic Sciences and shall have to pass the Part I examination at least six months prior to the Final Part II Examination.

Part II Examination shall be conducted at the end of Third year M.D.S Programme and shall consist of 3 papers each of 3 hours duration carrying 100 marks for each paper (total 300 marks) and shall also include:

- a) Dissertation
- b) Clinical/ Practical Examination – 200 marks.  
Viva Voce/Oral Examination and Pedagogy – 100 marks

**OC-4.13.1** **Dissertation:** Every candidate appearing for the M.D.S degree examination for the First time shall submit four type written copies of a dissertation / thesis of the research topic undertaken by the candidate and which was prepared under the direction and guidance and to the satisfaction of his/her postgraduate teacher or the guide. The dissertation shall be submitted at least six months prior to the M.D.S degree examination. The dissertation shall be referred to the examiner for the M.D.S examination and acceptance of it by the examiners shall be a prerequisite condition for awarding the M.D.S degree by the University. A candidate whose dissertation/thesis has been accepted by the examiners, but who is declared to have failed at the university examination will be permitted to reappear at the subsequent M.D.S. examination without having to prepare a new dissertation/ thesis. If, however, the dissertation/thesis is rejected, the authorities shall thereof assign specific reasons in writing along with suggestion for change to the candidate. The candidate shall then carry out all such modifications and re submit the dissertation/thesis to the examiners for evaluation and its acceptance shall be mandatory before awarding the M.D. S. degree.

**OC-44.13.2 (Written)**  
**Part I** shall be a written University Examination of 3 hours duration (Basic Sciences). The paper shall consist of 10 questions of 10 marks each (Total = 100 marks).

**Part II** Written Examination shall be conducted at the end of Third year MDS Programme and shall consist of 3 papers each of 3 hours duration carrying 100 marks for each paper (total 300 marks).

Paper-I & Paper-II shall consist of two long answer questions carrying 25 Marks each and 5 questions carrying 10 Marks each.

Paper-III will have 3 questions and the student has to answer any 2 questions. Each question carries 50 Marks. Questions on recent advances may be asked in any or all the papers.

**OC-44.13.3 Clinical and / or practical examination:**

This shall be of two days duration in all specialties. Extension for a maximum of one day is permitted if the practical/clinical Examination could not be completed in two days

**OC-44.13.4 Viva voce or oral examination**

There shall be four examiners of which two shall be external i.e. from outside the University. In the event that adequate examiners are not available, three examiners may conduct the examination, but two of them shall be external examiners from outside the university.

**OC-44.14 (effective from 6th December, 2004) Speciality Wise Scheme of Examination**

**OC-44.14.1 (Effective from June 2018)**

**Prosthodontics and Crown & Bridge** is a branch of dental art and science that pertains to the restoration and maintenance of oral function, health, comfort and appearance by the replacement of missing or lost natural teeth associated tissues by fixed or removable artificial substitutes

**Paper wise distribution of the subject:**

**Part I-** Applied basic Sciences Applied Anatomy, Embryology, Growth & Development, Genetics, Immunology, Anthropology, Physiology, Nutrition & Biochemistry, Pathology & Microbiology, Virology, Applied Pharmacology, Research Methodology & Biostatistics

Applied Dental Anatomy & Histology. Oral Pathology & Oral Microbiology Adult & Genetic Psychology. Applied Dental Materials

**Part II**

**Paper I-** Removable Prosthodontics and Implant supported Prosthesis (Implantology), Geriatric dentistry and Craniofacial Prosthodontics

**Paper II-** Fixed Prosthodontics, occlusion, TMJ and Aesthetics

**Paper III-** Description and analysis type question.

**Practical Examination**

The examination shall be of two days duration consisting of Clinical, Practical and Viva-Voce & Pedagogy which include Case Studies, Case Reports, Case Presentations, Treatment Planning and Fabrication of Prosthesis such as complete denture and fixed partial denture.

**OC-44.14.2 (Effective from June 2018)**

**Orthodontics and Dento-facial Orthopedics**

It deals with prevention and correction of oral anomalies and malocclusion and the harmonizing of the structures involved so that the dental mechanism will function in a normal way.

**Part-I Applied Basic Sciences:**

Applied Anatomy, Physiology, Pathology, Genetics, Physical Anthropology and Dental Materials, Applied Research Methodology, Biostatistics and Applied Pharmacology.

**Part II**

**Paper I-**Orthodontic History, Concepts of Occlusion and Aesthetics, Child and Adult Psychology, Etiology and Classification of Malocclusion, Dentofacial Anomalies, Diagnostic Procedures and Treatment Planning in Orthodontics, Prosthetic Management in Orthodontics.

**Paper II-** Clinical Orthodontics.

**Paper III-** Descriptive and Analysing type question.

The examination shall be of two days duration including diagnosis and treatment planning of one long case, one case of design, fabrication and insertion of arch wires and Auxillary. One case of diagnosis, fabrication and insertion in pre-adolescent patient Myofunctional Appliance and Presentation and discussion of treated cases, viva-voce and pedagogy.

**OC-44.14.3 (Effective from June 2018)**

**Oral Medicine & Radiology:** This speciality of dentistry concerned with the basic diagnostic procedures and techniques useful in recognizing the diseases of the oral tissues of local and constitutional origin and their medical treatment.

Radiology is a science dealing with x-rays and their uses in diagnosis and treatment of diseases in relation to oral facial diseases.

**Paper wise distribution of the subjects:-**

**Part I- Applied Basic Sciences:** Applied anatomy, Physiology & Biochemistry, Pathology, Microbiology, Pharmacology, Research Methodology and Biostatistics.

**Part II**

**Paper I-** Oral and Maxillofacial Radiology.

**Paper II-** Oral Medicine, Therapeutics and Laboratory Investigations.

**Paper III-** Descriptive and Analysing type question.

**Practical Examination**

The examination shall be of two days duration consisting of case studies, diagnosis and treatment planning for oral diseases. Radiological techniques and radiological diagnosis to demonstrate the candidate's proficiency and viva-voce and pedagogy.

**OC-44.14.4 (Effective from June 2018)**

**Periodontology:** Is the science that deals with the health and diseases of the investing and supporting structures of the teeth and oral mucous membrane.

**Paper wise distribution of the subjects:-**

**Part I- Applied Basic Sciences:**

Applied Anatomy, Physiology Biochemistry, Pathology, Microbiology, Pharmacology, Research Methodology & Biostatistics.

**Part II**

**Paper I-** Normal Periodontal Structure, Etiology and Pathogenesis of Periodontal Diseases, Epidemiology as related to Periodontics.

**Paper II-** Periodontal Diagnosis, Therapy and Oral Implantology.

**Paper III-** Descriptive and Analysing type question.

### **Practical Examination**

The examination shall be of two days duration involving case studies diagnosis and treatment methods used in treating periodontal diseases and Viva-Voce and Pedagogy.

#### **OC-44.14.5 (Effective from June 2018)**

**Conservative, Dentistry and Endodontics:** It deals with prevention and treatment of the diseases and injuries of the hard tissues and the pulp of the tooth and associated Periapical lesions, along with restorations of those teeth to normal flora, function and aesthetics.

**Paper wise distribution of the subjects:-**

**Part I- Applied Basic Sciences:** Applied Anatomy, Physiology, Pathology including Oral Microbiology, Pharmacology, Biostatics and Research Methodology and Applied Dental Materials.

#### **Part II**

**Paper I-** Conservative Dentistry

**Paper II-** Endodontics

**Paper III-** Descriptive and Analysing type question.

#### **Practical Examination**

The examination shall be of two days duration consisting of case discussion and endodontic treatment of molar tooth. Inlay preparation (Class II) on a molar tooth. Crown preparation of anterior tooth and Viva Voce and Pedagogy.

#### **OC-44.14.6 (Effective from June 2018 )**

**Oral and Maxillofacial Surgery :** It deals with the diagnosis and surgical and adjunctive treatment of diseases, injuries and defects of the human jaws and associated oral and facial structures

**Paper wise distribution of the subjects:-**

**Part I-Applied Basic Sciences:** Applied Anatomy, Physiology and Biochemistry, Pathology, Microbiology, Pharmacology, Research Methodology and Biostatistics.

#### **Part II**

**Paper I-** Minor Oral Surgery and Trauma

**Paper II-** Maxillofacial Surgery

**Paper III-**Descriptive and Analysing type question.

#### **Practical Examination**

The examination shall be of two days duration consisting of case presentation, including 2 major and 1 minor case, case history, treatment plan. Treatment planning for Orthognathic surgery patient. Minor surgery, extraction of infected mandibular third molar patient. Documentation and presentation of five



major cases. Presentation of daily work record. Thesis presentation (Using slides and OHP), Viva-Voce & Pedagogy.

**OC-44.14.7 Oral and Maxillofacial Pathology and Oral Microbiology**

**Part-I**

**Paper-I:**

Applied Anatomy, Physiology (General and Oral), Cell Biology, General Histology, Biochemistry, General Pathology, General and Systemic Microbiology, Virology, Mycology, Basic Immunology, Oral Biology (Oral and Dental Histology), Biostatistics and Research Methodology.

**Part II**

**Paper I:** Oral Pathology, Oral Microbiology and Immunology and Forensic Odontology

**Paper II:** Laboratory Techniques and Diagnosis and Oral Oncology.

**Paper III:** Descriptive and Analysing type question.

The examination shall be of two days duration consisting of Case History (long and short), collection of biological samples, laboratory investigation, Diagnostic Histopathology, Dissertation review, examination Viva Voce & pedagogy.

**OC-44.14.8 (Effective from June 2018)**

**Pediatric and Preventive Dentistry-** It deals with prevention and treatment of oral and dental ailments that may occur during childhood.

**Paper wise distribution of the subjects:-**

**Part I- Applied Basic Sciences:** Applied Anatomy, Physiology and Biochemistry, Pathology. Microbiology, Pharmacology, Research Methodology and Biostatistics, Growth and Development, Dental Plaque, Genetics.

**Part II**

**Paper I-** Clinical Pedodontics

**Paper II-** Preventive and Community Dentistry as applied to Paediatric Dentistry

**Paper III-** Descriptive and Analyzing type question.

**Practical Examination**

The examination shall be of two days duration consisting of case of Paediatric Endodontics, fixed space maintainer construction, preparation and cementation of SS crown, Thesis Presentation, Viva-Voce and pedagogy

**OC-44.14.9 (Effective from June 2018)**

**Public Health Dentistry -** Is the science and art of preventing and controlling dental diseases and promoting dental health through organized community efforts.

**Paper wise distribution of the subjects:-**

**Part I- Applied Basic Sciences:** Applied Anatomy and Histology, Applied Physiology and Biochemistry, Applied Pathology. Microbiology, Oral Pathology, Physical and Social Anthropology, Applied Pharmacology, Research Methodology and Biostatistics ,

**Part II****Paper I-** Public Health**Paper II-** Dental Public Health**Paper III-** Descriptive and Analysing type question.**Practical Examination**

The examination shall be of two days duration consisting of 1 major case history, indices, community programme planning, journal club, 2 short cases involving treatment such as fluoride application, pit and fissure sealants, oral prophylaxis, speech, lectures for the 3<sup>rd</sup> BDS students, dissertation. Viva-Voce and pedagogy.

\*\*\*\*

**(effective from 6th December, 2004) Community Dentistry (Preventive and Social Dentistry):** is the science and art of preventing and controlling dental diseases and promoting dental health through organized community efforts.

**Paper wise distribution of subjects:**

Paper I - Applied Anatomy, Physiology, Pathology and Research Methodology  
Paper II - Public Health  
Paper III - Dental Public Health  
Paper IV - Essay in the specialty and the allied fields.

**Practical Examination**

There shall be 2 days examination consisting of 1 major case history, indices, community programme planning, journal club, 2 short cases involving treatment such as fluoride application, pit and fissure sealants, oral prophylaxis, speech, lectures for the 3<sup>rd</sup> BDS students, dissertation, viva voce.

- OC-44.15 (effective from 6th December, 2004)** University shall award Degree of Master of Dental Surgery to the successful candidates.
- OC-44.16 (effective from 6th December, 2004)** A candidate who wishes to study for M.D.S. in a second specialty shall be exempted from taking courses in applied basic science subjects. The duration of the course for such a candidate shall be of three academic years. He/She shall fulfill all other requirements for M.D.S. including a fresh dissertation / thesis.
- OC-44.17 (effective from 6th December, 2004) Qualification for Examiners for the M.D.S. Examination:**
- OC-44.17.1 (effective from 1<sup>st</sup> August, 2013)** The examiner should possess qualifications and experience not less than as recommended for a teacher in the Post-Graduate program.
- OC-44.17.2 (effective from 1<sup>st</sup> August, 2013)** No person who is not an active Post-graduate teacher in the subject shall be appointed as examiner. However, in the case of retired teachers they may be appointed up to one year after retirement only in cases where a candidate guided by him/her is appearing for the examination.

**OC-44.17.3 (effective from 1<sup>st</sup> August, 2013)** No persons shall be appointed as an external examiner for more than three consecutive examinations.

**OC-44.18 (effective from 1<sup>st</sup> August, 2013)** To pass the M.D.S. examination a candidate shall secure a minimum of 50% marks independently in both theory and practical examinations.

For computing results there shall be a grading system on a five point scale i.e. A, B, C, D, E. Assessment on each component (Separately for each paper in theory) as well as overall assessment for the component of theory.

**OC-44.19 (effective from 6th December, 2004) The grade sheet shall be as under:-**

- > A 70% and above (Excellent)
- > B 60% to 69% (Good)
- > C 50% to 59% (Satisfactory)
- > D 40% to 49% (Poor)
- > E Less than 40% (Very Poor)

For declaring a candidate as "Successful" he/she is required to secure a minimum of "C" grade in each of the following components – Theory (overall), Practical/Clinical and viva voce/dissertation.

#### **(EFFECTIVE FROM THE ACADEMIC YEAR 2007-08 ONWARDS)**

**OC-45: Ordinance relating to the Three Year course of Bachelor of Arts, Bachelor of Commerce and Bachelor of Science degrees (Under Section 24(1) of Goa University Act 1984).**

##### **OC-45.1: General**

This ordinance shall come into force from the beginning of such Academic Year as notified by the University. The sections relating to the Semester-I & Semester-II (in the first year), Semester-III & Semester-IV (in the second year) and Semester-V & Semester-VI (in the third year) courses shall come into force sequentially, those relating to Semester-I and Semester-II coming into force during the first year of operation. Once notified, this Ordinance shall supersede all relevant existing Ordinances, Notifications and Circulars relating to these courses.

##### **OC-45.1.1: Objectives**

(a) To bring the undergraduate curriculum on par with the model curriculum recommended by the University Grants Commission, (b) To impart quality education to make it internationally comparable, (c) To offer new, relevant and need-based courses, (d) To inculcate in students responsibility and self-discipline in the learning process, (e) To enable students to acquire specific skills in keeping with their area of study, (f) To make the evaluation system continuous and more objective.

##### **OC-45.1.2: Degree to be awarded**

- (a) Bachelor of Arts / Commerce / Science (with two subjects-three units).
- (b) Bachelor of Arts / Commerce / Science (with one subject-six units).

##### **OC-45.1.3: Duration of course**

The afore-mentioned Degree Courses, shall each have duration of three academic years. Every academic year shall consist of two semesters.

##### **OC-45.2. Eligibility for admission**

Eligibility for admission leading to the degree of Bachelor of Arts / Commerce / Science shall be as follows.

**OC-45.2.1: Eligibility for admission to Semester-I & II (in the first year) B. A. course:**

(A) To be eligible for admission to the Semester-I of the Three Years course leading to the degree of Bachelor of Arts, the candidate should have passed (i) the Higher Secondary School Certificate (Std. XII) examination conducted by the Goa Board of Secondary and Higher Secondary Education in the Arts stream, **OR** (ii) the Higher Secondary School Certificate (Std. XII) examination conducted by the Goa Board of Secondary and Higher Secondary Education in the Vocational stream in the subjects notified by the University under this clause from time to time, **OR** (iii) Std XII (Arts) or similar examination of another body, equivalent to Goa Board of Secondary and Higher Secondary Education, Goa, and recognized as such by Goa University.

(B) A candidate satisfying the conditions laid down by the University for admission to the Semester-I course in B. Sc. or B. Com. shall also be eligible for admission to the Semester-I of B. A. course.

(C) A candidate not covered under any of the above categories but desirous of seeking admission to the said course may apply to the college. However, the Registrar along with Dean of concerned Faculty and Chairperson(s) of Board(s) of Studies of concerned subjects shall decide the eligibility.

(D) A candidate admitted for Semester-I shall be deemed eligible for admission to Semester-II.

(E) A candidate migrating from another recognized University and desirous of direct admission to Semester-II may be considered for admission provided he/she has cleared/passed First Term/ Semester-I examination of that University with those subjects for which admission is sought and undertakes to successfully complete the other compulsory papers of Semester-I.

**OC-45.2.2: Eligibility for admission to Semester I & II (in the first year) B. Com. course:**

(A) To be eligible for admission to the Semester-I of the Three Years course leading to the degree of Bachelor of Commerce, the candidate should have passed (i) the Higher Secondary School Certificate (Std. XII) examination conducted by the Goa Board of Secondary and Higher Secondary Education in the Commerce stream, **OR** (ii) the Higher Secondary School Certificate (Std. XII) Examination conducted by the Goa Board of Secondary and Higher Secondary Education in the Vocational stream in the subjects notified by the University, under this clause, from time to time, **OR** (iii) the Std XII (Commerce) or similar examination of another body equivalent to Goa Board of Secondary and Higher Secondary Education, Goa and recognised as such by Goa University.

(B) A candidate not covered under any of the above categories but desirous of seeking admission to the said course may apply to the college. However, the Registrar along with Dean of concerned Faculty and Chairperson(s) of Board(s) of Studies of concerned subjects shall decide the eligibility.

(C) A candidate admitted for Semester-I shall be deemed eligible for admission to Semester-II.

(D) A candidate migrating from another University and desirous of direct admission to Semester-II may be considered for admission provided he/she has cleared/passed First Term/ Semester-I examination of that University with those subjects for which admission is sought and undertakes to successfully complete the other compulsory papers of Semester-I.

**OC-45.2.3: Eligibility for admission to Semester I & II (in the first year) B. Sc. course:**

(A) To be eligible for admission to the Semester-I of the three years course leading to the degree of Bachelor of Science, the candidate should have passed (i) the Higher Secondary School Certificate (Std. XII) examination conducted by the Goa Board of Secondary and Higher Secondary Education in the Science stream, **OR** (ii) the Higher Secondary Certificate (Std. XII) Examination conducted by the Goa Board of Secondary and Higher Secondary Education in the Vocational stream in the subjects notified by the University, under this clause, from time to time, **OR** (iii) Std XII (Science) or similar examination of another body equivalent to Goa Board of Secondary and Higher Secondary Education, Goa and recognised as such by Goa University.

(B) A candidate not covered under any of the above categories but desirous of seeking admission to the said course may apply to the college. However, the Registrar along with Dean of concerned Faculty and Chairperson(s) of Board(s) of Studies of concerned subjects shall decide the

eligibility.

(C) A candidate admitted for Semester-I shall be deemed eligible for admission to Semester-II.

(D) A candidate migrating from another University and desirous of direct admission to Semester-II may be considered for admission provided he/she has cleared/passed First Term/ Semester-I examination of that University with those subjects for which admission is sought and undertakes to successfully complete the other compulsory papers of Semester-I.

**OC-45.2.4: Eligibility for admission to Semester-III and/or Semester-IV (in the second year) of B. A. / B. Com. /B. Sc. course:**

(A) A candidate who has registered and have requisite attendance for Semester-I and Semester-II shall be eligible for admission to Semester-III.

(B) A candidate migrating from any other recognized University may be considered for admission to Semester-III of the B. A. /B. Com. / B. Sc. provided: (a) he/she has passed the First Year B. A./ /B. Com./ B. Sc. examination in all subjects from that University, (b) he/she had offered at the First Year the same subjects as prescribed under Major category available under the scheme of this University, (c) he/she undertakes to successfully complete the compulsory Information Technology/ Environment Studies syllabus prescribed by this University for Semesters-I & II, if he/she has not already done so in the previous University. Result of Semester IV examination shall be withheld if the candidate fails to fulfill this undertaking.

(C) A candidate admitted for Semester-III shall be deemed eligible for admission to Semester-IV.

(D) A candidate from another recognized University may be considered for direct admission to Semester IV provided he/she fulfills the conditions in (a), (b) and (c) at (C) above and, in addition, has passed/cleared Semester-III/First Term examination of the Second Year B. A. /B. Com. /B. Sc. of that University. However, the result of Semester IV shall be withheld if the candidate does not fulfill these conditions.

**OC-45.2.5: Eligibility for admission to Semester-V (in the third year) B. A. / B. Com. /B. Sc. course:**

(A) A candidate who has been declared passed in Semester-I to Semester-IV examinations shall be eligible for admission to Semester-V.

(B) A candidate admitted for Semester-V shall be deemed eligible for admission to Semester-VI.

(C) A candidate migrating from any other recognized University may be considered for admission to Semester-V of the B. A. / B. Com. /B. Sc. Course provided: (a) he/she has passed the Second Year B. A. / B. Com. /B. Sc. Examination in all subjects from that University, and (b) he/she had offered at the Second Year the same subjects as prescribed under Major category available under the scheme of this University. A candidate fulfilling these conditions shall be eligible for admission to only Semester- V.

**OC-45.2.6: Eligibility for admission to Semester-VI (in the third year) B. A. / B. Com. /B. Sc. course:**

(A) A candidate already admitted for Semester-V shall be deemed eligible for admission to Semester-VI.

(B) Direct admission to Semester-VI shall not be permitted.

**OC-45.2.7: Class strength:**

Maximum number of students in a class/division shall not exceed sixty.

**OC-45.3: Course Structure:**

The course structure for the three year degree course in B.A./ /B. Com./B.Sc. is given below. – **(Notified on 25<sup>th</sup> July, 2017)** Each instructional period mentioned therein shall be of 60 minutes duration.

**OC-45.3.1: Course Structure for Bachelor of Arts:**

**(A) SEMESTER-I:**

*(a) Course Structure:*

- (i) One Compulsory Paper in English.
- (ii) One paper in a Language from the list notified by the University.

- (ii) **(Effective from 4<sup>th</sup> February, 2013)** One paper in each of the three subjects other than Mathematics selected from the major category as notified by the University.

OR

In case of Mathematics, two papers of Mathematics and one paper in any other subject selected from the major category as notified by the University.

- (iv) One paper in Foundation Course from the list notified by the University.
- (v) One Compulsory Paper in Information Technology.
- (vi) One Compulsory paper in Environment Studies.

*(b) (Effective from 22<sup>nd</sup> February, 2010) Instructional Periods:* Each paper in (i) to (v) above (total seven papers) shall have five instructional periods per week. The paper on Information Technology shall have five instructional periods of Theory per week and twenty hours of practical per semester. The paper on Environment Studies shall have two instructional periods per week. Subjects other than Information Technology, having practical component, shall have three instructional periods for Theory component and three instructional periods for Practical component per week.

*(c) Maximum Marks:* The seven papers under (i) to (v) above shall carry 100 marks each. The compulsory paper on Environment Studies shall carry 50 marks.

Note: Notwithstanding the selection of subjects at the Semester-I, at the time of admission, the Principal of the college may permit a student of Semester-I B.A. admitted in his/her college to change one or more subjects taken by the student within a period of fifteen days from the reopening of the college.

**(B) SEMESTER-II**

*(a) Course Structure:*

- (i) One Compulsory Paper in English.
- (ii) One paper in a Language from the list notified by the University.
- (iii) **(Effective from 4<sup>th</sup> February, 2013)** One paper in each of the same three subjects from the Major Category offered in Semester I.

OR

In case of Mathematics, two papers of Mathematics and one paper in the same subject from the Major Category as offered in Semester –I.

- (iv) One Paper in Foundation Course from the list notified by the University.
- (v) One Compulsory Paper in Information Technology
- (vi) One Compulsory paper in Environment Studies.

*(b) Instructional Periods:* Each paper in (i) to (iv) above (total six papers) shall have five instructional periods per week. The paper on Information Technology shall have four instructional periods of Theory per week and twenty hours of Practicals per Semester. The paper on Environment Studies shall have two instructional periods per week. Subjects other than Information Technology, having practical component also, shall have three instructional periods for the Theory component and three instructional periods for the Practical component per week.

*(c) Maximum Marks:* The seven papers under (i) to (v) above shall carry 100 marks each. Compulsory paper on Environment Studies shall carry 50 marks.

**(C) SEMESTER-III**

*(a) Course Structure:*

- (i) One Compulsory paper in English.
- (ii) **(Effective from 4<sup>th</sup> February, 2013)** One paper in each of the same three subjects from the Major Category offered in Semester –I and Semester-II.

OR

In case of Mathematics, two papers of Mathematics and one paper in the same subject from the Major Category as offered in Semester I and Semester II.

- (iii) One Paper in a subject allied to anyone of the Major subjects in (ii) above. The list of Allied Subjects shall be notified by the University.
- (iv) Any one paper in Foundation Course from the list notified by the University.
- (v) One paper on Human Rights *or* Population Studies *or* Gender Studies
- (b) Instructional Periods:* Each paper in (i) to (v) above (total seven papers) shall have five instructional periods per week. Subjects having practical component also, shall have three instructional periods for the Theory component and three instructional periods for the Practical component per week.
- (c) Maximum Marks:* The seven papers under (i) to (v) above shall carry 100 marks each.

#### **(D) SEMESTER-IV**

##### *(a) Course Structure:*

- (i) One Compulsory paper in English.
- (ii) **(Effective from 4<sup>th</sup> February, 2013)** One paper in each of the same three subjects from the Major Category as offered in Semester III.

OR

In case of Mathematics, two papers of Mathematics and one paper in the same subject from the Major Category as offered in Semester III

- (iii) One Paper in the same subject allied to one of the Major subjects as offered in Semester-III.
- (iv) One paper in the Foundation Course subject offered in Semester-III.
- (v) One paper on Self Development *or* Etiquette *or* Goan Heritage.
- (b) Instructional Periods:* Each paper in (i) to (v) above (total seven papers) shall have five instructional periods per week. Subjects having practical component also shall have three instructional periods for the Theory component and three instructional periods for the Practical component per week.
- (c) Maximum Marks:* The seven papers under (i) to (v) above shall carry 100 marks each.

#### **Bachelor of Arts degree (with two subjects-three units)**

#### **(E) SEMESTER-V**

##### *(a) Course Structure:*

- (i) Three papers in one of the subjects from Major category offered at Semester-I to IV.
- (ii) Three papers in another subject from Major category offered at Semester-I to IV.
- (iii) One Project Paper on the given topic preferably related to any one of the Major subjects in (i) or (ii) above.
- (iv) **(Effective from 12<sup>th</sup> October, 2009)** Two Papers on a Skill-based subject/s from the list notified by the University. Skilled based subjects would be optional.  
(Note: Topic for the Project Work, to be completed in Semester-VI, shall be given in Semester-V. The candidate shall be required to carry out work for the Project during Semesters-V & VI. The assessment of the project will be carried at the end of Semester-VI)
- (b) Instructional Periods:* Each paper in (i) and (ii) above (total six papers) shall have five instructional periods per week. Subjects having Theory and Practical component shall have three instructional periods for Theory component and three instructional periods for Practical component. Project paper in (iii) above shall have instructional period as defined in the project manual and each paper at (iv) above shall have three instructional periods, per week, respectively.
- (c) Maximum Marks:* The six papers under (i) and (ii) above shall carry 100 marks each, whereas the Skill-based paper shall carry 50 marks each. Marks scored in the Skill-based paper shall be converted into letter grade as given in the Scheme of examination.

#### **(F) SEMESTER-VI**



*(a) Course Structure:*

- (i) Three papers in the same subject under Major category as offered at Semester-V.
- (ii) Three papers in the same other subject from Major category as offered at Semester-V.
- (iii) One Project Paper on the given topic preferably related to any one of the Major subjects in (i) or (ii) above.

(Note: Topic for the Project Work, to be completed in Semester-VI, shall be given in Semester-V. The candidate shall be required to carry out work for the Project during Semesters-V & VI. The assessment of the project will be carried at the end of Semester-VI )

*(b) Instructional Periods:* Each paper in (i) and (ii) above (total six papers) shall have five instructional periods per week. Subjects having Theory and Practical component shall have three instructional periods for Theory component and three instructional periods for Practical component. The Project Paper shall have instructional periods as defined in the Project Manual.

*(c) Maximum Marks:* The six papers under (i) and (ii) above shall carry 100 marks each, whereas the Project Paper shall carry 100 marks. Marks scored in the Project Paper shall be converted into letter grade as given in the Scheme of Examination.

**Bachelor of Arts degree (with one subject-six units).**

***(E) SEMESTER-V***

*(a) Course Structure:*

- (i) Six Papers in one of the subjects under Major category offered at Semester-I to IV.
- (ii) One Project Paper on the given topic preferably related to anyone of the Major subjects in (i)

(iii) Two Papers on a Skill-based subject/s selected from the list notified by the University.

(Note: Topic for the Project Work, to be completed in Semester-VI, shall be given in Semester-V. The candidate shall be required to carry out work for the Project during Semesters-V & VI. The assessment of the project will be carried at the end of Semester -VI)

*(b) Instructional Periods:* Paper(s) in (i) shall have five instructional periods per week. Subjects having Theory and Practical component shall have three instructional periods for Theory component and three instructional periods for Practical component. Project Papers at (ii) shall have instructional periods as defined in the Project Manual. Each Paper at (iii) above shall have three instructional periods per week.

*(c) Maximum Marks:* The six papers under (i) above shall carry 100 marks each, whereas each Skill-based paper shall carry 50 marks. Marks scored in the Skill-based papers shall be converted into letter grade as given in the Scheme of Examination.

***(F) SEMESTER-VI***

*(a) Course Structure:*

- (i) Six Papers in the same subject under Major category offered at Semester-V.
- (ii) One Project Paper on the given topic preferably related to anyone of the Major subjects in (i).

*(b) Instructional Periods:* Each paper in (i) above (total six papers) shall have five instructional periods per week. Subjects having Theory and Practical component shall have three instructional periods for Theory component and three instructional periods for Practical component. The Project Paper shall have instructional periods as defined in the Project Manual.

*(c) Maximum Marks:* The six papers under (i) above shall carry 100 marks each, the Project Paper shall carry 100 marks. Marks scored in the Project Paper shall be converted into letter grade as given in the Scheme of Examination.

**OC-45.3.2: Course Structure for Bachelor of Commerce:**

***(A) SEMESTER-I***

*(a) Course Structure:*

- (i) One paper in *either* English *or* Geography.
- (ii) One paper *each* in two Commerce subjects selected from the list of such subjects notified by

the University.

(iii) One paper *each* in Mathematics and Economics.

(iv) One paper in Foundation Course in Commerce from the list notified by the University.

(v) One paper in Information Technology.

(vi) One Compulsory paper in Environment Studies.

**(b) (Effective from 22<sup>nd</sup> February, 2010) Instructional Periods:** Each, paper in (i) to (iv) above (total six papers) shall have five instructional periods per week. The paper on Information Technology shall have five instructional periods of Theory per week and twenty hours of Practicals per Semester. The paper on Environmental Studies shall have two instructional periods per week.

**(c) Maximum Marks:** The seven papers under (i) to (v) above shall carry 100 marks each, whereas compulsory paper on Environment Studies shall carry 50 marks.

Note: Notwithstanding the selection of subjects at the Semester-I, at the time of admission, the Principal of the college may permit a student of Semester-I of B.Com. admitted to his/her college to change one or more subjects taken by the student within a period of fifteen days from the reopening of the college.

### **(B) SEMESTER-II**

**(a) Course Structure:**

(i) One paper in *either* English *or* Geography.

(ii) The same two papers in Commerce subjects as offered in Semester-I

(iii) One paper each in Mathematics and Economics

(iv) One paper in Foundation Course in Commerce from the list notified by University.

(v) One paper in Information Technology

(vi) One Compulsory paper in Environment Studies.

**(b) Instructional Periods:** Each paper in (i) to (iv) above (total six papers) shall have five instructional periods per week. The paper on Information Technology shall have four instructional periods of Theory per week and twenty hours of Practicals per Semester. The paper on Environment Studies shall have two instructional periods per week.

**(c) Maximum Marks:** The seven papers under (i) to (v) above shall carry 100 marks each, whereas compulsory paper on Environment Studies shall carry 50 marks.

### **(C) SEMESTER-III**

**(a) Course Structure:**

(i) One paper in *either* Business Communication-I *or* Business Environment-I.

(ii) One paper each in Statistics-I, Business Law-I and Economics-I.

(iii) One paper *each* in two Commerce subjects selected from the list of such subjects for Semester-I and Semester-II, notified by the University.

(iv) One paper in Applied Component subject, related to commerce, from the list notified by the University.

**(b) Instructional Periods:** Each paper in (i) to (iv) above (total seven papers) shall have five instructional periods per week.

**(c) Maximum Marks:** The seven papers under (i) to (iv) above shall carry 100 marks each.

### **(D) SEMESTER-IV**

**(a) Course Structure:**

(i) One paper in *either* Business Communication-II *or* Business Environment-II.

(ii) One paper each in Statistics-II, Business Law-II and Economics-II.

(iii) One paper each in the same two Commerce subjects as offered in Semester-III

(iv) One paper in the same Applied Component subject, related to commerce, as offered in Semester-III

**(b) Instructional Periods:** Each paper in (i) to (iv) above (total seven papers) shall have five instructional periods per week.

**(c) Maximum Marks:** The seven papers under (i) to (iv) above shall carry 100 marks each.

## **Bachelor of Commerce degree.**

### **(E) SEMESTER-V**

#### *(a) Course Structure:*

- (i) One paper in Economics.
- (ii) One paper each in two Commerce subjects (other than that selected as Major).
- (iii) Three papers in a subject under Major category from the list notified by the University.
- (iv) **(Effective from 12<sup>th</sup> October, 2009)** Two Papers on a Skill-based subject/s from the list notified by the University. Skilled based subjects would be optional.

(Note: Topic for the Project Work, to be completed in Semester-VI, shall be given in Semester-V. The candidate shall be required to carry out work for the Project during Semester -V & VI. The assessment of the project will be carried at the end of Semester-VI )

*(b) Instructional Periods:* Each paper in (i), (ii) and (iii) above (total six papers), shall have five instructional periods per week. The Skill-based paper shall have three instructional periods per week. In addition, the Project Paper shall have instructional periods as defined in the Project Manual.

*(c) Maximum Marks:* The six papers under (i), (ii) and (iii) above shall carry 100 marks each, whereas the each Skill-based paper shall carry 50 marks. Marks scored in the Skill-based paper(s) shall be converted into letter grade as given in the Scheme of Examination.

### **(F) SEMESTER-VI**

#### *(a) Course Structure:*

- (i) One paper in Economics
- (ii) Two papers in the same Commerce subjects as offered in Semester-V.
- (iii) Three papers in the same Major category subject as offered at Semester-V.
- (iv) One Project Paper on the given topic preferably related to any paper at (ii) or (iii) in Semester-V.

*(b) Instructional Periods:* Each paper in (i), (ii) and (iii) above (total six papers) shall have five instructional periods per week. The Project Paper shall have instructional periods as defined in the Project Manual.

*(c) Maximum Marks:* The six papers under (i), (ii) and (iii) above shall carry 100 marks each, whereas the Project Paper shall carry 100 marks. Marks scored in the Project Paper shall be converted into letter grade as given in the Scheme of Examination.

### **OC-45.3.3: Course Structure for Bachelor of Science:**

#### **(A) SEMESTER-I**

##### *(a) Course Structure:*

- (i) Two papers each in three subjects under Major category from the list notified by the University. Generally, each paper shall have a Theory component and a Practical component. In the case of Mathematics (and similar subjects), both the papers shall have theory component only.
- (ii) One Compulsory paper in Information Technology. Students offering two papers in Computer Science in (i) above, shall have a Compulsory paper in a Foundation Course (selected from the list notified by the University) in lieu of Information Technology.
- (iii) One compulsory paper in Environment Studies.

*(b) (Effective from 22<sup>nd</sup> February, 2010) Instructional Periods:* Each paper in (i) above (total six papers) shall have three instructional periods per week for the Theory component and three instructional periods for the Practical component. However, for papers having Theory component only, there shall be five instructional periods per week. The paper on Information Technology shall have five instructional periods per week. The paper on Information Technology shall have five instructional periods of theory per week and twenty hours of practicals per semester. The paper on Environmental Studies shall have two instructional periods per week.

*(c) Maximum Marks:* The six papers in (i) and (ii) above shall carry 100 (75 marks for Theory and 25 marks Practicals component) marks each. The Paper on Information Technology shall carry 100 marks. The paper without Practical component shall carry 100 marks. Environment Studies paper shall carry 50 marks.

Note: Notwithstanding the selection of subjects at the Semester-I, at the time of admission, the Principal of the college may permit a student of Semester-I admitted in his/her college to change one or more subjects taken by the student within a period of fifteen days from the reopening of

the college.

### **(B) SEMESTER-II**

#### *(a) Course Structure:*

(i) Two papers each in the same three subjects under Major category as offered at Semester I. Each paper shall generally have Theory component and a Practical component. In the case of Mathematics (and similar subjects), both the papers shall have theory component only.

(ii) One Compulsory paper in Information Technology. Students offering two papers in Computer Science in (i) above, shall have a Compulsory paper in a Foundation Course (selected from the list notified by the University) in lieu of Information Technology.

(iii) One compulsory paper in Environment Studies.

*(b) Instructional Periods:* Each paper in (i) above (total six papers) shall have three instructional periods per week for the Theory component and three instructional periods per week for the Practical component. However, for paper(s) having Theory component only, there shall be five instructional periods per week per paper. The paper on Information Technology shall have four instructional periods of Theory per week and twenty hours of Practicals per Semester. The paper on Environment Studies shall have two instructional periods per week.

*(c) Maximum Marks:* The six papers under (i) and (ii) above shall carry 100 (75 marks for Theory and 25 marks Practicals component) marks each. The paper without Practical component shall carry 100 marks. The Paper on Information Technology shall carry 100 marks. Environment Studies paper shall carry 50 marks.

### **(C) SEMESTER-III**

#### *(a) Course Structure:*

(i) Two Papers each in the three subjects (Major category) offered at Semester-I/II. Each paper shall have a Theory component and a Practical component.

(ii) One compulsory paper in Foundation Course from the list notified by the University.

*(b) Instructional Periods:* Each paper in (i) above (total six papers) shall have three instructional periods per week for the Theory component and three instructional periods per week for the Practical component. However, for paper(s) having Theory component only, there shall be five instructional periods per week per paper. The paper on Foundation Course shall have five instructional periods per week.

*(c) Maximum Marks:* The six papers under (i) above shall carry 100 (75 marks for Theory and 25 marks Practicals component) marks each. The paper without Practical component shall carry 100 marks. The paper under (ii) shall carry 100 marks.

### **(D) SEMESTER-IV**

#### *(a) Course Structure:*

(i) Two Papers each in the three subjects (Major category) offered at Semester-III. Each paper shall generally have a Theory component and a Practical component.

(ii) One compulsory paper in Foundation Course from the list notified by the University.

*(b) Instructional Periods:* Each paper in (i) above (total six papers) shall have three instructional periods per week for the Theory component and three instructional periods per week for the Practical component. However, for paper(s) having Theory component only, there shall be five instructional periods per week per paper. The paper on Foundation Course shall have five instructional periods per week.

*(c) Maximum Marks:* The six papers under (i) above shall carry 100 (75 marks for Theory and 25 marks Practicals component) marks each. The paper without Practical component shall carry 100 marks. The paper under (ii) shall carry 100 marks.

### **Bachelor of Science degree (with two subject-three units).**

### **(E) SEMESTER-V**

#### *(a) Course Structure:*

(i) Three papers each in any two subjects (Major category) from those offered at Semester-III/IV. Out of the three papers (in each subject), two papers shall be of Theory component and

one paper shall be of Practical/s component. Subjects not having practical component shall have all the three papers in theory only.

(ii) One Project Paper on the given topic preferably related to any paper at (i) in Semester-V.

(iii) Two papers on Skill-based subject/s from the list notified by the University.

(iv) **(Effective from 12<sup>th</sup> October, 2009)** Two Papers on a Skill-based subject/s from the list notified by the University. Skilled based subjects would be optional.

(Note: Topic for the Project Work, to be completed in Semester-VI, shall be given in Semester-V. The candidate shall be required to carry out work for the Project during Semester V & VI. The assessment of the project will be carried at the end of Semester-VI)

*(b) Instructional Periods:* Each Theory paper in (i) above shall have four instructional periods per week. Each Practicals (Laboratory Exercises) paper in (i) above shall have eight instructional periods per week. Each Skill-based paper shall have three instructional periods per week. The Project Paper shall have instructional periods as defined in the Project Manual.

*(c) Maximum Marks:* The six papers under (i) above shall carry 100 marks each whereas the each Skill-based papers shall carry 50 marks. Marks scored in the Skill-based papers shall be converted into letter grade as given in the Scheme of Examination.

## **(F) SEMESTER-VI**

*(a) Course Structure:*

(i) Three papers each in the same two subjects (Major category) offered at Semester-V. Out of the three papers (in each subject), two papers shall be of Theory component and one paper shall be of Practical/s component. Subjects not having practical component shall have all the three papers in theory only.

(ii) One Project Paper on the given topic preferably related to any paper at (i) on the same given topic as selected at Semester-V.

*(b) Instructional Periods:* Each Theory paper in (i) above shall have four instructional periods per week. Each Practicals (Laboratory Exercises) paper in (i) above shall have eight instructional periods per week. The Project Paper shall have instructional periods as defined in Project Manual.

*(c) Maximum Marks:* The six papers under (i) above shall carry 100 marks each. The Project Paper shall carry 100 marks. Marks scored in the Project Paper shall be converted into letter grade as given in the Scheme of Examination.

## **Bachelor of Science degree (with single subject-six units).**

### **(E) SEMESTER-V**

*(a) Course Structure:*

(i) Six papers in any one subject under Major category offered at Semester-III/IV, out of which, four papers shall be of the Theory component and two shall be of the Practical/s component. Subjects not having practical component shall have all the three papers in theory only.

(ii) One Project Paper on the given topic preferably related to any paper at (i) on the same given topic as selected at Semester-V.

(iv) **(Effective from 12<sup>th</sup> October, 2009)** Two Papers on a Skill-based subject/s from the list notified by the University. Skilled based subjects would be optional.

(Note: Topic for the Project Work, to be completed in Semester-VI, shall be given in Semester-V. The candidate shall be required to carry out work for the Project during Semester-V & VI. The assessment of the project will be carried at the end of Semester-VI)

*(b) Instructional Periods:* Each Theory paper under (i) above shall have four instructional periods per week. Each Practicals (Laboratory Exercises) paper in (i) above shall have eight instructional periods per week. Each Skill-based paper shall have three instructional periods per week. The Project Paper shall have instructional periods as defined in the Project Manual.

*(c) Maximum Marks:* The six papers in (i) above shall carry 100 marks each. The Skill-based papers shall carry 50 marks each. Marks scored in the Skill-based papers shall be converted into letter grade as given in the Scheme of Examination.

### **(F) SEMESTER-VI**

*(a) Course Structure:*

(i) Six papers in the subject (Major category) offered at Semester-V, out of which, four papers shall be of Theory component and two shall be of Practicals component. Subjects not having practical component shall have all the three papers in theory only.

(ii) One Project Paper on the same given topic as selected at Semester-V.

*(b) Instructional Periods:* Each Theory paper in (i) above shall have four instructional periods per week. Each Practicals (Laboratory Exercises) paper in (i) above shall have eight instructional periods per week. The Project Paper shall have instructional periods as defined in the Project Manual.

*(c) Maximum Marks:* The six papers under (i) above shall carry 100 marks each. The Project Paper shall carry 100 marks. Marks scored in the Project Paper shall be converted into letter grade as given in the Scheme of Examination.

#### **OC-45.4 Scheme of Examination (B. A. / B. Com. / B. Sc.)**

**OC-45.4.1.** There shall be two modes of evaluation of the academic performance of the students offering the B.A. /B.Com. /B.Sc. course, namely, the Intra-Semester Assessment (ISA) and the Semester End Examination (SEE), hereafter mentioned as ISA and SEE respectively, for convenience. A student shall be required to appear for ISA as well as SEE.

**OC-45.4.2. (Effective from 12<sup>th</sup> October, 2009)** (a) The ISA (Intra-Semester Assessment) shall be conducted twice in a given Semester once through a test and the other by using alternate modes of evaluation such as assignment, presentation, orals etc. Generally, ISA for a given paper shall be conducted by the teacher/s teaching that paper. ISA shall not be conducted for the Practical component of a paper. The schedule for the ISAs shall be notified to all at the beginning of the semester. The marks of ISA shall be communicated to the students within two weeks.

(b) **(Effective from 12<sup>th</sup> October, 2009)** The ISA tests shall carry 20% of maximum marks allotted for the paper/course.

(c) **(Effective from 12<sup>th</sup> October, 2009)** Every College shall appoint a three member committee to monitor the ISA in the college. There would be no remission in workload or remuneration for carrying out this work.

(d) **(Effective from 12<sup>th</sup> October, 2009)** The test shall preferably be completed by the end of July for odd Semesters and end of January for even Semesters. Students who fail to appear for the test due to a genuine reason shall be given another opportunity by the end of August/February on a date pre-determined by the College. The other mode of ISA will be completed as decided by the teacher but before the end of the semester.

(e) **(Effective from 12<sup>th</sup> October, 2009)** A student who does not appear for a minimum of two ISA of a paper shall not be eligible to answer SEE of that paper.

**OC-45.4.3.** (a) The SEE (Semester End Examination) shall be conducted at the conclusion of a given Semester. Semester End Examinations shall cover the course of studies prescribed for the concerned / respective Semester.

(b) A candidate shall be considered to have successfully fulfilled the requirements of a Semester and deemed eligible to appear for the Semester End Examination provided he/she fulfills the minimum attendance requirements (75%) as per the relevant rules of the University. A candidate, failing to fulfill these conditions, shall have to repeat the Semester.

(c) A tentative schedule of SEE examination, evaluation, declaration of results etc. shall be prepared by the respective College(s), preferably at the beginning of each academic year for first four Semesters and shall be notified to their students with a copy to the University. Setting of the question papers, evaluation of answer-scripts and declaration of results shall be done by respective Colleges

(d) Assessment of answer-scripts of SEE of Semesters-I to Semester-IV shall be organized by the colleges. The assessment of the SEE answer scripts at the Semesters I to IV shall be done by the teachers of respective colleges. If two or more Colleges desire to have the same question paper in any of the subjects, a common paper may be set by the teachers from the concerned colleges. For this purpose, a Committee of senior teachers may be constituted by the Principals of concerned Colleges.

(e) The pattern of question paper(s) to be set for the SEE in a given subject and the scheme of marking shall be decided by the Board of Studies in that subject. For this purpose, the Board of Studies shall frame specimen question paper(s) in the concerned subject for each semester for the information of the students. Similarly, for practical examinations, the number of laboratory exercises, marks distribution for each exercise and other relevant details shall be decided by the Board of Studies in that subject.

(f) The Schedule of the Examination and the setting of question paper(s) for SEE for Semester-V and Semester-VI shall be done centrally by the University. A Board of Paper-Setters and Examiners for the SEE shall be appointed by the University. This Board shall finalize question paper(s), and the Chairperson shall personally hand over the sealed set of question papers to the Controller of Examinations in the prescribed manner. There shall be no objective type of questions at SEE, however short answer questions may be set. Further, before assessment begins, this Board of Examiners shall prepare a key to answers to all question/sub-questions and the scheme of marking of the paper set at the examination. Photocopies of this key and the marking scheme for each of the paper of the concerned Semester (V and VI) shall be given to the examiners assessing the papers. In case of descriptive type of answers, only important points to be expected may be highlighted. There shall be a blue print in each subject. The assessment of the SEE at Semesters V and VI shall be done centrally at the University.

(g) The duration of SEE theory paper carrying 80 or 60 marks shall be of two hours duration and the theory paper carrying 40 marks shall be of one and half hour duration.

**OC-45.4.4. (Effective from 12<sup>th</sup> October, 2009)** There shall be no revaluation of answer books of the candidates at Semester-I to Semester-IV examinations. However the existing provisions in the University for revaluation/verification shall be applicable to Semesters V and VI. Personal verification of marks shall be granted to the candidate in the presence of Principal/Vice-Principal and the concerned Examiner, provided he has applied for the same along with payment of prescribed fees within one week of the declaration of result. The following shall be the procedure for the verification of marks:

- (a) On a notified day and time, which should be not later than 10 days after the receipt of application from the candidate, the candidate shall be shown the answer book in the chamber of the Principal/Vice-Principal in the presence of the Examiner concerned.
- (b) If the candidate is not satisfied with the result on personal verification of answer book, he may apply to College Grievance Committee within a week.
- (c) The College Grievance Committee shall take appropriate action as per the relevant Ordinance and inform the candidate of the decision taken accordingly.

**OC-45.4.5.** (a) A theory paper carrying 100 marks shall have ISA component of 20 marks and a SEE component of 80 marks. For a 75 marks theory paper, the ISA component shall be 15 marks and the SEE component shall be 60 marks. A theory paper carrying 50 marks shall have ISA component of 10 marks and SEE component of 40 marks.

(b) **(Effective from 12<sup>th</sup> October, 2009)** A student shall be required to score a minimum of 40% of maximum marks in ISA and SEE components taken together to pass in a paper in **Semesters I to VI.**

(c) **(Effective from 12<sup>th</sup> October, 2009)** Deleted.

(d) In practical paper/component a student shall be required to score a minimum of 40% marks to pass in all the Semesters.

(e) Marks secured by the student in ISA shall be carried forward even if he/she fails in the paper.

(f) **(Effective from 12<sup>th</sup> October, 2009)** Deleted.

**OC-45.4.6.** (a) Examination(s) in Laboratory exercises shall be conducted for courses/papers having practical(s) component. Marks shall be allotted for journal/lab record book, field work, experiment assigned to the candidate and oral/viva voce during this examination. The break-up of marks shall be as per the recommendations of the Board of Studies in the respective subject as approved by the Academic Council. The allotment of marks shall be broadly as follows: **20%** for journal(s), **60%** for the experiment and **20 %** for the oral(s). Allotment of marks shall be

notified by the University to all the colleges.

(b) Candidates shall be required to submit the journal/record book while entering the laboratory to appear for the practical examination. Examiner(s) shall take into account the regularity of the candidate in attending the Laboratory course, completeness of the exercises, presentation and style of writing the journal. For subjects having the field work component, the candidate shall be required to submit the report of such field excursion(s) along with the journal(s) for assessment. The examiner(s) shall consider the report along with journal(s) while allotting the marks.

(c) For assessing the candidate's performance in the assigned experiment, the examiner shall take into account the planning, the procedure and the technique followed by the candidate along with the readings/observations, the results and the presentation.

(d) In oral examination, the examiner(s) shall assess the knowledge of the candidate in the course/paper as well as the experiment(s) performed by the candidate.

(e) Record of the breakup of marks thus obtained by the candidate shall be maintained by the respective college for Semesters I to IV, in a sealed envelope for a minimum period of 4 years.

(f) The practical examination shall be treated as an independent head of passing.

(g) A candidate may be permitted, strictly on medical or other genuine grounds, to appear for practical examination out of turn, irrespective of the timetable and the batch allotted to him/her, in the examination programme for Semester-V and Semester-VI issued by the University. This out of turn appearance may be in the same college in a different batch or in a different college. Such permission may be granted by the University if so recommended by the Principal of the college. The candidate shall be required to remit the requisite fee for his/her being examined out of turn.

**OC-45.4.7. (Effective from 17th February, 2010)** (a) During the Semesters V & VI candidates of B.A./B.Sc./B.Com. shall be assigned work for completing the Project paper in the area/field of subject/s. Project work and the Report shall be based on field work/library work /laboratory work or on-the-job training or similar work assigned by the teacher on a topic identified by the latter.

Project work shall be assigned to a single student or upto a group of 5 students. The staff shall be assigned one or more such groups according to the requirement of the subject/college.

**(Effective from 17th February, 2010)** (b) Candidates shall be required to carry out a project in a subject which is in Semester -V and submit the Project Report at the end of Semester -VI for evaluation. A remission of 2 lectures per week shall be given for a group of 5 students in Semesters V and VI.

Those students opting for Fire Technology as one of the subjects at T.Y.B.Sc. in combination with either Chemistry or Physics shall have option to take a Project Paper either in Fire Technology or Chemistry or Physics. Those students who opt for Project paper in Fire Technology shall be required to undergo attachment training programme of total duration not less than 45 days. The attachment training shall be during the vacation starting from the end of semester IV examination till the end of December of that year. Such students shall submit the Project report including the report of attachment training on or before the last date notified by University.

The assessment of the project paper shall be done equally by Internal Examiner (Project Supervisor for 50 marks) and External Examiner (for 50 marks) as per the guidelines defined in the project manual.

**OC-45.4.8.** To be eligible for class, the student shall be required to complete the course in the minimum prescribed period and shall be required to pass Semester-V and Semester-VI each in a single seating with all SEE papers and Practicals of respective Semesters. The class shall be awarded on the basis of the aggregate total of marks scored at semester-V and semester -VI taken together as follows:



40% and above but less than 50%	- Pass Class
50% and above but less than 60%	- Second class
60% and above but less than 70%	- First Class
70% and above	- Distinction

**OC-45.4.9 (Notified on 25<sup>th</sup> July, 2017)** A candidate who has passed the B.A./B.Com./ B.Sc. Degree examination and desires to improve his/her performance/total score shall be permitted to appear again.

However, such a candidate shall be allowed to reappear only in the SEE component of one or more papers of his/her choice Semester V and/or Semester VI examinations excluding the Project Paper and the Skill-based papers. For this purpose, the marks scored at the first appearance, in the Project Paper and in the Skill-based paper as also in ISA component of the other papers, shall be carried forward for tabulation of the result under "improvement of performance". This facility to reappear under "improvement" shall be available only during the immediately subsequent Semester-V and Semester-VI examinations. A candidate shall not be permitted to reappear for improvement of performance at Semesters- I, II, III and IV. The candidate availing of this provision shall be considered to have passed Semesters- V and/or VI "under improvement" and this fact shall be recorded on his/her statements of marks and other relevant documents. The candidate shall be required to surrender the original statement of marks and other relevant documents at the time of receiving the fresh statement of marks in the event of improvement of performance/total score. The performance of a candidate, who appears under this provision and fails to improve, shall be ignored. A candidate can appear only once under this clause.

**OC-45.4.10.** The semester-wise aggregate marks secured by the candidate in Semester-I to Semester-IV examinations along with the paper-wise marks secured in Semester-V shall be indicated in the statement of marks issued to the candidate for Semester-V. Similarly, the semester-wise aggregate marks secured by the candidate in Semester-I to Semester-V examinations along with the paper-wise marks secured in Semester-VI shall be indicated in the final statement of marks issued to the candidate after the Semester-VI examination for the B.A./B.Com./B.Sc. degree course. In case the student passes any Semester or part thereof in the second appearance, it shall be so indicated in the statement of marks of Semester-V and Semester-VI.

**OC-45.4.11.** An unsuccessful candidate who obtains the minimum percentage of marks prescribed for passing in a subject (theory/practical) shall be exempted from reappearing in that subject. He/She shall be declared to have passed the full examinations on his passing in the remaining subjects.

**OC-45.4.12 (Effective from 15<sup>th</sup> September, 2011)**

(i) Deleted.

(ii) **(Effective from 15<sup>th</sup> September, 2011)** A supplementary examination shall be conducted, preferably after 15 days from the declaration of results of Semester II and IV examinations. Students who have a backlog of any or all the papers (theory / practical) of Semesters I, II, III and IV are eligible to appear for this examination, irrespective of whether a student has already attempted Semester I examination four times.

**OC-45.4.13. (Effective from 12<sup>th</sup> October, 2009)** Marks scored by a candidate in the Skill-based paper at Semester-V shall be converted into Letter Grade in the following manner:

Below 30%..... E Grade

- 30% and above but below 40%.....D Grade
- 40% and above but below 50%.....C Grade
- 50% and above but below 60%.....B Grade
- 60% and above but below 70%.....A Grade
- 70% and above .....O Grade

**OC-45.4.14. (Effective from 12<sup>th</sup> October, 2009)** A candidate registered for the three years B.A/B.Com./B.Sc. Degree course shall be required to successfully complete all papers and obtain 40% marks in all papers. 100 marks shall also be allotted for the Project and added to the aggregate. The award of class shall be determined accordingly. There would be no conversion of marks into grades.

**OC-45. 4.15 College Examination Committee, College Unfair Means Committee and College Grievance Committee**

**OC-45. 4.15.1** The following committee shall be constituted by the Principal of the college for the terms mentioned against each of them and shall work subject to control and supervision of the Principal.

1. College Examination Committee - 3 years
2. College Unfair Means Committee - 3 years
3. College Grievance Committee - 3 years

**(Effective from 12<sup>th</sup> October, 2009)** (A) (1) The College Examination Committee shall consist of :

- i) A senior teacher who shall be the Chairman
- ii) Two or four regular teachers (In addition to the Chairman)

There will be no remission in work-load but adequate remuneration shall be paid to the members.

(2) This Committee shall be generally in-charge of all matters pertaining to F.Y. and S.Y.B.A., B.Com., and B.Sc., examination in the College.

(3) The Committee shall prepare the examination time-table, arrange to get the question paper sets printed or cyclostyled and answer books assessed. The Committee shall arrange to get the results prepared, settled, announced and individual statement of marks prepared and issued to the candidates.

(B)(1) The College Unfair Means Inquiry Committee (CUMIC) shall be constituted with the following members.

- i) Vice-Principal or a senior teacher as Chairman
- ii) Two more teachers who shall be the member of the College Examination Committee

(2) This committee shall investigate into the cases of unfair means and malpractices reported in a manner prescribed by OC-45.4.15.2 and shall recommend to the Principal a course of action as prescribed in OA-5.14

(C) (1) The College Grievance Committee shall be constituted as under :-

- i) Vice-Principal/Senior member of teaching staff as Chairman, provided that he is not the Chairman of CUMIC.
- ii) Two regular teachers, preferably not members of CUMIC and the College Examination Committee.
- iii) In case the Grievance concerns any member of the committee, the Principal shall reconstitute the committee, excluding the concerned member.

(2) This committee shall investigate into written complaints from the students referred to them by the Principal in the conduct of examinations and recommend a course of action to the Principal as prescribed in OC-45.4.15.3 and OA- 5.14.

**OC-45.4.15.2** Procedure for investigating cases of unfair means:

The following procedure shall be followed for investigating the cases of candidates alleged to have used unfair means at the First Year and/or Second Year B.A., B.Com., and B.Sc., examinations.

(1) The candidates be served with a show cause notice and made aware of the charges/allegations reported against him so as to enable him to prepare his defence at the time of this appearance before the Unfair Means Inquiry Committee and informing him thereby of the proposed action to be taken in his case, with a request to bring reply to the show cause notice as to why the action proposed under it should not be taken against him.

(a) The reply received by the Committee from the candidate when he appears before it be considered by the Committee and the final recommendation in the matter be taken and reported to the Principal for his approval.

(b) The punishment finally awarded can be equal to or less than what is mentioned in the show cause notice, but not more than what is mentioned therein.

(c) The College Unfair Means Inquiry Committee is a recommendatory body. The Principal has to exercise his power under Statute SB-13(iv) of the University and issue final order.

(d) The broad category of malpractice and the quantum of punishment for each category thereof shall be as given in general Ordinance on malpractices i.e. OA-5.14.19. Besides these guidelines, each case be examined in detail and punishment awarded on the merit of each case.

**OC-45.4.15.3 Procedure for Investigation of Grievance by the College Grievance Committee**

1) The Committee shall consider the written complaint by a student on the conduct of examination provided that (i) the complaint is submitted by the student within 15 days after the declaration of results; (ii) the complaint is accompanied with a fee of Rs.200/- (refundable if the complaint is found genuine); and (iii) the matter is referred to the Committee by the Principal. The Committee shall invite a reply to the allegations, if any made by the student from the concerned party.

2) After considering the reply of the concerned party, the committee shall recommend a course of action in writing to the Principal.

3) The Principal may inform the student, the findings of the Committee and shall take appropriate action including reassessment of the said answer book. However, if the marks are reduced after revaluation of the said answer book the original marks shall be retained and the student to be communicated that there is no change in his/her result.

4) A minimum fine of Rs.200/- which shall not exceed Rs.500/-, shall be imposed on the student complainant, if the said allegation(s) is (are) found to be a deliberate attempt at casting aspersions on the teacher(s) concerned. If the allegations are found to be genuine and the same is recorded giving reasons, the action shall be taken as provided under OA-5.2.6.

**OC –45.5 Field Training/Work at B.A/ BSc./B.Com Course of study**

In the subject where the field training/work is a compulsory component of the curriculum, a minimum of 3 days equivalent to 24 clock hours of field training/work (at First Year), 9 days equivalent to 72 clock hours (at Second Year) and 18 days equivalent to 144 clock hours (at Third Year) in an academic year, consisting of two successive Semesters (one odd and one even) taken together, shall be undertaken. Number of clock hours in an academic year may be split equally between two Semesters by the teacher(s) supervising the field training/work. This work shall be deemed equivalent to one practical period per week per batch of 15 students for the respective Semesters.

**OC-46 Ordinance for the Bachelor of Financial Services Programme (BFS) (Under Section 24(1) of the Goa University Act, 1984). (Effective from 2006-07).**

**OC-46.1 GENERAL**

**OC-46.1.1 Course Objective:** To produce an employable workforce that will have sound knowledge of business fundamentals, of the working of institutions in the financial sector and services provided by these institutions.

**OC-46.2 Duration of the Course:**

**OC-46.2.1** The duration of the programme is three years, which is divided into six semesters with two semesters per year.

**OC-46.2.2** Semesters I, III and V shall be termed as Odd Semesters while Semesters II, IV and VI shall be termed as Even Semesters.

**OC-46.2.3** The maximum period for the completion of the course shall be 6 years (as per Ordinance OA-16).

**OC-46.3 Academic calendar**

The academic calendar of the programme will be the same as that prescribed by Goa University for the B.Sc., B.Com and B.A. programmes.

**OC-46.4 Degree to be awarded**

Upon successful completion of the programme, the degree of Bachelor of Financial Services (BFS) shall be conferred upon every candidate.

**OC-46.5 Eligibility for Admission and Intake Capacity:**



**OC-46.5.1****Eligibility for Admission**

a) Eligibility for Admission to the First Semester of the BFS programme (First Year BFS).

Any candidate who has passed Standard XII in any stream of the Goa Board of Secondary and Higher Secondary Education or any other equivalent examination recognized by Goa University is eligible for admission to the First semester of the BFS programme.

b) **(Effective from 1<sup>st</sup> October, 2009)** Eligibility for Admission to the Third Semester of the BFS programme (Second Year BFS).

A candidate who has completed and passed at least 8 of the 14 papers of Semester I and II taken together shall be eligible for admission to Semester III.

c) **(Effective from 1<sup>st</sup> October, 2009)** Eligibility for Admission to the Fifth Semester of the BFS programme (Third Year BFS).

A candidate who has completed and passed all the papers of Semesters I and II and at least 8 of the 14 papers of Semesters III and IV taken together shall be eligible for admission to Semester V.

**OC-46.5.2**

The number of candidates to be admitted to the BFS programme shall ordinarily be not more than 40 per College/Institute.

**OC-46.6**

**PROGRAMME STRUCTURE** For matters provided under this Ordinance, the other general ordinances shall not be applicable.

**OC-46.6.1**

Number of papers

**OC-46.6.1.1**

Each semester from Semester I to V shall consist of seven papers.

**OC-46.6.1.2**

Semester VI shall comprise a Project to be carried out during compulsory internship in an organization. Each student shall carry out the project work under the joint guidance of a Project Guide from the College and a designated Project-In-charge at the Organization where he/she does his/her compulsory Internship.

**OC-46.6.2**

Total Marks assigned to each Paper and Semester

**OC-46.6.2.1**

Every semester (except Semester VI) shall carry a total of 700 marks.

**OC-46.6.2.2**

Each paper (except the Project paper) shall carry 100 marks.

**OC-46.6.2.3**

Semester VI shall carry 600 marks.

**OC-46.6.2.4**

The Project in Semester VI shall carry 600 marks.

**OC-46.6.3**

Total Number of Lectures per paper

**OC-46.6.3.1**

Duration of each lecture period shall be of 45 minutes.

**OC-46.6.3.2**

Each paper (except the project paper) shall be allotted five lectures per week.

**OC-46.6.3.3**

**(Effective from 1<sup>st</sup> October, 2009)** Deleted

- OC-46.6.3.4** **(Effective from 1<sup>st</sup> October, 2009)** A teacher shall be assigned not less than 3 and not more than 10 students for the project work. Project work guidance provided to 8 to 10 students shall be considered equivalent to a workload of 6 lectures per week; guidance provided to 4 to 7 students shall be considered equivalent to a workload of 4 lectures per week; while guidance provided to 3 students or less shall be considered equivalent to a workload of 2 lectures per week.
- OC-46.6.4** **Instructional Scheme:**
- OC-46.6.4.1** **Programme structure**  
The structure for all the six semesters shall be as specified in the Annexure to this Ordinance. The recommended papers and syllabi shall be reviewed preferably after every three years.
- OC-46.6.4.2** Programme Coordinator: One faculty member of the College shall be appointed by the Principal of the College as the Programme Coordinator.
- OC-46.6.4.3** Course Plan:
- OC-46.6.4.3.1** At the beginning of the semester, a course outline plan shall be submitted to the Programme Coordinator by every teacher for every paper.
- OC-46.6.4.3.2** The course plan shall include the distribution of topics, the in-semester evaluation components and weightage distribution. The plan shall also indicate the textbooks, other study material and resources to be used.
- OC-46.6.4.3.3** At the end of every semester, every teacher shall submit to the Programme Coordinator, the compliance report for the course plan, mentioning deviations if any, and the reasons for the deviations.
- OC-46.6.4.4** Feedback: Individual paper feedback, as well as overall course feedback shall be collected from every student at the end of every semester. The feedback shall have sections on course content, teacher competency, evaluation, availability of resources, etc. The feedback data shall be made available during Academic audit
- OC-46.6.4.5** Paper-wise file: For every paper in every semester, the Programme Coordinator shall maintain a file comprising the course plan, reading/teaching material used in class, assignments, question papers, answer papers, student feedback along with final evaluation and marks scored by the students in each paper. This file shall be made available to the Academic Audit Committee for scrutiny.
- OC-46.6.4.6** **Academic Audit:**
- OC-46.6.4.6.1** Academic Audit shall be conducted by an Academic Audit Committee at the end of every even semester after the conduct of the examination.

- OC-46.6.4.6.2** The Academic Audit Committee shall comprise members appointed by the Vice-Chancellor. The composition of the Committee shall be as follows:
- a) One member from the Department of Commerce, Goa University (Chairman)
  - b) One member from BoS in Commerce (UG),
  - c) One member from BoS in Economics,
  - d) One member from Industry/another University
  - e) One member from BoS in Financial Services
  - f) The Programme Coordinator from the College shall be the ex-officio Member-Secretary of the Committee.
- OC-46.6.4.6.3** The Committee upon audit shall prepare a report and recommend remedial measures wherever required. The report shall be submitted within a maximum of four weeks from the meeting of the Academic Audit Committee. One copy of the report shall be sent to the Board of Studies in Financial Services.
- OC-46.6.4.6.4** All the expenditure towards conduct of academic audit shall be borne by the concerned college.
- OC-46.6.4.6.5** The Academic Audit Committee shall also function as the Grievance Redressal Committee for the Programme.
- OC-46.7** **SCHEME OF EXAMINATION**
- OC-46.7.1** **Scheme of Evaluation**
- OC-46.7.1.1** There shall be continuous assessment throughout the semester for every paper with an End-Semester Examination at the end of the semester. The two components of evaluation shall be called the In-Semester Examination and the End-Semester Examination.
- OC-46.7.1.2** The weightage for the In-Semester Examination for every paper (except the Project paper) shall be 40% while that for End-Semester Examination shall be 60%.
- OC-46.7.1.3** The college shall conduct all examinations, both internal as well as external, on behalf of Goa University.
- OC-46.7.1.4** There shall be no revaluation for any of the papers at any Semester.
- OC-46.7.1.5** Personal Verification shall be permitted at Semesters I to V for the End-Semester Examination component of each paper. The procedure for Personal Verification shall be as per the Goa University ordinances relating to the B.A./B.Sc./B.com courses.
- OC-46.7.1.6** Project Paper at Semester VI:
- OC-46.7.1.6.1** In case of the project paper, the marks allotment shall be as follows:
- OC-46.7.1.6.1.1** Evaluation for 250 marks shall be carried out by the project guide from the College. The internal marks are to be awarded by the project guide based on the progress of the work related to the project (150 marks) and the project report (100 marks).



- OC-46.7.1.6.1.2** Evaluation for 250 marks shall be carried out by the designated Project-in-charge from the Organization where the candidate does his/her compulsory internship. These marks shall be awarded based on the performance of the candidate in the organization (150 marks) and the project report (100 marks).
- OC-46.7.1.6.1.3** There shall be a viva voce examination for the Project Paper at the end of Semester VI. The viva-voce examination shall be of 100 marks. The viva-voce shall be jointly conducted by the Project Guide and an External Examiner appointed as per Goa University Ordinance OB-4. The mode of evaluation of the viva voce shall be as follows: Evaluation for 50 marks shall be carried out by the Project Guide from the College and evaluation for the remaining 50 marks shall be carried out by the External Examiner.
- OC-46.7.1.7** In-Semester Examination:
- OC-46.7.1.7.1** No single component of in-semester evaluation shall carry more than 50% of the total marks allotted for internal evaluation.
- OC-46.7.1.7.2** In-semester evaluation of all papers except project paper shall consist of two intra-semester written tests and other evaluation components such as quizzes, assignments, presentations, group discussions as may be deemed fit and notified at the beginning of the semester.
- OC-46.7.1.7.3** All components of internal evaluation shall be conducted during the normal teaching periods.
- OC-46.7.1.7.4** A student shall answer all components of the In-Semester Examination.
- OC-46.7.1.8** End-Semester Examination:
- OC-46.7.1.8.1** The duration of end-semester examination shall be 2 hours.
- OC-46.7.1.8.2** End-semester examinations shall be conducted during the same period as prescribed by Goa University for the B.Sc., B.Com and B.A. courses.
- OC-46.8** **Passing & Award of Class**
- OC-46.8.1** **Passing Requirements:**
- OC-46.8.1.1** A candidate shall obtain a total of at least 40 out of 100 marks in the in-semester and end-semester components taken together in each paper to be declared as passed.
- OC-46.8.1.2** A candidate shall obtain a minimum of 20 out of 60 marks at the end-semester examination for each paper to be declared as passed.
- OC-46.8.1.3** A candidate who has failed in any paper in any semester, shall be allowed to appear only in the End-Semester component of those paper(s) in which he/she has failed in the following semester examination
- OC-46.8.1.4** A candidate who has not submitted the Project report in Semester VI by the stipulated date shall not be permitted to appear for the viva voce examination and shall not be considered to have passed in the said examination.

- OC-46.8.1.5** A candidate who has submitted the Project report in Semester VI by the stipulated date, but does not appear for the viva voce examination at the end of the Semester shall not be considered to have passed in the said examination. However, such candidates who do not appear for the viva voce examination shall be allowed to appear for the same in the following semester.
- OC-46.8.2** **Grace marks:** Grace marks shall be awarded as per Goa University Ordinance OA 5.16
- OC-46.9** **Award of class:**
- OC-46.9.1** Class shall be awarded as follows:
- 40% and above but less than 50% - Pass class
  - 50% and above but less than 60% - Second class
  - 60% and above but less than 70% - First class
  - 70% and above – Distinction
- OC-46.9.2** The class shall be declared on the basis of percentage of aggregate of marks obtained in all six semesters taken together.
- OC-46.9.3** **(Effective from 1<sup>st</sup> October, 2009)** To be eligible for award of class, a student shall complete the course in the minimum prescribed period and shall pass Semesters VI in the first attempt
- OC-46.9.4** There shall be no improvement of class for the BFS Programme.
- OC-46.10** **(Effective from 1<sup>st</sup> October, 2009) Mark sheet:**
- The mark sheet issued at the end of the Sixth semester shall show the aggregate marks obtained in each semester as well as the overall class obtained. Degree to be awarded by Goa University.

### **Annexure to BFS Ordinances**

#### Bachelor of Financial Services (BFS)

#### Programme Structure

#### **SEMESTER I**

1. Communication Skills
2. Quantitative Techniques – I
3. Essentials of Management - I
4. Essentials of Accounting – I
5. Business Economics
6. Theory & Practice of Banking
7. Fundamentals of Business Computer Applications

#### **SEMESTER III**

1. Direct Taxes
2. Cost Accounting
3. Indian Securities Market
4. Financial Services
5. Financial Management
6. Fundamentals of Insurance
7. Foreign Exchange Markets

#### **SEMESTER II**

1. Business Communication
2. Quantitative Techniques - II
3. Essentials of Management – II
4. Essentials of Accounting – II
5. Indian Financial System
6. Indian Business Environment
7. Environmental Studies

#### **SEMESTER IV**

1. Indirect Taxes
2. Management Accounting
3. Indian Economy
4. International Finance
5. Corporate Finance
6. Marketing of Financial Services
7. Business Law

**SEMESTER V**

1. Financial Auditing
2. Accounting for Financial Services
3. Financial Sector Legislation
4. Fundamentals of Strategic Management
5. Security Analysis and Portfolio Management
6. Stock Market Operations
7. Research Methodology

**SEMESTER VI**

Compulsory Internship and Project

**OC-46 Ordinance for the Bachelor of Business Studies (Financial Services) Programme {BBS (Financial Services)} (Under Section 24(1) of the Goa University Act, 1984). (Effective from 2010-11)**

**OC-46.1 GENERAL**

**OC-46.1.1 Course Objective:** To produce an employable workforce that will have sound knowledge of business fundamentals, of the working of institutions in the financial sector and services provided by these institutions.

**OC-46.2 Duration of the Course:**

**OC-46.2.1** The duration of the programme is three years, which is divided into six semesters with two semesters per year.

**OC-46.2.2** Semesters I, III and V shall be termed as Odd Semesters while Semesters II, IV and VI shall be termed as Even Semesters.

**OC-46.2.3** The maximum period for the completion of the course shall be 6 years (as per Ordinance OA-16).

**OC-46.3 Academic calendar**

The academic calendar of the programme will be the same as that prescribed by Goa University for the B.Sc., B.Com and B.A. programmes.

**OC-46.4 (Effective from 2010-11) Degree to be awarded**

Upon successful completion of the programme, the degree of Bachelor of Business Studies (Financial Services) [BBS(FS)] shall be conferred upon every candidate.

**OC-46.5 Eligibility for Admission and Intake Capacity:**

**OC-46.5.1 (Effective from 2010-11) Eligibility for Admission**

a) Eligibility for Admission to the First Semester of the BBS(FS) programme (First Year BBS(FS)).

Any candidate who has passed Standard XII in any stream of the Goa Board of Secondary and Higher Secondary Education or any other equivalent examination recognized by Goa University is eligible for admission to the First semester of the BBS(FS) programme.

b) Eligibility for Admission to the Third Semester of the BBS(FS) programme (Second Year BBS(FS)).

A candidate who has completed and passed at least 8 of the 14 papers of Semester I and II taken together shall be eligible for admission to Semester III.

c) Eligibility for Admission to the Fifth Semester of the BBS(FS) programme (Third Year BBS(FS)).

A candidate who has completed and passed all the papers of Semesters I and II and at least 8 of the 14 papers of Semesters III and IV taken together shall be eligible for admission to Semester V.

**OC-46.5.2 (Effective from 2010-11)** The number of candidates to be admitted to the BBS (FS) programme shall ordinarily be not more than 40 per College/Institute.

**OC-46.6 PROGRAMME STRUCTURE** For matters provided under this Ordinance, the other general ordinances shall not be applicable.

**OC-46.6.1** Number of papers

**OC-46.6.1.1** Each semester from Semester I to V shall consist of seven papers.

**OC-46.6.1.2** Semester VI shall comprise a Project to be carried out during compulsory internship in an organization. Each student shall carry out the project work under the joint guidance of a Project Guide from the College and a designated Project-In-charge at the Organization where he/she does his/her compulsory Internship.

**OC-46.6.2** Total Marks assigned to each Paper and Semester

**OC-46.6.2.1** Every semester (except Semester VI) shall carry a total of 700 marks.

**OC-46.6.2.2** Each paper (except the Project paper) shall carry 100 marks.

**OC-46.6.2.3** Semester VI shall carry 600 marks.

**OC-46.6.2.4** The Project in Semester VI shall carry 600 marks.

**OC-46.6.3** Total Number of Lectures per paper

**OC-46.6.3.1** Duration of each lecture period shall be of 45 minutes.

**OC-46.6.3.2** Each paper (except the project paper) shall be allotted five lectures per week.

**OC-46.6.3.3 (Effective from 1<sup>st</sup> October, 2009)** Deleted

**OC-46.6.3.4 (Effective from 1<sup>st</sup> October, 2009)** A teacher shall be assigned not less than 3 and not more than 10 students for the project work. Project work guidance provided to 8 to 10 students shall be considered equivalent to a workload of 6 lectures per week; guidance provided to 4 to 7 students shall be considered equivalent to a workload of 4 lectures per week; while guidance provided to 3 students or less shall be considered equivalent to a workload of 2 lectures per week.

**OC-46.6.4 Instructional Scheme:**

**OC-46.6.4.1 (Effective from 2010-11) Programme structure**

The structure for all the six semesters shall be as recommended by the Board of Studies in Business Studies and approved by the Academic Council. The recommended papers and syllabi shall be reviewed preferably after every three years.



- OC-46.6.4.2** Programme Coordinator: One faculty member of the College shall be appointed by the Principal of the College as the Programme Coordinator.
- OC-46.6.4.3** Course Plan:
- OC-46.6.4.3.1** At the beginning of the semester, a course outline plan shall be submitted to the Programme Coordinator by every teacher for every paper.
- OC-46.6.4.3.2** The course plan shall include the distribution of topics, the in-semester evaluation components and weightage distribution. The plan shall also indicate the textbooks, other study material and resources to be used.
- OC-46.6.4.3.3** At the end of every semester, every teacher shall submit to the Programme Coordinator, the compliance report for the course plan, mentioning deviations if any, and the reasons for the deviations.
- OC-46.6.4.4** Feedback: Individual paper feedback, as well as overall course feedback shall be collected from every student at the end of every semester. The feedback shall have sections on course content, teacher competency, evaluation, availability of resources, etc. The feedback data shall be made available during Academic audit
- OC-46.6.4.5** Paper-wise file: For every paper in every semester, the Programme Coordinator shall maintain a file comprising the course plan, reading/teaching material used in class, assignments, question papers, answer papers, student feedback along with final evaluation and marks scored by the students in each paper. This file shall be made available to the Academic Audit Committee for scrutiny.
- OC-46.6.4.6** **Academic Audit:**
- OC-46.6.4.6.1** Academic Audit shall be conducted by an Academic Audit Committee at the end of every even semester after the conduct of the examination.
- OC-46.6.4.6.2** The Academic Audit Committee shall comprise members appointed by the Vice-Chancellor. The composition of the Committee shall be as follows:
- a) One member from the Department of Commerce, Goa University (Chairman)
  - b) One member from BoS in Commerce (UG),
  - c) One member from BoS in Economics,
  - d) One member from Industry/another University
  - a) One member from BoS in Financial Services
  - f) The Programme Coordinator from the College shall be the ex-officio Member-Secretary of the Committee.
- OC-46.6.4.6.3** The Committee upon audit shall prepare a report and recommend remedial measures wherever required. The report shall be submitted within a maximum of four weeks from the meeting of the Academic Audit Committee. One copy of the report shall be sent to the Board of Studies in Financial Services.

- OC-46.6.4.6.4** All the expenditure towards conduct of academic audit shall be borne by the concerned college.
- OC-46.6.4.6.5** The Academic Audit Committee shall also function as the Grievance Redressal Committee for the Programme.
- OC-46.7** **SCHEME OF EXAMINATION**
- OC-46.7.1** **Scheme of Evaluation**
- OC-46.7.1.1** There shall be continuous assessment throughout the semester for every paper with an End-Semester Examination at the end of the semester. The two components of evaluation shall be called the In-Semester Examination and the End-Semester Examination.
- OC-46.7.1.2** The weightage for the In-Semester Examination for every paper (except the Project paper) shall be 40% while that for End-Semester Examination shall be 60%.
- OC-46.7.1.3** The college shall conduct all examinations, both internal as well as external, on behalf of Goa University.
- OC-46.7.1.4** There shall be no revaluation for any of the papers at any Semester.
- OC-46.7.1.5** Personal Verification shall be permitted at Semesters I to V for the End-Semester Examination component of each paper. The procedure for Personal Verification shall be as per the Goa University ordinances relating to the B.A./B.Sc./B.com courses.
- OC-46.7.1.6** Project Paper at Semester VI:
- OC-46.7.1.6.1** In case of the project paper, the marks allotment shall be as follows:
- OC-46.7.1.6.1.1** **(Effective from 2010-11)** Evaluation for 250 marks shall be carried out by the project guide from the College as per the guidelines in the project manual approved by the Academic Council.
- OC-46.7.1.6.1.2** Evaluation for 250 marks shall be carried out by the designated Project-in-charge from the Organization where the candidate does his/her compulsory internship. These marks shall be awarded based on the performance of the candidate in the organization (150 marks) and the project report (100 marks).
- OC-46.7.1.6.1.3** **(Effective from 2010-11)** Evaluation for 100 marks shall be on the basis of individual student presentation and open viva in form of a three-member Board of Examiners comprising the Programme Coordinator and two external examiners, as well as all the other students. The average of marks awarded by all three Board members would be the final marks obtained by the student. One external examiner shall be an academician from a University other than Goa University. The other external examiner shall be from industry and from outside Goa.
- OC-46.7.1.7** In-Semester Examination:
- OC-46.7.1.7.1** No single component of in-semester evaluation shall carry more than 50% of the total marks allotted for internal evaluation.



- OC-46.7.1.7.2** In-semester evaluation of all papers except project paper shall consist of two intra-semester written tests and other evaluation components such as quizzes, assignments, presentations, group discussions as may be deemed fit and notified at the beginning of the semester.
- OC-46.7.1.7.3** All components of internal evaluation shall be conducted during the normal teaching periods.
- OC-46.7.1.7.4** A student shall answer all components of the In-Semester Examination.
- OC-46.7.1.8** End-Semester Examination:
- OC-46.7.1.8.1** The duration of end-semester examination shall be 2 hours.
- OC-46.7.1.8.2** End-semester examinations shall be conducted during the same period as prescribed by Goa University for the B.Sc., B.Com and B.A. courses.
- OC-46.8** **Passing & Award of Class**
- OC-46.8.1** **Passing Requirements:**
- OC-46.8.1.1** A candidate shall obtain a total of at least 40 out of 100 marks in the in-semester and end-semester components taken together in each paper to be declared as passed.
- OC-46.8.1.2** A candidate shall obtain a minimum of 20 out of 60 marks at the end-semester examination for each paper to be declared as passed.
- OC-46.8.1.3** A candidate who has failed in any paper in any semester, shall be allowed to appear only in the End-Semester component of those paper(s) in which he/she has failed in the following semester examination
- OC-46.8.1.4** A candidate who has not submitted the Project report in Semester VI by the stipulated date shall not be permitted to appear for the viva voce examination and shall not be considered to have passed in the said examination.
- OC-46.8.1.5** A candidate who has submitted the Project report in Semester VI by the stipulated date, but does not appear for the viva voce examination at the end of the Semester shall not be considered to have passed in the said examination. However, such candidates who do not appear for the viva voce examination shall be allowed to appear for the same in the following semester.
- OC-46.8.2** **Grace marks:** Grace marks shall be awarded as per Goa University Ordinance OA 5.16
- OC-46.9** **Award of class:**
- OC-46.9.1** Class shall be awarded as follows:
- 40% and above but less than 50% - Pass class
  - 50% and above but less than 60% - Second class
  - 60% and above but less than 70% - First class
  - 70% and above – Distinction

**OC-46.9.2** The class shall be declared on the basis of percentage of aggregate of marks obtained in all six semesters taken together.

**OC-46.9.3** **(Effective from 1<sup>st</sup> October, 2009)** To be eligible for award of class, a student shall complete the course in the minimum prescribed period and shall pass Semesters VI in the first attempt

**OC-46.9.4** **(Effective from 2010-11)** There shall be no improvement of class for the BBS(FS) Programme.

**OC-46.10** **(Effective from 1<sup>st</sup> October, 2009) Mark sheet:**

The mark sheet issued at the end of the Sixth semester shall show the aggregate marks obtained in each semester as well as the overall class obtained. Degree to be awarded by Goa University.

**OC-47** **(EFFECTIVE FROM 2007-2008) Ordinance for Bachelor of Computer Applications (BCA) (To be made effective from 2007-08) (Under Section 24(1) of Goa University Act 1984).**

**OC-47.1** **GENERAL**

**OC-47.1.1** **Programme objective:**

To produce employable IT workforce that will have sound knowledge of IT and business fundamentals that can be applied to develop and customize solutions for Small and Medium Enterprises (SMEs).

**OC-47.1.2** **Duration of the Programme & Semesters:**

(i) Duration of the programme shall be of three academic years which is divided into Six Semesters with two semesters per academic year.

(ii) Semester I, III, and V shall be termed as Odd semesters while Semester II, IV, and VI shall be termed as Even Semesters.

(iii) Every semester shall be of approximate five months duration inclusive of breaks and vacations.

(iv) Academic Terms for Odd semesters and Even semesters shall be as notified by the university every year and shall follow the term that is applicable to BA/BSc/BCom programmes.

(v) All the instructions as well as examinations shall be conducted within the above mentioned period of each semester.

(vi) An academic calendar showing the commencement of course, instructions, mid semester examinations, end-semester examinations, shall be displayed before the beginning of each semester.

**OC-47.1.3** **Degree to be awarded:**

Upon successful completion of the programme, every candidate shall be conferred upon the degree of Bachelor of Computer Applications (BCA).

**OC-47.1.4 Eligibility for admission and intake capacity:**

**OC-47.1.4.1 Eligibility for Admission to Semester I and Semester II:**

(i) Any candidate who has passed the XII standard examination in any stream from Goa Board of Secondary & Higher Secondary Education or equivalent is eligible for admission to the first semester.

(ii) A candidate shall be selected based on the selection test as prescribed by Goa University from time to time. The selection test shall test the general aptitude, logical reasoning and analytical abilities and basic arithmetical skills of the candidate.

(iii) A candidate admitted for Semester-I shall be deemed eligible for admission to Semester-II.

**OC-47.1.4.2 Eligibility for admission to Semester-III and Semester-IV**

(i) A candidate securing minimum passing grade of DD or above in each of the courses of Semester-I and Semester-II is eligible for admission to Semester-III.

(ii) In addition to above, those candidates who secure FF or II grade in maximum four courses (theory as well as laboratory) out of all the courses that were offered in Semester-I and Semester-II shall be eligible for admission to Semester-III and Semester-IV.

(iii) A candidate admitted for Semester-III shall be deemed eligible for admission to Semester-IV.

**OC-47.1.4.3 Eligibility for admission to Semester-V and Semester-VI**

(i) A candidate securing minimum passing grade of DD or above in each of the courses of Semester-III and Semester-IV is eligible for admission to Semester-V.

(ii) In addition to above, those candidates who secure FF or II grade in maximum four courses (theory as well as laboratory) out of all the courses that were offered in Semester-III and Semester-IV and have obtained minimum DD grade in all the courses of Semester I and II shall be eligible for admission to Semester-V and Semester-VI.

(iii) A candidate admitted for Semester-V shall be deemed eligible for admission to Semester-VI.

(iv) Number of candidates to be admitted to BCA programme shall not be more than 40 per division per year.

**OC-47.2 COURSE STRUCTURE**

**OC-47.2.1            Number of courses/Papers:**

(i) The instructional scheme for the BCA is based on a system of integrated units called courses. Each course shall mean one paper.

(ii) Each Semester shall have four Theory courses and two laboratory courses except Semester VI which shall have four theory courses and a Project work.

(iii) There shall be one Elective course in each of the Semester V and Semester VI

(iv) The Elective courses to be offered shall be as per the list approved by BoS in Computer Science(UG)

(v) Courses that shall be offered as electives shall be only from the Commerce and Management disciplines.

(vi) Semester I and II shall include a non-credit additional course on Environmental Studies.

(vii) The syllabus for Environmental Studies shall be as prescribed by concerned Board of Studies and as applied to BA/ BSc /BCom programmes.

(viii) The actual programme structure along with nomenclature of courses and topics to be covered therein shall be as prescribed by BoS from time to time.

**OC-47.2.2            Total marks/credits assigned to each course/Paper:**

(i) Every Semester shall carry a total of 30 credits points.

(ii) Each course (Theory and Project work) having a weightage of 100 marks shall be allotted 6 credit points while each course (Laboratory) having 50 marks shall be allotted 3 credit points.

(iii) Courses on Environmental Studies shall not carry any credit but will carry 50 marks per Semester.

**OC-47.2.3            Total number of contact hours/lectures (with duration of lecture) per course/paper:**

(i) Duration of each lecture period shall be of 45 minutes.

(ii) Every Theory course shall be allotted four lecture periods and one tutorial period per week.

(iii) Every theory course shall be taught in a total of 45-50 lecture periods while for laboratory course a minimum of 15 lecture sessions per class and 15 lab sessions per batch shall be conducted.

(iv) Every laboratory course shall have one lecture cum demonstration period for the entire class and one practical session of three periods per batch per week.

(v) Batch size for laboratory course: each batch shall be of 20 students. A second batch can be formed only if more than 20 students have registered for the Semester.

(vi) Project Work batch size: Each Instructor shall guide not more than 10 students.

(vii) Project work guidance provided to more than five students shall be considered equivalent to a workload of four lectures per week while guidance provided to five or less number of students shall be considered equivalent to a workload of two lectures per week.

(viii) Maximum 5 students per group are entitled to undertake one project work.

(ix) In case of Environmental Studies course, two lectures shall be allotted per week per semester.

#### **OC-47.2.4**

##### **Instructional Scheme**

**(i) Instructor-in-Charge:** Each course may have one or more instructors teaching the course. One of them is to be appointed as Instructor-in-charge.

**(ii) Course Coordinator:** In case of courses taught by Visiting Faculty, one faculty member from the College shall be associated with the course as course coordinator.

**(iii) Course plan:** Every Instructor has to submit a course plan at the beginning of the course. The course plan should include the topic distribution, evaluation components weightage distribution.

**(iv) Feedback:** Individual course feedback as well as overall feedback has to be collected from every student at the end of every Semester.

**(v) Course File :** For each course taught, a file shall be maintained by the Instructor-in-charge/course-coordinator comprising of course plan, reading/teaching material used in class, assignments, question papers, answer papers, student feedback, student attendance record along with final evaluation and grading.

#### **OC-47.2.5**

##### **Academic Audit:**

(i) The task of the academic audit is to ascertain that all in-semester and end-semester evaluation is done in transparent and fair manner.

(ii) Academic Audit Committee: The committee shall comprise of members appointed by the Vice-Chancellor based on the recommendations of Board of Studies in Computer Science (UG). The constitution of the committee shall be

as follows: 1 member from BoS in Computer Science (UG) who shall act as Chairperson, 1 faculty member from Dept of Management Studies or Commerce, Goa University, 1 member from Industry/teacher from another college offering BCA programme, and 1 teacher from the concerned college undergoing the academic audit who also shall act as Member-secretary of the committee.

(iii) The Academic audit shall be conducted by afore mentioned committee at the end of every academic year after the declaration of results of even semesters. It shall examine the course files and other academic records of all the semesters of that year.

(iv) Academic Audit Report: The committee shall prepare the report after conducting an audit and the same shall be placed before the Board of Studies within 4 weeks. A copy of the report shall also be given to the concerned college.

(v) The Board of Studies shall discuss all the audit reports and recommend improvements in the conduct of the programme to colleges.

### **OC-47.3 SCHEME OF EXAMINATION**

#### **OC-47.3.1 General**

(i) There shall be both an In-semester element and an End-semester element in the evaluation of the performance of candidates for every course, each carrying equal weightage of 50% .

(ii) In-semester evaluation is to be carried out during the course of instructions within the normal lecture periods preferably during the tutorial periods.

(iii) Marks secured and wherever applicable, answer scripts, of all the internal assessments of In-Semester evaluation shall be communicated to the candidates within seven days of conduct of such examinations.

(iv) End-semester evaluation is to be conducted at the end of every semester

#### **OC-47.3.2 Eligibility for examinations:**

(i) End-semester examination: A candidate is eligible to appear for the end-semester theory, laboratory and Project examination provided he/she satisfies the minimum attendance rules framed by Goa University.

(ii) In addition to above, a candidate has to appear for the class test component for Theory course and Lab test component for Laboratory course of In-Semester evaluation.

#### **OC-47.3.3 Evaluation of Theory courses:**

##### **OC-47.3.3.1 In-semester Evaluation**

(i) Internal evaluation shall be conducted in continuous manner in the form of regular assignments, quizzes, submissions and tests.

(ii) Out of maximum 50 marks, at least 30 marks shall be evaluated by conducting one or more class test(s) during the normal lecture periods of the semester.

(iii) A faculty member may conduct extra class tests to allow those candidates who were unable to appear for the regular class tests in genuine cases.

#### **OC-47.3.3.2 End-semester Evaluation**

(i) Evaluation consists of an examination for 50 marks of 2 hour duration.

(ii) External Examiners shall be appointed for the Theory examinations at Semester – V and Semester – VI in accordance with the University Ordinance OB – 4 from the panel of examiners approved by the Academic Council. However, assessment with respect to these two semesters shall be done internally. Paper setting and assessment of papers/courses at Semester – I to Semester – IV shall be done internally by the teacher teaching the paper/course.

(iii) Assessment shall be done at the college by the faculty who taught the concerned course.

(iv) The pattern of question paper(s) to be set for the End-Sem–and the scheme of marking shall be decided by the Board of Studies.

#### **OC-47.3.4 Evaluation of laboratory courses:**

##### **OC-47.3.4.1 In-semester Evaluation**

(i) Internal evaluation shall be conducted in continuous manner in the form of regular assignments, submissions and tests.

(ii) Out of maximum 25 marks, at least 15 marks shall be evaluated by conducting one or more lab test(s) during the semester.

(iii) A faculty member may conduct extra class tests to allow those candidates who were unable to appear for the regular class tests in genuine cases.

(iv) A record of work done in the form of journal has to be maintained by every student.

##### **OC-47.3.4.2 End-semester Evaluation**

(i) The evaluation consists of an examination of 25 marks of 2 hour 15 minutes duration conducted by the college.

(ii) An online examination and a viva-voce shall be jointly conducted by an internal and external examiner.

(iii) The course instructor shall act as the internal examiner

(iv) External Examiners shall be appointed for the Laboratory Course examination at Semester – V and Semester – VI in accordance with the University Ordinance OB – 4 from the panel of examiners approved by the Academic Council. However, assessment and grading shall be done jointly by the external examiner and internal examiner for these two semesters. Paper setting and assessment of Laboratory courses at Semester – I to Semester – IV shall be done internally by the teacher teaching the paper/course.

**OC-47.3.5 Evaluation of Project work**

**OC-47.3.5.1** In-semester Evaluation for 50 marks shall be done by the project guide based on the record of work done and quality of work done.

**OC-47.3.5.2** End-semester Evaluation and Re-Examination

(i) The evaluation consists of an oral viva-voce and demonstration for 30 marks jointly conducted by project guide and external examiner.

(ii) External examiner shall allot maximum 20 marks for the Project Report

(iii) External Examiners shall be appointed for the Project work assessment at Semester – VI from the panel of examiners approved by the Academic Council in accordance with the University Ordinance OB – 4. Assessment and grading shall be done jointly by the External Examiner and the Internal Examiner/Guide.

**OC-47.3.6 Evaluation of Environmental Studies for Semester I and Semester II**

(i) In-Semester evaluation for 25 marks and End-Semester evaluation for 25 marks shall be made.

(ii) In-semester evaluation shall be done by the Instructor by conducting minimum 1 class test of minimum 15 marks and one or more assignments, quizzes, presentations during the semester.

(iii) End-Semester examination of one hour duration shall be conducted. Paper-setting and assessment shall be done by the College Instructor.

(iv) A candidate has to secure a minimum of 40% marks of the total marks for securing pass.

(v) A grade will not be allotted for this course as well as they will not be included for the purpose of calculating SPI/CPI.

(vi) Degree will not be allotted unless a candidate passes these courses.

(vii) Candidate who has not secured pass percentage shall re-appear for the end-sem examination until pass percentage is secured.

**OC-47.4 SCHEME OF GRADING**

**OC-47.4.1 Grading Scheme**



(i) Relative grading scheme shall be followed to compute grade for each candidate.

(ii) The final grades for the course would be awarded by the Instructor-in-charge/course co-coordinator taking into account the collective performance in the In-Semester and End-Semester.

For each course taken by the student, a letter grade is assigned based on the performance in all assessments. These grades are defined as:

AA, AB, BB, BC, CC, CD, DD, II and FF

(iii) Each grade not only indicates a qualitative assessment of the student's performance but also carries an equivalent number called the grade point.

The grade points corresponding to different letter grades are defined below:

Letter Grade	Grade point	Letter Grade	Grade point
AA	10	CC	6
AB	9	CD	5
BB	8	DD	4
BC	7	II and FF	0

(iv) A candidate passes the courses if he/she gets any grade in the range between AA and DD.

(v) The letter grade II is given to a candidate on account of inability of a candidate to appear for the end-semester examination due to valid reason. Such candidate has to apply to the Principal of the concerned college within seven days from the end of the Examination communicating the reason for absence supported by documentary evidence. The Principal shall take appropriate decision based on the documentary evidence provided by the candidate.

(vi) If a candidate is awarded II grade during the end-semester examination, he/she has to reappear for the end-semester component only when that course is being offered next.

(vii) A candidate is awarded FF grade on account of overall poor performance or failure to appear for the end-semester examination without justification.

(viii) If a candidate is awarded FF grade during the end-semester examination, he/she has to reappear for the In-semester as well as end-semester components when that course is being offered next.

(ix) A candidate getting a letter grade of II at the End-Sem examination for a course and subsequently re-appearing for End-Sem examination, shall be allotted a suitable grade from AA to DD or FF as per the latest grading scheme defined by the Course Instructor for that course.

(x) A candidate getting a letter grade of FF at the End-Sem examination and subsequently re-appearing for End-Sem examination shall be allotted a suitable grade from either DD or FF. If the letter grade corresponding to the range in which his/her total marks fall at the latest End-semester examination

is DD or above then the candidate is allotted letter grade DD. Otherwise, letter grade FF shall be awarded to the candidate.

#### **OC-47.4.2 Performance Indices**

(i) **Semester Performance Index (SPI)**: The performance of a student in a semester is indicated by a number called SPI. The SPI is the weighted average of the grade points obtained in all the courses during the semester. SPI to be calculated as  $SPI = \frac{\sum \text{Grade point} \times \text{course credit}}{\sum \text{credits of each paper in semester}}$  SPI has to be rounded to two decimal digits

(ii) **Cumulative Performance Index (CPI)** :The overall performance of a student for the entire programme is obtained by calculating a number called CPI. The CPI is the weighted average of the grade points obtained in all the courses for the programme. The CPI is also calculated to two decimal places.

#### **OC-47.4.3 Award of class**

(i) Each semester grade report for the student shall carry his/her SPI. The final semester mark-sheet will indicate the CPI. The final class for the BCA degree would be awarded as per the following scheme:

Distinction: CPI equal to or greater than 8.5

First class: CPI equal to or greater than 6.5 but less than 8.5

Second Class: CPI equal to or greater than 5.0 but less than 6.5

Pass Class: CPI equal to or greater than 4.0 but less than 5.0

(ii) Due to the relative nature of grading, there is no provision for gracing in the individual course. However, entitlement marks awarded by Goa University for candidates due to NSS, NCC, Sports or cultural activities shall be added to the total before calculating CPI and Class.

#### **OC-47.4.4 Declaration of results:**

(i) Every Instructor shall display the grades obtained by the candidates within 10 days of the last examination held by the College for that Semester.

(ii) College running the BCA program shall send the consolidated result-sheets of all the students at Semester – I to Semester -VI examinations which were conducted by them, within thirty days of the last examination held by the college for that semester, to the Controller of Examinations, Goa University.

#### **OC-47.4.4.1**

**Revaluation:** There shall be no revaluation of answer books of the candidates at the End-sem examination. Personal verification of marks shall be granted to the candidates in the presence of Principal/Vice-Principal and the concerned examiner, provided he had applied for the same along with the payment of prescribed fees within one week of the declaration of results. The following shall be the procedure for the verification of marks:

(i) On a notified day and time, which should be not later than 10 days after the receipt of application from the candidate, the candidate shall be shown the

answer book in the chamber of the Principal/Vice-Principal in the presence of the Examiner concerned.

(ii) If the Candidate is not satisfied with the results on personal verification of answer book, he may apply to the Principal for looking into the grievances.

**OC-47.4.5**

The candidate can make an appeal to the Principal of College in case of any grievances with respect to evaluation within seven days of notification of final grades of the concerned course by the course instructor/coordinator. The Principal in consultation with the BCA programme coordinator/HoD shall decide about the matter. The records pertaining to the appeal as well as the decision taken thereof, shall be placed before the Academic Audit committee during the academic audit.

**OC-47.4.6**

**Attempts and Improvement of class**

(i) Attempts: A student shall be considered to have passed a course at first attempt, provided he/she passes with a letter grade of DD or higher, at the regular examination.

(ii) In addition to the above, a candidate securing II grade and later passing the course at the next appearance shall be considered to have passed the course at first attempt.

(iii) All other cases would be treated as second attempts.

(iv) A candidate is allowed to repeat an entire year (Even and Odd Semester) in order to improve his/her performance. In such a situation the better of the two performances shall be considered. This facility shall be permitted only once in the BCA programme and the Statement of marks shall bear the sentence "Under Improvement". The candidate shall be required to surrender the original gradesheet and other relevant documents at the time of receiving the fresh Gradesheet in the event of improvement of performance for each concerned semester. The better of the two performances for each semester shall be considered.

## Sample grading for courses and computing SPI and CPI

### A. Relative Grading steps

1. Each candidate has to be allotted a grade based on his/her relative performance in the In-Sem and End-Sem examinations combined together.
2. The marks scored in various components of evaluation has to be totalled and marks out of total marks allotted to the course has to be computed. While arriving at the total marks, the various In-sem evaluation component may be weighted.
3. Decide the grade that is to be allotted to the range of marks. A separate workshop was conducted on various techniques that can be used to arrive at the grades. Please refer to the material provided as part of this workshop. Various statistical parameters such as mean, mode, standard deviation etc can be used in arriving at the grades.

Example:

A candidate with roll number 0712 has scored the following marks in In-sem and End-sem for a theory course BCA11( Programming) for Semester-I.

Roll Number	In-Sem evaluation				In sem total	End-sem	Total	Grade
	Quiz1	Quiz2	Class test 1	Class test 2				
	10	10	15	15	50	50	100	
0712	7	5	9	8	29	30	59	BC

Similarly marks of all the other candidates are to be computed.

Suppose the highest marks scored in this course is 80, lowest is 20 and average marks scored is 50.

The Instructor arrives at the following Grading scheme for this course:

Grade	marks
AA	Above 75
AB	Between 75 and 71
BB	Between 70 and 64
BC	Between 63 and 55
CC	Between 54 and 48
CD	Between 47 and 41
DD	Between 40 and 35
FF	Less than 30

Accordingly grade for Roll number 0712 is BC

### B. Calculating SPI and CPI

Once grades for all the courses of the semester are available, SPI will be calculated as follows. Each Grade has an associated grade point starting from 10 for AA to 00 for II/FF. The course credit associated with each course are also used.

Sample: Roll number 0712 has secured following grades in all the course of Semester-I

Courses	Grade secured	Corresponding Grade point	Course Credit	Grade point X course credit

BCA11	BC	7	6	42
BCA12	AA	10	6	60
BCA13	BB	8	6	48
BCA14	AB	9	6	54
BCA15	BB	8	3	24
BCA16	AA	10	3	30
		Total	30	258

$$\text{SPI} = 258 / 30 = 8.6$$

Similarly CPI can be computed by considering all the courses.

**Appendix 1**  
**Programme Structure for Bachelor of Computer Applications (wef 2007-08)**

SEMESTER I							
Course Code	Course Name	Periods		Marks		Total	Course credit
		T	P	In sem	End sem		
BCA11	Problem Solving and Programming in Java	5		50	50	100	6
BCA12	Computer Organization and Operating System	5		50	50	100	6
BCA13	Basic Accounting	5		50	50	100	6
BCA14	Mathematics	5		50	50	100	6
BCA15	Java Programming Lab	1	3	25	25	50	3
BCA16	OS Lab	1	3	25	25	50	3
BCA17	Environmental Studies	2		25	25	50	--
SEMESTER II							
Course Code	Course Name	Periods		Marks		Total	Credits
		T	P	In sem	End sem		
BCA21	Data Structures using Java	5		50	50	100	6
BCA22	Communication Skills-I	5		50	50	100	6
BCA23	Advanced Accounting	5		50	50	100	6
BCA24	Mathematical Foundations of Computer Science	5		50	50	100	6
BCA25	Data Structures Lab	1	3	25	25	50	3
BCA26	IT Tools Lab	1	3	25	25	50	3
BCA27	Environmental Studies	2		25	25	50	--
SEMESTER III							
Course Code	Course Name	Periods		Marks		Total	Credits
		T	P	Insem	Endsem		
BCA31	DBMS	5		50	50	100	6
BCA32	Computer Networks	5		50	50	100	6
BCA33	Communication Skills-II	5		50	50	100	6
BCA34	Probability and Stats	5		50	50	100	6
BCA35	RDBMS Lab	1	3	25	25	50	3
BCA36	VB .Net Lab	1	3	25	25	50	3
SEMESTER IV							
Course Code	Course Name	Periods		Marks		Total	Credits
		T	P	In sem	End sem		
BCA41	Software Engineering-I	5		50	50	100	6
BCA42	Intro to Management Functions	5		50	50	100	6
BCA43	Managerial Economics	5		50	50	100	6
BCA44	Cost Accounting	5		50	50	100	6
BCA45	UML Lab	1	3	25	25	50	3
BCA46	Data Analysis and Accounting Lab	1	3	25	25	50	3

SEMESTER V							
Course Code	Course Name	Periods		Marks		Total	Credits
		T	P	In sem	End sem		
BCA51	Software Engineering-II	5		50	50	100	6
BCA52	Web Technology	5		50	50	100	6
BCA53	IT Project Management	5		50	50	100	6
BCA54	Elective-I	5		50	50	100	6
BCA55	CASE Tools lab	1	3	25	25	50	3
BCA56	Web Technology lab	1	3	25	25	50	3
SEMESTER VI							
Course Code	Course Name	Periods		Marks		Total	Credits
		T	P	Insem	Endsem		
BCA61	e-Commerce Applications	5		50	50	100	6
BCA62	Information systems audit	5		50	50	100	6
BCA63	ERP Systems	5		50	50	100	6
BCA64	Elective-II	5		50	50	100	6
BCA65	Project work		4	50	50	100	6

T- Theory periods P-Practical periods

**Ordinance OC-47A relating to Bachelor of Computer Applications (BCA) Revised Course Structure.** (Effective from the academic year 2011-12)

**OC-47A.1 GENERAL**

**OC-47A.1.1 Programme objective:**

To produce employable IT workforce, that will have sound knowledge of IT and business fundamentals that can be applied to develop and customize solutions for Small and Medium Enterprises (SMEs).

**OC-47A.1.2 Duration of the Programme & Semesters:**

- i. Duration of the programme shall be of three academic years which is divided into Six Semesters with two semesters in each academic year.
- ii. Semester I, III, and V shall be termed as Odd semesters while Semester II, IV, and VI shall be termed as Even Semesters.
- iii. Academic Terms for Odd semesters and Even semesters shall be as notified by the University every year and shall follow the term that is applicable to B.A/B.Sc/B.Com programmes.
- iv. All the instructions as well as examinations shall be conducted within the above mentioned period of each semester.
- v. An academic calendar showing the commencement of B.C.A course, instructions, In-semester class tests and End-semester examinations shall be displayed before the beginning of each semester.

**OC-47A.1.3 Degree to be awarded:**

Upon successful completion of the programme, every candidate shall be conferred upon the degree of Bachelor of Computer Applications (BCA).

**OC-47A.1.4 Eligibility for admission and intake capacity:**

**OC-47A.1.4.1 Eligibility for Admission to Semester-I and Semester-II:**

- i. Any candidate who has passed the XII standard examination in any stream from Goa Board of Secondary & Higher Secondary Education or equivalent is eligible for admission to the first semester.
- ii. A candidate shall be selected based on a selection test as prescribed by Goa University from time to time. The selection test shall test the general aptitude, logical reasoning and analytical abilities and basic arithmetical skills of the candidate.
- iii. A candidate admitted for Semester-I shall be deemed eligible for admission to Semester-II.

**OC-47A.1.4.2 Eligibility for admission to Semester-III and Semester-IV:**

- i. A candidate securing minimum passing grade of D or above in each of the courses of Semester-I and Semester-II is eligible for admission to Semester-III.
- ii. In addition to above, those candidates who secure F grade after the Supplementary examination in maximum four courses (theory as well as



laboratory) out of all the courses that were offered in Semester-I and Semester-II shall be eligible for admission to Semester-III and Semester-IV.

- iii. A candidate admitted for Semester-III shall be deemed eligible for admission to Semester-IV.

#### **OC-47A.1.4.3 Eligibility for admission to Semester-V and Semester-VI:**

- i. A candidate securing minimum passing grade of D or above in each of the courses of Semester-I to Semester-IV is eligible for admission to Semester-V.
- ii. A candidate admitted for Semester-V shall be deemed eligible for admission to Semester-VI.

#### **OC-47A.1.4.4 Intake Capacity:**

Number of candidates to be admitted to BCA programme shall not be more than 40 per division per year.

### **OC-47A.2 COURSE STRUCTURE**

#### **OC-47A.2.1 Number of Courses/Papers:**

- i. The instructional scheme for the BCA is based on a system of integrated units called courses. Each course shall mean one paper.
- ii. Each Semester, except Semester V and VI, shall have seven courses of which five shall be Theory courses and two shall be Laboratory courses. Semester V and VI each shall have four theory courses, one Laboratory course and one Project Work.
- iii. Out of the four theory courses, there shall be one Computer Science Elective course and one Non-Computer Science Elective course in each of the Semester V and Semester VI.
- iv. The Elective courses to be offered shall be as per the list approved by Board of Studies in Computer Science (UG) from time to time.
- v. Courses that shall be offered as Non-Computer Science electives shall be from disciplines other than Computer Science.
- vi. Semester I and II shall include a two-credit course on Environmental Studies (EVS).
- vii. The syllabus for Environmental Studies shall be as prescribed by concerned Board of Studies and as applied to B.A/B.Sc./B.Com. programmes.
- viii. The actual programme structure along with nomenclature of courses and topics to be covered therein shall be as prescribed by the Board of Studies from time to time.

**OC-47A.2.2 Total marks/credits assigned to each course/Paper:**

- i. Semester I and II shall carry a total of 32 credit points, Semester III and IV shall have 35 credits, Semester V shall have 25 credits and Semester VI shall carry 30 credits.
- ii. Each course having 5 credit points shall be evaluated out of 100 marks.
- iii. Courses on Environmental Studies having 2 credit points shall be evaluated out of 50 marks per Semester.

**OC-47A.2.3 Total number of contact hours/lectures (with duration of lecture) per course/paper:**

- i. Duration of each lecture period shall be of 45 minutes duration.
- ii. Every Theory course shall be allotted five lecture periods per week.
- iii. Every theory course shall be taught in a total of 60–65 lecture periods while for laboratory course a minimum of 15 lecture sessions per class and 15 laboratory sessions per batch shall be conducted.
- iv. Every laboratory course shall have one lecture cum demonstration period for the entire class and one practical session of four periods per batch per week.
- v. Batch size for laboratory course: Each batch shall be of not more than 20 students. A second batch can be formed only if more than 20 students have registered for the Semester.
- vi. Project Work batch size: Maximum 5 students per group are entitled to undertake one project work.
- vii. Each Instructor shall guide not more than 10 students.
- viii. Project work guidance provided to more than five students shall be considered equivalent to a workload of four lectures per week while guidance provided to five or less number of students shall be considered equivalent to a workload of two lectures per week.
- ix. In case of Environmental Studies course, two lectures shall be allotted per week per semester.

**OC-47A.2.4 Instructional Scheme:**

- i. **Instructor-in-Charge:** Each course may have one or more instructors teaching the course. One of them shall be appointed as Instructor-in-charge.
- ii. **Course Coordinator:** In case of courses taught by Visiting Faculty, one faculty member from the College shall be associated with the course as course coordinator.
- iii. **Course plan:** Every Instructor has to submit a course plan at the beginning of the course. The format for the course plan shall be as prescribed by the Board of Studies from time to time.
- iv. **Feedback:** Individual course feedback is to be taken after the first internal class test as well as overall feedback has to be collected from every student at the end of every Semester to improve the overall quality of the course.
- v. **Course File:** For each course taught, a file shall be maintained by the Instructor-in-charge or the course-coordinator comprising of course plan, reading/teaching material used in class, assignments, question papers, answer papers, student feedback, student attendance record along with final evaluation and grading.
- vi. LMS (Moodle) could also be used for (iv) and (v) above.

### **OC-47A.2.5 Academic Audit:**

- i. The task of the academic audit is to ascertain that all In-semester and End-semester evaluation is done in transparent and fair manner.
- ii. **Academic Audit Committee (AAC):** The constitution of the committee shall be as follows:
  - a) Chairperson: The chairperson shall be appointed by the Vice-Chancellor from the list approved by the Board of Studies -Computer Science (U.G).
  - b) Subject expert: One subject expert each in Commerce/Management and Computer Science will be selected by the Chairperson from the list approved by the Board of Studies – Computer Science (U.G).
  - c) Member-Secretary: 1 teacher from the concerned college undergoing the academic audit shall act as Member-Secretary of the committee. Member-Secretary will be appointed by the Principal of the respective college.
- iii. The Academic audit will be a continuous process which shall be conducted by afore mentioned committee during the Semesters with the help of LMS for uploading In-semester question papers /assignments /quizzes and obtaining feedback after In semester and End semester Examinations. The Committee will visit the college normally once during the academic year before the declaration of results of even semesters. It shall examine the course files and other academic records of all the semesters of that year.
- iv. Academic Audit Report: The committee shall prepare the report at the end of each academic year based on the inputs gathered during the semester and the visit to the college. The report shall be sent to the Board of Studies - Computer Science (U.G) chairperson before the commencement of the new academic year in the format approved by the Board of Studies Computer Science -U.G. A copy of the report shall also be given to the concerned college Principal by the chairperson of the Audit Committee.
- v. The Board of Studies shall discuss all the audit reports and recommend improvements in the conduct of the programme to colleges.

### **OC-47A.3 SCHEME OF EXAMINATION**

#### **OC-47A.3.1 General**

- i. There shall be both an In-semester element and an End-semester element in the evaluation of the performance of candidates for every course, each carrying equal weightage of 50%.
- ii. In-semester evaluation is to be carried out during the course of instructions within the normal lecture periods.
- iii. Marks secured and wherever applicable the answer scripts, of all the internal assessments of In-Semester evaluation shall be shown to the candidates within 15 days of conduct of the assessments.
- iv. End-semester evaluation is to be conducted at the end of every semester.

- v. Supplementary Examinations for F.Y(Semester I, II), S.Y(Semester III, IV) of B.C.A is to be conducted once in a year before the commencement of the fresh academic year.
- vi. Examinations for candidates who fail to obtain the minimum D grade in the T.Y(Semester V and VI) of B.C.A shall be conducted as per the schedule prescribed by Goa university from time to time for the B.A / B.Sc / B.Com programmes.
- vii. Examinations for candidates who fail to appear for the T.Y(Semester V and VI) End-semester examination of B.C.A shall be conducted as per the rules and schedule prescribed by Goa university from time to time for the B.A / B.Sc / B.Com programmes.

### **OC-47A.3.2 Eligibility for examinations**

#### **OC-47A.3.2.1 End-semester examination**

- i. A candidate shall be eligible to appear for the End-semester examination of a theory or laboratory or Project course provided he/she satisfies the minimum attendance rules framed by Goa University.
- ii. In addition to above, a candidate should have answered the prescribed In-semester evaluation components (class tests, assignments, quizzes, etc.) of the respective course.

#### **OC-47A.3.2.2 Supplementary examination**

The following candidates shall be eligible to appear for supplementary examination:

- i. A candidate who did not appear in the End-semester examination of some or all the papers of the odd/even/both semesters on medical grounds or for representing the college/University/State/Nation in cultural or sports or NCC/NSS activities.
- ii. A candidate who did not appear in the End-semester examination of some or all the papers of the odd/even/both semesters only under very special circumstances, provided that the Principal is satisfied.
- iii. A candidate who has failed to obtain the minimum grade of D required for passing the course.

### **OC-47A.3.3 Evaluation of Theory courses**

#### **OC-47A.3.3.1 In-semester Evaluation**

- i. Internal evaluation shall be conducted in continuous manner in the form of regular assignments/quizzes and class tests.
- ii. Out of maximum 50 marks, at least 30 marks shall be evaluated by conducting two class tests. If two or more colleges desire to have the same question paper in any of the subjects for these class tests, a common paper may be set by the teachers from the concerned colleges. Assessment shall be done at the college by the faculty who taught the concerned course.
- iii. A faculty member may conduct extra class tests to allow those candidates who were unable to appear for the regular class tests in genuine cases.

#### **OC-47A.3.3.2 End-semester Evaluation**

- i. Evaluation consists of an examination for 50 marks of 2 hour duration.
- ii. The question paper setting, conduct of examination and assessment for Semester I to Semester IV shall be done by the teachers of the respective colleges. If two or more colleges so desire they may have a common question paper.
- iii. The question paper setting and conduct of examination for Semester V and Semester VI shall be done by the University. Assessment of End-semester examination for Semester V and Semester VI shall be done centrally at the University
- iv. The pattern of question paper(s) to be set for the End-semester examination and the scheme of marking shall be decided by the Board of Studies.

#### **OC-47A.3.4 Evaluation of laboratory courses**

##### **OC-47A.3.4.1 In-semester Evaluation**

- i. Internal evaluation shall be conducted in continuous manner in the form of regular assignment submissions and laboratory tests.
- ii. Out of maximum 50 marks, at least 30 marks shall be evaluated by conducting one or more laboratory test(s) during the semester.
- iii. A faculty member may conduct extra laboratory tests to allow those candidates who were unable to appear for the regular laboratory tests in genuine cases.
- iv. A record of work done in the form of laboratory journal (could be an e-journal) has to be maintained by every student.

##### **OC-47A.3.4.2 End-semester Evaluation**

- i. The evaluation consists of an End-semester examination of 50 marks of 3 hour duration conducted by the college.
- ii. The End-semester examination includes a laboratory examination and a viva-voce which shall be jointly conducted by an internal and external examiner.
- iii. The course instructor shall act as the internal examiner.
- iv. Paper setting and assessment of Laboratory courses at Semester – I to Semester – IV shall be done internally by the teacher teaching the paper/course preferably along with another teacher from the same department.
- v. External Examiners shall be appointed for the Laboratory Course examination at Semester V and Semester VI in accordance with the University Ordinance OB-4 from the panel of examiners approved by the Academic Council. However, paper setting and assessment shall be done jointly by the external examiner and internal examiner for these two semesters.

##### **OC-47A.3.5 Evaluation of Project work**

- i. Evaluation of Project work shall be done at the end of sixth semester.
- ii. Evaluation for 50 marks shall be done by the project guide based on the record of work done and quality of work done.
- iii. The evaluation by external examiner shall be for 50 marks consisting of an oral viva-voce and demonstration for 30 marks conducted in the presence of Project Guide and 20 marks for the Project Report.
- iv. External Examiners shall be appointed for the Project work assessment at Semester VI from the panel of examiners approved by the Academic Council in accordance with the University Ordinance OB-4. Assessment and grading shall be done jointly by the External Examiner and the Internal Examiner/Guide.

##### **OC-47A.3.6 Evaluation of Environmental Studies for Semester I and Semester II**

- i. In-semester evaluation for 25 marks and End-semester evaluation for 25 marks shall be made.
- ii. In-semester evaluation shall be done by the Instructor by conducting minimum one class test of minimum 10 marks and one or more practical assignments, presentations, quizzes during the semester.
- iii. End-semester examination of 1 hour duration shall be conducted. Paper-setting and assessment shall be done by the college Instructor.
- iv. A candidate has to secure minimum D grade.
- v. The grade obtained in Environmental studies will be considered for the purpose of calculating Semester Performance Index (SPI)/Cumulative Performance Index (CPI).
- vi. Degree shall not be awarded unless a candidate passes these courses.
- vii. Candidate who has not secured D grade shall re-appear only for the End-semester examination until he obtains a D grade.

### **OC-47A.3.7 Supplementary Examination**

- i. During the Supplementary Examination, the candidate shall answer only the End-semester component. The In-semester marks are carried forward.
- ii. There should be at least 15 days period between the date of declaration of the Even semester examination results and the conduct of Supplementary examinations.
- iii. The result of the supplementary examination is to be declared preferably before the commencement of the new academic year and in no circumstances after the last day of admissions, so as to enable a candidate to enroll for the higher class after passing the course.
- iv. The candidates who do not obtain the minimum grade of D after the supplementary examination shall reappear for the End-semester course assessment till they obtain minimum D grade required for passing.

## **OC-47A.4 SCHEME OF GRADING**

### **OC-47A.4.1 Grading Scheme**

- i. Absolute grading scheme shall be followed to compute grade for each course registered by the candidate.
- ii. The final grades for the course shall be awarded by the Instructor-in-charge/course co-coordinator taking into account the collective performance in the In-Semester and End-Semester examination.
- iii. For each course taken by the student, a letter grade is assigned based on the performance in all assessments. These grades are defined as A,B, C, D and F.
- iii. Each grade not only indicates a qualitative assessment of the student's performance but also carries an equivalent number called the grade point. The absolute grading range in terms of marks and the corresponding grade point are shown in the table below:

<b>Letter Grade</b>	<b>Grade Point</b>	<b>Range for Total %Marks</b>
---------------------	--------------------	-------------------------------

A	10	86 – 100
B	8	71 - 85
C	6	51 - 70
D	4	40 - 50
F	0	Less than 40

- iv. A candidate passes the course if he/she gets any grade in the range between A and D.
- v. A candidate is awarded F grade on account of overall poor performance (total marks less than 40) or failure to appear for the End-semester examination.
- vi. If a candidate is awarded F grade after the End-semester examination, he/she has to appear for the Supplementary Examination conducted at the end of that academic year.
- vii. If a candidate is awarded F grade after the Supplementary examination, he/she has to repeat only the End-semester component when that course is being offered next.
- viii. If a candidate is absent for the Supplementary examination, he/she will get a F grade and has to repeat only the End-semester component when that course is being offered next.

#### **OC-47A.4.2 Performance Indices**

- i. **Semester Performance Index (SPI):** The performance of a student in a semester is indicated by a number called SPI. The SPI is the weighted average of the grade points obtained in all the courses during the semester.

SPI is to be calculated as:

$$\text{SPI} = \frac{\sum \text{Grade point} \times \text{course credit}}{\sum \text{credits of each paper in semester}};$$

SPI has to be rounded to two decimal digits.

- ii. **Cumulative Performance Index (CPI):** The overall performance of a student at a particular point during the entire programme is obtained by calculating a number called CPI. The CPI of a particular semester is the weighted average of the grade points obtained in all the courses for the programme till that semester. The CPI is calculated to two decimal places.
- iii. **Conversion of C.P.I into Percentage for the B.C.A Course:** In cases where an employer or an institute needs the equivalent percentage they can use the following formula to get an approximate idea of the percentage equivalent for the C.P.I score –

$$\text{Equivalent Percentage} = \text{C.P.I score} * 10$$

For example - if C.P.I = 5.67, then equivalent percentage = 5.67 \* 10 = **56.7**

### OC-47A.4.3 Award of class

- i. Each semester grade report for the student shall carry his/her SPI and CPI. The final class for the B.C.A. degree would be awarded based on CPI of final semester as per the following scheme:

Distinction: CPI equal to or greater than 7.0

First class: CPI equal to or greater than 6.0 but less than 7.0

Second Class: CPI equal to or greater than 5.0 but less than 6.0

Pass Class: CPI equal to or greater than 4.0 but less than 5.0

- ii. **(effective from 20<sup>th</sup> September, 2014)** Award of Gracing and Entitlement marks shall be in accordance with the general Ordinance OA-5.16.
- iii. **(effective from 20<sup>th</sup> September, 2014)** In cases where the Entitlement Marks(EM) have not been fully utilized for gracing, these balance/remaining marks shall be converted to equivalent Entitlement Points(EP) using the conversion formula given below –

$$EP(S) = \text{Rounded}[\{EM(S) \times \text{Aggregate\_Points}(S)\} / \text{Aggregate\_Marks}(S)] ;$$

where

EP(S) is Entitlement Points allotted for the respective Semester 'S';

EM(S) is Entitlement Marks allotted in the respective Semester 'S';

Aggregate\_Points(S) in Semester 'S' is equal to Aggregate\_Credits(S) x Max\_Grade Points;

Aggregate\_Credits (S) is the total of credits of all courses/subjects in that semester;

Aggregate\_Marks (S) is the total of maximum marks of all courses/subjects in that semester;

Max\_GradePoints is highest Grade Point [ 10 in BCA Programme]

The EP(S) so obtained, shall be added to the numerator while calculating the CPI of semester 'S'

For Example - If a student has obtained 13 marks as EM(1) in the first semester of BCA and used 5 marks for gracing than the remaining 8 marks will be converted to EP(1) as follows -

$$EP[1]= \text{Rounded}[\{EM(1) \times \text{Aggregate\_Points}(1)\} / \text{Aggregate\_Marks}(1)]$$

$$= [(13 \times 10) \times 8]/650$$

$$= (320 \times 8)/650$$

$$= 2560/650$$

$$= 3.94$$

$$= 4$$

### OC-47A.4.4 Declaration of results



- i. Every Instructor shall display the grades obtained by the candidates within 10 days of the last examination held by the College for Semesters I to IV.
- ii. The Colleges running the BCA program shall send the consolidated result sheet of all the students at Semester-I to Semester-IV examinations conducted by them to the Controller of Examinations, Goa University, within thirty days of the declaration of the result by the college for that semester.
- iii. The In-semester marks of all the courses of the Semester V and VI shall be sent to the Controller of Examinations, Goa University, within 10 days of the commencement of End-semester examination for that semester (V/VI).

**OC-47A.4.5 Revaluation**

There shall be no revaluation of answer books of the candidates at the End-semester examination, except for Semester V and VI. Revaluation of answer books shall be as per the relevant Ordinance.

**OC-47A.4.6 Personal Verification**

Personal verification of answer books for Semesters I to IV shall be permitted to the candidates in the presence of Principal/Vice-Principal and the concerned examiner, provided he/she applies for the same along with the prescribed fees within eight days from the date of declaration of results.

The following shall be the procedure for the verification of marks:

- i. On a notified day and time, which shall not be later than 10 days after the receipt of application, the candidate shall be shown the answer book.
- ii. If the candidate is not satisfied with the results on personal verification of answer book, he/she may apply to the Principal for looking into the grievance(s).

**OC-47A.4.6.1 Redressal of grievances**

- i. The candidate can make an appeal to the Principal of College in case of any grievance with respect to evaluation within two days from the date of personal verification of the answer book(s). The Principal in consultation with the BCA programme coordinator/HoD shall decide the matter.
- ii. The records pertaining to the appeal as well as the decision taken thereof, shall be placed before the Academic Audit Committee during the academic audit.

**OC-47A.4.7 Attempts and Improvement of class**

- i. Attempts: A student shall be considered to have passed a course at first attempt, provided he/she passes with a letter grade of D or higher, at the regular examination.
- ii. In addition to the above, a candidate who was absent for the regular End semester examination on valid grounds and later passes the course after appearing for the Supplementary examination shall be considered to have passed the course at first attempt.
- iii. All other cases would be treated as second attempts and indicated on the grade sheet.
- iv. A candidate is allowed to repeat an entire year (Even and Odd Semester) in order to improve his/her performance. In such a situation the better of the two performances shall be considered. This facility shall be permitted only once in the BCA programme and the Statement of marks shall bear the sentence "Under Improvement". The candidate shall be required to surrender the original grade sheet and other relevant documents at the time of receiving the fresh Grade sheet in the event of improvement of performance for each concerned semester. The better of the two performances for each semester shall be considered.

**OC-48 (EFFECTIVE FROM 2006-2007) Ordinance relating to Degree of Master of Science in Information Technology [M.Sc (IT)](To be made effective from 2006-07)** (Under Section 24 (1) of the Goa University Act,1984)

**OC-48.1 Course Equivalence**

This is two year, four semesters, full-time Master's Degree Programme in Science in the subject of Information Technology M.Sc (IT) designed on the lines of DOEACC "B" Level programme

**OC-48.2 Eligibility and selection**

**OC-48.2.1**

Admission to the first semester of 2 year, 4 semester, full time course leading to the degree of Master of Science in Information Technology, is open to any graduate with first degree in Computer Science or Computer Application, securing at least 55% aggregate marks at first degree examination.

**OC-48.2.2**

Have secured 50 percentile in D-level CST examination conducted by C-DAC Mumbai (formerly NCST).

**OC-48.3 Post-Graduate Departmental Council**

Each College/University offering M.Sc(IT) programme will constitute a Post-Graduate Departmental Council within College/University. All faculty members of the department will be the members and Head of the Department will be the ex-officio chairman of the Departmental Council. The Departmental Council will meet at least 4 times in a semester and take decisions on all academic matters pertaining to running of M.Sc(IT) programme.

**OC-48.4 Instructional Scheme**

Instructional scheme for the M.Sc.(IT) programme is based on a system of integrated units called courses. Each course shall mean one paper. Semester I to III shall have 5 theory papers and 2 lab papers. Semester VI shall be exclusively dedicated to project / training.

**OC-48.4.1**

Course Credit: Each course will be of 100 marks and will have credits depending upon number of contact hours per week. The project will have no credits associated with it.

**OC-48.4.2**

Cumulative Credits: The sum total of all the credits of all the courses taken in a semester.

**OC-48.4.3**

Contact Hours: The total number of Lectures hours, Tutorials hours and Practical hours. Minimum of 45 contact hours are recommended for a 4 credit course, with 4 contact hours per week. One credit is equivalent to 15 contact hours in a semester.

**OC-48.4.4**

Instructor-in-Charge: Each course may have one or more instructors teaching the course. One of these is to be appointed as Instructor-in-charge.

- OC-48.4.5** Course Co-ordinator: In case of courses taught by Visiting Faculty, one faculty member from the department/College shall be associated with the course as course-co-ordinator
- OC-48.4.6** Course File: For each course taught, a file shall be maintained by the Instructor-in-charge comprising of course plan, reading/teaching material used in class, assignments, question papers, answer papers, student feedback, student attendance record along with final evaluation and grading.
- OC-48.4.7** Academic Audit Committee: The task of the academic audit is to ascertain that all in-semester an end-semester evaluation is done in transparent and fair manner. The committee shall comprise of two members appointed by the Vice-Chancellor, one from the University Department and one expert from Industry. It shall meet once every year end and shall examine the course file. On the basis of aberrations noticed if any, Academic Audit Committee shall take appropriate action to resolve the matter.
- OC-48.5** **Scheme of Evaluation**
- OC-48.5.1** There shall be both an in-semester element and an end-semester element in the evaluation of the performance of candidates. The in-semester evaluations will be 60% and end-semester evaluation will be of 40%
- OC-48.5.2** For a theory course, in semester evaluation is a continuous assessment worth 60 marks. At least 40 marks of the in-semester evaluation will be graded through one or more class test. The remaining could be evaluated through quizzes, assignments etc.
- OC-48.5.3** For a theory course, the end-semester evaluation consists of an 'end-semester' examination of 40 marks of 2 hour duration conducted by the college/department. A candidate is eligible to appear for the end-semester examination if she/he has a minimum of 75% attendance in the theory course.
- OC-48.5.4** For a laboratory course, the assessment will be continuous with 60 marks for the in-semester evaluation consisting of lab experiments, assignments etc. and 40 marks being reserved for the end-semester examination which includes a viva-voce and an online examination jointly conducted by an internal and external examiner. An external examiner is to be appointed from the panel of examiners approved according to the University ordinance OB-4. A candidate is eligible to appear for the end-semester examination if he has a minimum of 75% attendance in the laboratory course.
- OC-48.5.5** Final grades for the course would be awarded by the Instructor-in-charge/course co-ordinator taking into account the total performance.
- OC-48.5.6** Project viva would be jointly conducted by an internal and an external examiner as per the guidelines of the project evaluation. An external examiner is to be appointed from the panel of examiners approved according to the University ordinance OB-4. Detailed guideline for project submission and evaluation is to be published in the prospectus and copy of the same is made available in the department for reference.

**OC-48.5.7** There shall be no reevaluation. The students can make an appeal to the Chairman Departmental Council in case of any discrepancies in evaluation. The Chairman shall refer the matter to the academic audit committee.

**OC-48.6 Grading Scheme**

**OC-48.6.1** For each course taken by a student, a letter grade is assigned based on the performance in all assessments. These grades are defined as:

AA, AB, BB, BC, CC, CD, DD, EE, II and FF

Each grade not only indicates a qualitative assessment of the student's performance but also carries an equivalent number called the grade point.

The grade points corresponding to different letter grades are defined below:

<b>Letter Grade</b>	<b>Grade point</b>	<b>Letter Grade</b>	<b>Grade point</b>
AA	10	CD	5
AB	9	DD	4
BB	8	EE	0
BC	7	II	0
CC	6	FF	0

**OC-48.6.2** A student passes the courses if he/she gets any grades in the range AA to DD.

**OC-48.6.3** The letter grade EE and the letter grade II makes the student eligible to take a supplementary examination in that course.

**OC-48.6.4** The letter grade II is given to a student on account of absence from the end-semester examination for valid reason.

**OC-48.6.5** The letter grade EE is given to a student on account of poor performance in the end semester examination.

**OC-48.6.6** The letter grade EE and II are not awarded in supplementary examination

**OC-48.6.7** There is no provision of supplementary examination in lab course

**OC-48.6.8** A student who fails in the supplementary examination is awarded FF grade and has to repeat the entire course. The student who fails to appear for the supplementary examination or remains absent is awarded FF and has to repeat the entire course

**OC-48.6.9** A student shall be considered to have passed a course at first attempt, provided he/she passes with a letter grade of DD or better, at the regular examination.

**OC-48.6.10** In addition to the above, a student getting a letter grade of II at the regular examination and subsequently passing the course at the supplementary examination with letter grade of DD or better, will be considered to have passed the course at first attempt. However, a candidate getting a letter grade of EE at the regular examination shall be deemed to get letter grade DD in the supplementary examination, if successful.

- OC-48.6.11** All other cases would be treated as second attempts.
- OC-48.6.12** The final year Project shall carry only qualitative evaluation such as Excellent, Good, Satisfactory, Pass and Fail. A student getting a Fail grade shall have to repeat the project.
- OC-48.6.13** Supplementary Examination shall be held at the beginning of every semester.
- OC-48.6.14** A student is allowed to repeat a year or a semester in order to improve the performance. In such a situation his previous performance in that year or a semester shall be considered null and void.

**OC-48.7 Performance Indices**

**OC-48.7.1** Semester Performance Index (SPI):

The performance of a student in a semester is indicated by a number called SPI. The SPI is the weighted average of the grade points obtained in all the courses during the semester. For example, with courses in a semester, having credits C1, C2, C3, C4 and C5 and the grade points in the semester being g1, g2, g3, g4 and g5 respectively then the SPI is equal to:

$$\text{SPI} = \frac{\sum_{i=1}^5 C_i g_i}{\sum_{i=1}^5 C_i}$$

The SPI is calculated to two decimal places

**OC-48.7.2** Cumulative Performance Index (CPI)

The overall performance of a student for the entire programme is obtained by calculating a number called CPI. The CPI is the weighted average of the grade points obtained in all the courses for the programme. The CPI is also calculated to two decimal places.

**OC-48.8 Award of class**

**OC-48.8.1** Each semester grade report for the student shall carry his/her SPI. The final semester mark-sheet will indicate the CPI and the project performance. The final class for the M.Sc (IT) degree would be awarded as per the following scheme:

- Distinction: CPI equal to or greater than 8.5 and a minimum "Good" performance in the project
- First class: CPI equal to or greater than 6.5 but less than 8.5 and a minimum performance of "Satisfactory" in the project
- Second Class: CPI equal to or greater than 5.0 but less than 6.5 and a minimum performance of "Pass" in the Project
- Pass Class: CPI equal to or greater than 4.0 but less than 5.0 and a minimum performance of "Pass" in the project.

**OC-48.8.2** There is no provision for gracing in the individual paper. However, for candidates representing University in the National / State level event, a maximum of 7 grade points could be awarded before calculating CPI and Class.

- OC-48.8.3** Percentage equivalent of CPI is approximately given by the formula  

$$\text{Percentage} = 10 * \text{CPI} - 5$$
 Table below defines the conversion scale

CPI	Percentage
6.0	55
6.5	60
7.0	65
7.5	70
8.5	80

**OC- 49      Ordinance relating to Three Year Degree Course of Bachelor of Social Work (B.S.W.) (Under Section 24 (1) of the Goa University Act, 1984) (To be made effective from 2008)**

**OC-49.1      General**

**OC-49.1.1      Objectives**

It is envisaged that the student undergoing the course will a) acquire knowledge of the basic concepts and principles of social work, b) understand the influences of social institutions and other social forces in society, c) develop the attitudes necessary in dealing with social problems at the micro and macro level, and d) acquire the skills necessary to make effective interventions.

**OC-49.1.2      Degree to be awarded**

The Degree to be awarded by the Goa University shall be Bachelor of Social Work hereafter referred to as B. S. W.

**OC-49.1.3      Duration of course**

The B. S. W. Degree shall have duration of three academic years. Every academic year shall consist of two semesters.

**OC-49.2      Eligibility for admission**

To be eligible for admission to the First Semester of B. S. W. Course, a candidate shall have passed the Higher Secondary School Certificate Examination of the Goa Board or any other recognised board or an equivalent Examination of any other Boards with a minimum of 45 percent marks in Science, Arts, Commerce or Vocational streams.

**OC-49.2.1      Mode of admission**

Admission for B. S. W. Degree programme shall be made strictly according to the merit considered on the following:

- a. Fifty percent weightage shall be given to the qualifying examination.

b. Remaining fifty percent shall be given to the candidate's aptitude for the course ascertained from her/his performance in (i) entrance test (30%), (ii) group discussion (10%), and (iii) personal interview (10%).

A merit list shall be prepared based on the combined scores of (a) and (b).

A candidate admitted to Semester I shall be deemed to be eligible for admission to Semester II.

**OC-49.2.2 Eligibility for admission to Semester-III or Semester-IV (Second Year) of B.S.W. course**

(A) A candidate who has been declared passed in Semester-I and Semester-II shall be eligible for admission to Semester-III.

(B) A candidate who appeared for Semester-I and Semester-II examinations but failed to secure passing grades in not more than three papers each in Semester –I and/or Semester –II shall also be eligible for admission to Semester-III provided the candidate has passed in the practicum.

(C) Considering the nature of the course which places heavy emphasis on fieldwork migration from other universities shall not be permitted to the Semester – III /IV/V and VI of B. S. W.

**OC-49.2.3 Eligibility for admission to Semester-V of the (Third Year) B. S. W. Course**

(A) A candidate who has been declared passed in the first four Semesters i.e. Semester-I to Semester-IV examinations shall be eligible for admission to Semester-V.

(B) A candidate who has been declared passed in Semester-I and Semester-II and has failed to secure pass grades in not more than three papers each in Semester-III and/or Semester-IV shall also be eligible for admission to Semester-V provided the candidate has passed in the practicum.

(C) A candidate admitted for Semester-V shall be deemed to be eligible for admission to Semester-VI.

**OC-49.3 Course Structure**

The B. S. W. Course shall be of six Semesters. Each Semester shall have five Theory papers and one practicum. Each Theory paper shall have five instructional periods per week, each of 45 minutes duration. The practicum shall be of 15 hours per week. During the course of the Semester the students shall be assessed continuously. Minimum two Intra Semester Assessment Tests (ISA) shall be given for the Theory papers. This ISA shall be of total 20 marks. At the end of each Semester a comprehensive Theory Examination shall be conducted for each paper. The Semester End Examination (SEE) for each paper shall be of two hours duration and the paper shall carry 80 marks.

The component for the practicum for Social Work shall be assessed for 200 marks at the end of the Semester. The guidelines for the conduct and assessment shall be decided by the Board of Studies in Social Work.

**OC-49.3.1 Social Work Practicum**

Social Work practicum includes a fieldwork component in every semester. The practicum for BSW course shall consist of field/observation visits, social work practice

skills, laboratory and actual social work practice helping individuals, groups, and communities under the guidance of a qualified field instructor.

**OC-49.4 Scheme of Examination**

There shall be two modes of evaluation of the academic performance of the students offering the BSW course, namely, the Intra Semester Assessment (ISA) and the Semester End Examination (SEE), hereafter mentioned as ISA and SEE respectively, for convenience. A student shall be required to appear for ISA as well as SEE for being eligible to pass a course/paper.

**OC-49.4.1 The ISA**

(a) The ISA shall be conducted throughout a given Semester as per the requirements of a professional course to be finalised by the institution. The ISA tests shall carry a 20% of maximum marks allotted for the paper/course.

(b) The institution offering the course shall appoint a three-member committee to monitor the ISA in the institution. Similarly, the University shall appoint a five-member committee for monitoring the ISA.

**OC-49.4.2 The SEE**

(a) The SEE shall be conducted at the conclusion of a given Semester. Semester End Examinations shall cover the courses of studies prescribed for the concerned/ respective Semester.

(b) A candidate shall be considered to have successfully fulfilled the requirements of a Semester and deemed eligible to appear for the Semester End Examination provided she/he fulfils the minimum attendance requirements (75%) as per the relevant rules of the University. A candidate, failing to fulfil these conditions, shall have to repeat the Semester.

(c) A tentative schedule of SEE examination, evaluation, declaration of results etc. shall be prepared by the respective institution(s) preferably at the beginning of each academic year for all Semesters and the same shall be communicated to all the affiliated colleges for display.

(d) The pattern of question paper(s) to be set for the SEE in a given paper and the scheme of marking shall be decided by the Board of Studies in Social Work. For this purpose, the BOS shall frame specimen question paper(s) in the subject concerned for each semester for the information of the students.

(e) A Board of Paper-Setters and Examiners for the SEE shall be appointed by the University for Semester-V and VI. The Board shall finalize question paper(s), (which shall not have any objective types of questions, however, short answer question may be included) and the Chairperson of the Board shall personally hand over the sealed set of question papers to the Controller of Examinations in the prescribed manner. The Board shall prepare a key to answers to all question/sub-questions and the scheme of marking of the paper set at the examination. The assessment of the SEE at Semesters V and VI shall be done centrally at the University.

In case of descriptive type of answers, only important points to be expected may be highlighted.

(f) The setting of question paper and assessment of answer-scripts of SEE of Semesters-I to Semester-IV shall be organized by the colleges on behalf of the



University. The assessment of the SEE answer scripts at the Semesters I to IV shall be done by the teachers of respective colleges.

**OC-49.4.3 Personal Verification of Marks**

There shall be no reevaluation of answer books of the candidates at Semester-I to Semester-IV examinations. There shall be no reevaluation of field work/practicum. Personal verification of marks shall be granted to the candidate in the presence of Principal/Vice-Principal and the Examiner concerned, provided she/he has applied for the same along with payment of prescribed fees within one week of the declaration of results. The following shall be the procedure for the verification of marks:

a) On a notified day and time, which should be not later than 10 days after the receipt of application from the candidate, the candidate shall be shown the answer book in the chamber of the Principal/Vice-Principal in the presence of the Examiner concerned.

b) If the candidate is not satisfied with the results on personal verification of answer book, she/he may apply to the College Grievance Committee within a week from the date the answer script was shown to the candidate.

c) The College Grievance Committee shall take appropriate action as per the relevant Ordinance and inform the candidate of the decision taken accordingly.

**OC-49.4.4 Marks Allotment**

A theory paper carrying 100 marks shall have a ISA component of 20 marks and a SEE component of 80 marks. A candidate shall be required to score a minimum 40% of maximum marks each in (i) SEE Component, (ii)SEE and ISA Component taken together and (iii) the Practicum component. The ISA shall not constitute a separate head of passing. The appearance for ISA shall be compulsory. The conduct and assessment of the ISA component shall be completed before the 15th of September for odd Semesters and before the 15th of March for even Semesters.

**OC-49 .4.5 Project Work**

During the Semesters V & VI a candidate of BSW shall be assigned work for completing the project paper in the area/field of subject/s. Project work and the Report shall be based on field work/library work or on-the-job training or similar work assigned by the teacher on a topic identified by the latter. The teacher shall assigned ordinarily one project title to one candidate. A report, of about 50 double spaced typed printed pages, based on this work shall be submitted by the candidate a week before the last working day of the Semester VI. The late submission is permissible after the last date with the prior approval of the Principal to that effect on an application counter signed by the respective guide/supervisor .Candidates shall be required to answer a paper on social work research in Semester –V and submit the Project Report at the end of Semester –VI for evaluation. The project guide shall evaluate the report for 100 marks.

**OC-49.4.6 Award of Class**

a) The marks of Semester I to Semester IV shall be communicated by the College Principal in a sealed envelope to the Controller of Examinations for the purpose of computing the final results.

b) Only such candidates of the B. S. W. course who pass all the six Semesters'

Examinations at the first attempt, shall be awarded a Class. This shall be done on the basis of the aggregate total of marks scored at all the six semesters, as follows:

40% and above but less than 50%	- Pass Class
50% and above but less than 60%	- Second class
60% and above but less than 75%	- First Class
75% and above	- Distinction

A candidate passing any paper/practicum in any semester examination at the second attempt shall be placed in Pass Class.

#### **OC-49.4.7 Improvement of Performance**

A candidate who has passed the B. S. W. degree examination of this university and desires to improve her/his performance/total score shall be permitted to appear again. However, such an opportunity shall be restricted only to reappear in the SEE component of the papers of Semester V and/or Semester VI examinations excluding the Project Paper and the practicum. For this purpose, the marks scored at the first appearance in the Project Paper, practicum, and in the ISA component of the other papers, shall be carried forward for tabulation of the result under "improvement of performance". This facility to reappear under "improvement" shall be available only during the immediate subsequent regular Semester V and Semester VI examinations. A candidate shall not be permitted to reappear for improvement of performance at Semesters - I, II, III and IV. The candidate availing of this provision shall be considered to have passed Semester- V and/or Semester VI "under improvement" and this fact shall be recorded on her/his statements of marks and other relevant documents. The candidate shall be required to surrender the original statement of marks and other relevant documents at the time of receiving the fresh statement of marks in the event of improvement of performance/total score. The performance of a candidate, who appears under this provision and fails to improve, shall be ignored. A candidate can appear only once under this clause.

#### **OC-49.4.8 Clearing backlog papers**

A candidate who appeared for Semester-I and Semester-II examinations and failed to secure passing grades in not more than three papers each in these Semesters shall be required to appear and pass in the Papers of Semester-I and/or Semester-II, as the case may be, along with those of Semester-III and Semester-IV respectively in the subsequent year. Such a candidate shall be required to remit the requisite additional fee(s). Such repeat appearance shall be appropriately indicated in the statement of marks.

A candidate who, having cleared Semesters I and II entirely, failed to secure passing grades in not more than three papers each in Semester-III and Semester-IV shall be eligible to appear for backlog papers of Semester-III and Semester-IV along with Semester-V and Semester-VI (respectively) during the relevant year. Such candidate shall be required to remit the requisite additional fee(s) for each paper that she/he intends to appear as prescribed by the University from time to time. Such repeat appearance shall be appropriately indicated in the statement of marks.

#### **OC-49.5 College Examination Committee, College Unfair Means Committee and**

## College Grievance Committee

**The provisions of Ordinances OC-45.4.15, OC-45.4.15.1, OC-45.4.15.2 and OC-45.4.15.3 shall be applicable mutatis mutandis to the B.S.W. Course.**

### FLOW OF COURSES AND SCHEME OF EXAMINATION FOR BSW COURSE

Semester I	Title of the Paper	Periods of instruction per week	Duration of examination	Marks in Examination		
				Theory	Practical	Total Marks
BSW 1.1	Functional English - I	5	2 hours	80+20		100
BSW 1.2	Environmental Education - I	2	2 hour	50		50
BSW 1.3	Foundation Course: Gandhian Studies	5	2 hours	80+20		100
BSW 1.4	Computer Awareness	5	2hours	80+20		100
BSW 1.5	Social Work Profession	5	2 hours	80+20		100
BSW 1.6	Work with Groups	5	2 hours	80+20		100
BSW 1.7	Social Work Practicum	15 hours (Four days per week)			200	200
Total for I Semester						750

Semester II	Title of the Paper	Periods of instruction per week	Duration of examination	Marks in Examination		
				Theory	Practical	Total
BSW 2.1	Functional English - II	5	2 hours	80+20		100
BSW 2.2	Environmental Education - II	2	2 hours	50		50
BSW 2.3	Foundation Course: Social Welfare and Social Legislation	5	2 hours	80+20		100
BSW 2.4	Contemporary Social concerns in India	5	2 hours	80+20		100
BSW 2.5	Social Work Profession	5	2 hours	80+20		100
BSW 2.6	Work with individuals and families	5	2 hours	80+20		100
BSW 2.7	Social Work Practicum	15 hours (Four days per week)			200	200
Total for II Semester						750

§ Students have to compulsorily answer this paper. However, the marks obtained will not be reflected in calculating the class/percentage. Mark sheet will be withheld till student passes the paper.

Semester III	Title of the Paper	Periods of instruction per week	Duration of examination	Marks in Examination		
				Theory	Practical	Total
BSW 3.1	Contemporary Ideologies of Social Work - I	5	2hours	80+20		100
BSW 3.2	Integrated Social Work Practice - I	5	2 hours	80+20		100

BSW 3.3	Work with Communities/Community /Development - I	5	2 hours	80+20		100
BSW 3.4	Political Economy and Planning in India - I	5	2hours	80+20		100
BSW 3.5	Human Growth and Development - I	5	2 hours			100
BSW 3.6	Social Work Practicum	15 hours (Four days per week)			200	200
Total for III Semester						700

Semester IV	Title of the Paper	Periods of instruction per week	Duration of examination	Marks in Examination		
				Theory	Practical	Total
BSW 4.1	Contemporary Ideologies of Social Work - II	5	2hours	80+20		100
BSW 4.2	Integrated Social Work Practice - II	5	2hours	80+20		100
BSW 4.3	Work with communities/Community /Development - II	5	2 hours	80+20		100
BSW 4.4	Political Economy and Planning in India - II	5	2 hours	80+20		100
BSW 4.5	Human Growth and Development - II	5	2 hours			100
BSW 4.6	Social Work Practicum	15 hours (Four days per week)			200	200
Total for IV Semester						700

Semester V	Title of the Paper	Periods of instruction per week	Duration of examination	Marks in Examination		
				Theory	Practical	Total
BSW 5.1	Personal and Professional Growth - I	5	2hours	80+20		100
BSW 5.2	Social Work Research	5	2hours	80+20		100
BSW 5.3	Sociology for Social Work in India	5	2 hours	80+20		100
BSW 5.4	Counseling	5	2hours	80+20		100
BSW 5.5	Management of Developmental and Welfare Services - I	5	2hours	80+20		100
BSW 5.6	Social Work Practicum	15 hours (Four days per week)			200	200
Total for V Semester						700

Semester VI	Title of the Paper			Marks in Examination
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		Periods of instruction per week	Duration of examination	Theory	Practical	Total
BSW 6.1	Personal and Professional Growth - II	5	2 hours	80+20		100
BSW 6.2	Social Work Research: Project Work					100
BSW 6.3	Social Work With Abused Children	5	2 hours	80+20		100
BSW 6.4	Communication	5	2 hours	80+20		100
BSW 6.5	Management of Developmental and Welfare Services - II	5	2 hours			100
BSW 6.6	Social Work Practicum	15 hours (Four days per week)			200	200
Total for VI Semester						700

**OC-50 (Effective from 29<sup>th</sup> September, 2008) Ordinance relating to the Degree of Bachelor of Education (Special Education) (Under Section 24(1) of the Goa University Act, 1984).**

**OC-50.1 Eligibility for Admission**

A candidate for being eligible for admission to B.Ed. (Special Education) degree programme shall have passed with the minimum of 45% marks in any Bachelor/Masters degree of Goa University or an equivalent degree of any other University recognized by the University Grants Commission.

**OC-50.2 Degree to be awarded**

The degree to be awarded by the Goa University shall be Bachelor of Education (Special Education)

**OC-50.3 (effective from 25<sup>th</sup> July, 2011) (Applicable from the academic year 2012-13) Duration of the Programme**

The B.Ed. Special Education Degree Programme is a full time course of two semesters. A candidate shall not be permitted to enroll for any other full time programme.

**OC-50.4 (effective from 25<sup>th</sup> July, 2011) (Applicable from the academic year 2012-13) The B.Ed (Special Education) Programme Structure:**

All components other than microteaching shall be assigned credits. 1 Credit is equivalent to 15 Hours. The total credits allotted for internals as well as externals are as follows.

**Semester I**

Part	Details	Internal	External	Total
<b>A</b>	PAPER I	2	2	4
	PAPER II	2	2	4
	PAPER III	2	2	4
	PAPER IV	2	2	4
	PAPER V	4	0	4

	TOTAL	12	08	20
<b>B</b>	a)Practice Teaching 20 Lessons in MR and 10 in LD	5+2	--	7
	b)Case Study 1	4	--	4
	c)Visits to schools	2	--	2
	d) Computer Assisted Prog	1	--	1
	e)Home based programme I	1	--	1
	f) Community Work	2	--	2
	TOTAL	17	00	17

### Semester II

Part	Details	Internal	External	Total
<b>A</b>	PAPER VI	2	2	4
	PAPER VII	2	2	4
	PAPER VIII	2	2	4
	PAPER IX	4	0	4
	TOTAL	08	08	16
<b>B</b>	a) Practice Teaching 20 Lessons in Autism	5	--	5
	b) Case Study2	4	--	4
	c) Non-Verbal Communication	1	--	1
	d) Diagnostic Test	1	--	1
	e) Home based programme II	1	--	1
	f) Internship	4	--	4
	g) Workshop	3	--	3
	TOTAL	19	00	19

#### OC-50.5 Records to be Certified by the Principal

The Head of the Institution/Principal shall certify the completion of the following:

- A report of the project work/assignments in each of the theory papers
- A record of observations
- A file or such other records as may be determined by the Institution containing lessons plans/notes of the 50 lessons
- A file containing a record of the school-based activities conducted during Internship
- A record of the practical work under Part B

The Head of the Institution/Principal shall ensure that candidates have completed work as required in Parts A and B and forward a statement of internal assessment to the University at the end of the academic year.

#### OC-50.6 (effective from 25<sup>th</sup> July, 2011) (Applicable from the academic year 2012-13)

##### Eligibility for the Examination

A candidate to be eligible for the Bachelor of Education (Special Education) Examination shall have:

- a) attended two semesters in the Institute, with a minimum of 75% attendance of the total working days.
- b) completed the programme within a maximum period of four consecutive semesters.
- c) completed all internal assessments in Part A and Part B in each of the semesters, as certified by the Head of the Institution.

**OC-50.7 (effective from 25<sup>th</sup> July, 2011) (Applicable from the academic year 2012-13)**

**Scheme of Examination**

The question paper will be of two hours. The format of the question paper shall be as decided by the BOS from time to time.

**OC-50.8 (effective from 25<sup>th</sup> July, 2011) (Applicable from the academic year 2012-13)**

**Evaluation of Performance**

The performance of candidates shall be assessed through direct grading using a six point grading scale.

Conversion of Grade into Grade Point (GP) & Grade Point Average (GPA) and subsequently GPA into the final Grade shall be as per the following table:

**Grade Grade Point GPA Range Qualitative Description**

O	6	5.51 & above	Outstanding
A+	5	4.51 – 5.50	Very Good
A	4	3.51 – 4.50	Good
B	3	2.51 – 3.50	Average
C	2	1.51 – 2.50	Satisfactory
D	1	0.51 – 1.50	Poor

To be declared successful in each semester a candidate shall obtain a minimum of Grade C

- a) in each paper of Part A
- b) in Part B taken as whole

In case a candidate does not obtain the minimum of grade C, the candidate shall be required to improve the grade in part A as specified in OC-50.10.1. Any deficiency in Part B shall have to be rectified by the candidate within the prescribed duration of the course.

## **OC-50.9 Exemptions**

**OC- 50.9.1** In case of a candidate, who has completed Part B but has not completed Part A, shall be allowed at his/her option to complete Part A during the next academic year.

**OC- 50.9.2** A candidate who does not fulfill the requirements of Part B will have to repeat the course if she/he so desires. In such a case, the candidate will have to pay the course fees again.

**OC- 50.9.3** A candidate shall not continue to be registered for the B.Ed Special Education Course beyond a period of two years from and including the year of initial registration.

## **OC-50.10 Improvement of Grade**

**OC- 50.10.1** A candidate can improve his Grade if she/he so desires with respect to only the External Examination of Part-A. However, the candidate will not be allowed to repeat Part-B of the course.

**OC- 50.10.2** For improvement of grades, the candidate will be allowed to repeat only the external examination of Part A, within two consecutive attempts by paying the required examination fees. Further even if modifications are effected in the syllabi or question paper pattern, no separate question papers will be set for those who reappear for the B.Ed. Special Education final examination.

**OC- 50.11 (effective from 25<sup>th</sup> July, 2011) (Applicable from the academic year 2012-13)**

### **Award of Degree:**

The final grade for the degree shall be the average of the grades of the two semesters.

**OC-50.11.1** To be eligible for the award of the Degree of Bachelor of Education (Special Education), a candidate shall have to get an overall grade D (parts A and B combined). In case a candidate does not obtain grade D, the candidate shall be required to improve the grade in part A as specified in OC 50.10.1 to be eligible for the award of the degree.

## **OC-51 (Effective from 16<sup>th</sup> July, 2009) Ordinance relating to the BTTM (Bachelor of Travel and Tourism Management) Programme.**

### **OC-51.1 Objective of the Programme**

To build competence in students to effectively undertake entry-level managerial employment in tourism related organizations.

### **OC-51.2 Duration of the Program**

Three-year full time program. Each year shall consist of three Terms of 3 months duration with additional summer Terms of six weeks each in the first and second year of the program.



**OC-51.3 Admission and Eligibility for Admission**

A candidate, who has passed XII standard, is eligible for admission to BTTM. Admission shall be made based on an admissions test. An Admissions Committee consisting of the Principals or Course Directors of the Colleges conducting the programme, the Dean of the Faculty of Management Studies and one of the faculty members of the Department of Management Studies; all appointed by the Vice Chancellor of the University shall decide the nature of the particular admissions test and procedures for admission. One of the Principals or the Dean of the Faculty of Management Studies shall be nominated as the Chairperson by the Vice Chancellor.

**OC-51.4 Structure of the Programme****OC-51.4.1 Term wise Programme Structure<sup>1</sup>****TERM 1**

Code	Subject	Credits	Hours per week
T01	Tourism Concepts <sup>2</sup>	3	3
T03	Tour Operations Management	2	2
T05	Marketing Tourism and Hospitality 1	3	3
101	IT <sup>3</sup> Skills	2	2
102	Management Process	2	2
106	Case Analysis 1	2	2
107	Soft Skills Training <sup>16</sup>	2	2
108	PBE <sup>5</sup> 1	2	2
Total		18	18

<sup>4</sup>Soft Skills Training would also include Subjects such as Communicating in any Indian Language such as Hindi, Marathi, Konkani, etc. or in any Foreign Language such as English, French, German, Portuguese, etc.

<sup>5</sup> Perspectives Building Electives from already approved subjects under Humanities, Social Sciences and Science and Technology including Indian History, Understanding Indian Society, Indian Heritage, History of Goa, Cultural History of Goa, Tourism Geography etc.

<sup>1</sup> The subject codes pertain to those of BBA or PGD/MBA/Bachelor's Degree in Tourism Management

<sup>2</sup> Same as T01 Tourism: Philosophies, Principles and Practices

<sup>3</sup> Information Technolog

## TERM 2

Code	Subject	Credits	Hours per week
T04	Economics of Tourism 1	3	3
T06	Travel Agency Management	2	2
T05	Marketing Tourism and Hospitality 2	3	3
104	Human Resource Management 1	3	3
201	IT Skills 2	2	2
206	Case Analysis 2	2	2
207	Soft Skills Training 2	2	2
208	PBE 2	2	2
Total		19	19

## TERM 3

Code	Subject	Credits	Hours per week
T02	Hospitality Management 1	2	2
T08	Economics of Tourism 2	2	2
T16	International Tourism	2	2
203	Human Resource Management 2	3	3
302	Financial Statement Analysis for Decisions	3	3
306	Case Analysis 3	2	2
307	Soft Skills Training 3	2	2
308	PBE 3	2	2
Total		18	18

## TERM 4

Code	Subject	Credits	Hours per week
401	Study Tour and Summer Placement Report	12	6 weeks
402	Study Tour and Summer Placement Seminar	6	1 hour per student

## TERM 5

Code	Subject	Credits	Hours per week
T12	Tourism Industry 1	2	2
T07	Hospitality Management 2 <sup>6</sup>	2	2
T14	Advertising Management in Tourism	2	2
305	Organizational Behavior 1	2	2
509	ME 1 <sup>8</sup>	3	3

<sup>6</sup> Hospitality Operations Management

<sup>7</sup> ME: Management Electives such as Financial Accounting, Management Accounting, Finance Management, Production Operations Management, etc.

506	Case Analysis 4	2	2
507	Soft Skills Training 4	2	2
508	PBE 4	2	2
Total		17	17

#### TERM 6

Code	Subject	Credits	Hours per week
T12	Tourism Industry 2	2	2
T11	Information Technology in Tourism	2	2
T13	Management of Transport Operations	3	3
501	Organizational Behavior 2	2	2
609	ME 2 <sup>9</sup>	3	3
606	Case Analysis 5	2	2
607	Soft Skills Training 5	2	2
608	PBE 5	2	2
Total		18	18

#### Term 7

Code	Subject	Credits	Hours per week
T15	Tourism Products of India	2	2
605	Legal Aspects of Tourism	3	3
T16	Sustainable Tourism	2	2
304	Business Research Methods	3	3
709	ME 3 <sup>10</sup>	2	2
706	Case Analysis 6	2	2
707	Soft Skills Training 6	2	2
708	PBE 6	2	2
Total		18	18

#### TERM 8

Code	Subject	Credits	
801	Study Tour and Summer Placement Report	12	6 weeks
802	Study Tour and Summer Placement Seminar	6	1 hour per student

#### TERM 9

Code	Subject	Credits	Hours per week
T17, T18	Tourism Electives <sup>11</sup> 1 and 2	2 Each	2 Each
T09	Tourism Planning and Policies	2	2
701	Economic Environment of Tourism	2	2

<sup>8</sup> ME: Management Electives such as Financial Accounting, Management Accounting, Finance Management, Production Operations Management, etc.

<sup>9</sup> ME: Management Electives such as Financial Accounting, Management Accounting, Finance Management, Production Operations Management, etc.

<sup>10</sup> Such as Airlines Management, Tourism In Goa, Airline Ticketing, Event Management, Film Festivals, etc.

904	Environment Management 1	2	2
905	Interactions with Entrepreneurs	1	2 hours per fortnight
906	Mock Interviews by Executives	1	30 minutes per student for the Term
907	Seminars on General Topics	1	3 hours per week
908	Case Analysis 7	2	2
909	Soft Skills Training 7	2	2
910	PBE 7	2	2
Total		19	20

#### TERM 10

Code	Subject	Credits	Hours per week
T19, T20	Electives 3 and 4	2 each	2 hours per elective
1004	Environment Management 2	2	2
301	Strategic Management	2	2
1005	Interactions with Executives	1	2 hours per fortnight
1006	Mock Interviews by Executives	1	30 minutes per student for the Term
1007	Seminars on General Topics	1	3 hours per week
1008	Case Analysis 8	2	2
1009	Soft Skills Training 8	2	2
1010	PBE 8	2	2
Total		17	18

#### TERM 11

Code	Subject	Credits	Hours per week
T21	Emerging Trends in Tourism	2	2 hours
1103	Project Report and Seminar	8 (6 and 2)	4 weeks
1104	Interactions with Executives	1	2 hours per fortnight
1105	Mock Interviews by Executives	1	30 minutes per student for the Term
1106	Seminars on General Topics	1	3 hours per week
1107	Case Analysis 8	2	2
1108	Soft Skills Training 8	2	2
1109	PBE 9	2	2
Total		19	12

- OC-51.4.2** Subject 401 and 801 Summer Placement Report shall be undertaken in an established organization.
- OC-51.4.3** Students in groups of six may undertake a mini entrepreneurial activity in lieu of any 2-credit electives equivalent to 903 of BBA.
- OC-51.4.4** Subject 1103 comprises a Project undertaken in an established firm under the guidance of a regular, contributory or guest teacher.
- OC-51.4.5** For the subject Case Analysis for each Term, a maximum of 9 cases shall be discussed in addition to one real life case written by the students.

- OC-51.4.6** For the subjects Soft Skills Training and Perspective Building Electives (PBE) in each Term, the institution shall offer subjects from the already approved subjects. Indian and Foreign Language courses may be offered under Soft Skills Training.
- OC-51.4.7** Subjects 907, 1007, and 1106 would be done in groups of 6 students and on contemporary topics.
- OC-51.4.8** For subjects 905, 1005 and 1104, an entrepreneur / executive from industry with minimum two years experience shall be invited for interactions.
- OC-51.4.9** For subjects 906, 1006, and 1105, an executive from industry with minimum two years experience shall be invited for conducting the Interviews and grading the students.
- OC-51.4.10** Subject allocations to Terms are only indicative. The Institution shall have the freedom to reallocate courses across Terms with the approval of the Board of Studies in Management Studies.
- OC-51.4.11** For each Subject, detailed course outlines shall be obtained from the teachers before the commencement of teaching. Only the Board of Studies in Management Studies shall make exceptions to this with valid reasons.
- The Course Outlines shall include objectives in terms of competencies to be developed, broad outline of topics to be covered, pedagogical and evaluation methods to be used and minimum reading stipulated. The format for the Course Outline shall include session by session topics to be covered, reference of essential reading for each session, session by session assignments, components of evaluation, rationale for each component of evaluation and weights for each component of evaluation. Formats as given in Schedule I and Schedule II shall be used for the above purpose.
- Every session shall have preparatory reading materials and shall have either an exercise or case study as a background for class discussion or class work by the students. Lecture by Instructor, as a method of training, shall not be used in any session.
- OC-51.5** Registration for electives
- OC-51.5.1** Each elective opted for shall be a distinct subject.
- OC-51.5.2** The institution shall decide the minimum number of students required for offering an elective.
- OC-51.5.3** Electives offered shall be of 2 credits each and shall be from areas such as Tourism, Hospitality, Marketing, Human Resources Management, Production Operations Management, Systems, Economics, etc.
- OC-51.5.4** Every year, before the end of February, the Course Director shall obtain the syllabi for the electives giving objectives and broad outline from regular and visiting teachers such as teachers from other Institutions and institutions outside Goa University as well as professionals and managers from industry. The syllabi shall include objectives in terms of competencies to be developed, broad outline of topics to be covered, pedagogical and evaluation methods to be used and minimum reading stipulated.

**OC-51.5.4.1** Electives approved by the Board of Studies in Management Studies shall be announced to the 2nd year BTTM students and provisional registrations shall be obtained. Based on the registrations and availability of faculty resources, the Institution shall finalize the electives to be offered in the subsequent academic year.

**OC-51.5.4.2** For such approved electives, detailed course outlines shall be obtained from the teachers and the same shall be submitted to the Board of Studies in Management Studies for approval. The Course Outlines shall include objectives in terms of competencies to be developed, broad outline of topics to be covered, pedagogical and evaluation methods to be used and minimum reading stipulated. The format for the Course Outline shall include session by session topics to be covered, reference of essential reading for each session, session by session assignments, components of evaluation, rationale for each component of evaluation and weights for each component of evaluation. Formats as given in Schedule I and Schedule II shall be used for the above purpose.

Every session shall have preparatory reading materials and shall have either an exercise or case study as a background for class discussion or class work by the students. Lecture as a method of training shall not be used in any session.

Final registrations for electives shall be obtained before the end June of the academic year.

**OC-51.5.5** In all Terms put together, in lieu of 2 credits worth of Electives, the student may opt for a Project Course (PC) / Fieldwork Course (FC) under an approved guide (a regular faculty member of the Institution / University or a Contributory / Guest teacher).

**OC-51.5.6** Registration for Non Credit Subjects

The Institution, with the help of its regular, contributory or guest faculty, shall periodically offer non-credit subjects in various areas of management / non-management disciplines and especially in newly emerging areas. Once a student registers for such a subject, it becomes a compulsory subject for the student. In exceptional circumstances, the Course Director may allow a student to withdraw registration, if it is convinced about the genuineness of the reasons. There shall be no evaluation in non-credit subjects. The Institution shall issue a Certificate to the student mentioning the names and number of credits of each such subject attended by the student.

**OC-51.6** Evaluation, Grading and Pass Requirements

**OC-51.6.1** Each subject shall have certain number of credits as given in OC-51.4.1 above. The number of credits is approximately the number of minimum contact hours divided by 10.

**OC-51.6.1.1** No component of evaluation shall exceed 40% weight in the total evaluation of the subject. The method as well as the content of evaluation of Summer Placement Report, Summer Placement Seminar, Project Work, Project Seminar and Project / Fieldwork Courses shall be decided by the concerned guide with the consent of a Committee of all full time teachers of the Institution chaired by the Course Director. The respective teacher or the guide shall do the assessment as well as grading.

**OC-51.6.1.2** All examinations shall be open book examinations. The student while answering the examinations can use the prescribed texts distributed to the students by the Institution and other hand-written notes of the student. No other resource other than ordinary (non-scientific) calculators shall be allowed.

**OC-51.6.1.3** The teacher shall submit at the end of every month, the details of the Grades awarded to each student as well as the percentage of attendance till that point of time to enable the student to benefit from timely feedback.

**OC-51.6.1.4** Summer Placement Seminar and Project Seminar shall be evaluated by a panel of an internal faculty and an executive from industry with minimum two years experience.

Summer Placement Seminar and Project Seminar shall be organized as public seminars, where anybody from the audience can ask questions, unless the organization on which the work was done requires the results to be kept confidential. In the latter case, only the examiners shall be present during the Seminar.

**OC-51.6.2** The manner in which classes are conducted and the method as well as the content of evaluation of each subject of each Term shall be reviewed by Academic Audit Committee, appointed by the Vice Chancellor from a panel of experts prepared by the Board of Studies in Management Studies. The committee shall consist of at least three members, of which preferably at least two shall be from outside the Institution. At least one of the members shall preferably be from the corporate sector. If the work for a committee is on the higher side, more than one committee may be appointed. The Committee shall meet twice in a year after the completion of two consecutive Terms.

All course-outlines, answer sheets, assignments, project reports and mark lists shall be maintained and made available for the scrutiny of the committee. The results of the Term are finalized after the approval of the committee with suitable modifications suggested by it. The reports shall be prepared as per the procedures and formats laid out in Schedule III.

The Academic Audit Committee shall also be the Grievance Committee for all grievances related to evaluation and grading.

The Grades approved by the Committee shall be signed by the Chairman of the Academic Audit Committee and handed over to the Examinations Department in Tabulated Grade Sheet form after Term 11.

**OC-51.6.3** After evaluation, each student shall be graded for each subject, as per the following scheme of grades and grade points.

Grade

A: Excellent 8.00 upwards

B: Good 6 to < 8

C: Satisfactory 5.5 to < 6

D: Low Pass 5 to < 5.5

F: Failed 0 to < 5

Teachers shall use the following grades (and not Grade Points) with equivalent grade points for individual items of evaluation such as answers to individual questions in a question paper.

A+: 10, A: 9, A-: 8, B+: 7.5, B: 6.75, B-: 6, C+: 5.9, C: 5.7, C-: 5.5, D: 5, F: 0

The grade points awarded for a subject shall be rounded off to two decimals for determining grades for the subject.

**OC-51.6.4** To obtain a pass in BTTM, the student should have obtained a weighted average grade point (weighted by the number of credits of each subject) of 5.00 for the subjects of Terms 1 to 11 taken as a whole, should not have obtained F grades for more than three subjects and should have completed the requirements of the non-credit subjects, if any, the student had registered for.

The mark-list given to the student shall give grades and grade points for each subject of each Term, his/her rank in the class in the respective institution for each subject, the overall grade (weighted average weighted by the Credits of each subject) and grade points.

**OC-51.6.5** There shall not be any University wide ranking of the students. A student who has not met the requirements for pass in BTTM may reregister for necessary subjects by paying the appropriate fee and attempt to obtain a pass within a period of 6 years from the date of joining the BTTM programme. The Institution may not be in a position to make changes in the Time Table of subjects to avoid clashes of sessions to accommodate such students.

**OC-51.6.6** A student has to register / reregister for a full subject and not a part thereof, including those in case of reregistering for Project related subjects. If a student reregisters for the Summer Placement Report or Seminar, the Institution with the consent of the internal guide may decide whether the student should redo only the Report or the Seminar or both or whether he/she should repeat the summer work in another Term.

**OC-51.6.7** A student may cancel an elective subject and may register for another elective while reregistering.

**OC-51.6.8** A student who wants to improve grades in a subject or subjects may reregister for such a subject or subjects in subsequent years by paying the appropriate fee and attempt to obtain improved grades in such a subject or subjects within a period of 6 years from the date of joining the BTTM programme. The Institution may not be in a position to make changes in the timetable to avoid clashes of sessions to accommodate all such students. This provision shall not be available for students after their receiving the BTTM degree.

**OC-51.6.9** In all cases of re-registration, the grades obtained in the last registration by the student shall hold good.

**OC-51.7** Normally, grades or grade points shall not be converted to marks, class, distinctions, etc. In exceptional cases, where an employer or an entity insists on specifying equivalent marks or such classifications, the following scheme shall be used.



Equivalent Marks = Grade Point Average multiplied by 10.

- A: Distinction
- B: First Class
- C and D: Second Class
- F: Failed

**OC-51.8** The Board of Studies in Management Studies shall resolve any ambiguities and interpretation requirements arising from this Ordinance.

**Schedule I Scheme of Evaluation**

Subject: \_\_\_\_\_ Instructor: \_\_\_\_\_  
 Term: \_\_\_\_\_ Year: \_\_\_\_\_ College / Institute: \_\_\_\_\_

<b>Objectives</b>
At the end of the course, the students will have competence in:

<i>Objective in Terms of Competence to be Developed</i>	<i>Learning Methodology Planned for each of the Competencies in Column 1: The Activities will Involve Case Discussions, Presentations, Project/s, Article Critiques, Problem Solving Sessions, Other Experiential Sessions, etc.</i>	<i>Implemented</i>	<i>Reasons for Deviations</i>

<b>Items</b>		<b>Planned</b>	<b>Planned</b>	<b>Implemented</b>	<b>Implemented</b>	<b>Reasons for Deviations</b>
<b>Competence Assessed</b>	<b>Evaluation Methodology Planned</b>	<b>Group / Individual Evaluation</b>	<b>Weight : Total 100</b>	<b>Group / Individual Evaluation</b>	<b>Weight: Total 100</b>	

**Schedule II Course Outline Form**

**Term:**            **Subject:**            **Instructor:**            **Year:**            **College / Institution:**

Item	Planned	Implemented
Session No <sup>12</sup>	Date:	
Objective		
Reading Material		
Learning Methodology		

Item	Planned	Implemented
Sessions No	Date:	
Objective		
Reading Material		
Learning Methodology		

Item	Planned	Implemented
Session No	Date:	
Objective		
Reading Material		
Learning Methodology		

<sup>11</sup> One Table for each Session

Schedule III

Form for AAC (Academic Audit Committee) Report on Conduct of Sessions and Evaluation<sup>13</sup>

Batch		Program	
Term		Institution	
Subject Code		Subject	
Credits		Instructor	

Documents required are in the footnote.<sup>14</sup> The Process to be adopted is outlined in the footnote.<sup>15</sup> The comments and action plans, against each item below, are to be filled up based on these inputs.

No	Item	Comments / Suggestions / Decisions by AAC	Status of Implementation for the Subsequent Batch
1	Whether the Evaluation Scheme clearly articulates the Competencies to be developed in Behavioural Terms.		
2	Whether the Competencies to be developed are consistent with the Objectives of the Syllabus.		
3	Whether the topics dealt with were adequate to develop the required competencies.		
4	Whether the Course Outline clearly articulates the Competencies to be developed in Behavioral Terms for each Session.		
5	Whether each session had experiential (active rather than passive learning) exercises such as cases, problems, exercises etc. rather than pure theoretical / conceptual discussions.		

<sup>12</sup>Original to be filed in the AAC File of the Batch, one Copy for the Subject File, one Copy for the Instructor, one copy for the Board of Studies, one copy for the AAC Chairperson.

<sup>13</sup>Documents Required (These are to be submitted through a File or Files numbered Volume I, II, III, etc.):

- 1 Syllabus
- 2 Course Outline with Implemented Column filled up
- 3 Evaluation Scheme with Implemented Column filled up
- 4 Hard / Soft copies of Materials discussed other than Text Books prescribed
- 5 Attendance Sheet with Number of Hours Engaged with % Attendance for each Student
- 6 Grade Sheet with Item wise and Overall Grades
- 7 Question Papers for Assignments and Tests
- 8 Answer Sheets of Assignments (Soft / Hard) / Tests
- 9 Feedback Rating by Students and Qualitative Comments

<sup>14</sup>Process to be Adopted:

- 1 Perusal of above Documents
- 2 Discussions with the Batch Coordinator, Instructor and Students
- 3 Random Check of Sample Answer Sheets
- 4 Random Check of Grade Sheets, etc.

6	Whether the exercises were spelt out in specific terms (such as Problem Numbers, Case Title, etc.) in the Course Outline		
7	Whether these exercises were reality or practice oriented rather than purely conceptual or theoretical.		
8	Whether these exercises were adequate to develop the envisaged competencies.		
9	Whether reading materials for each session for prior reading were given with page numbers specified in the Course Outline.		
10	Whether executives were invited for some of the Sessions as per the Ordinance, wherever applicable.		
11	Was the workload for the student realistic?		
12	If a textbook other than the one recommended is followed, whether it is appropriate for the subject.		
13	Whether the measures of evaluation chosen to assess the competencies were appropriate.		
14	Whether the assessment was evenly spread during the Term.		
15	Whether weight for any Item of Evaluation exceeds limits (except for 1 Credit Subjects with prior permission) given by the Ordinance		
16	Whether the questions were appropriate for open book examinations.		
17	Whether the Assignments were appropriate for developing the required competencies (In contrast to those where cut and paste and copying could be adopted)		
18	Whether qualitative comments were given in Answer Sheets / assignments.		
19	Whether grades rather than marks were adopted for individual items of evaluation.		
20	Whether Grades are available against each Competency.		
21	Whether the full spectrum of grades was used. (Was grading too liberal or too conservative?)		

22	Whether grading was fair (based on sample check of answer sheets and grievances expressed, if any, by the students).		
23	Whether AAC recommends any change in the grades awarded. (Give reasons)		
24	On the whole, does the Committee feel the Instructor succeeded in developing the required competence on the part of the students?		
25	Overall comments and instructions to Instructor for further action.		
26	Action required at the level of the Institution		
27	Action required at the level of the University		

Names and Signatures of AAC Members with Date

**OC-52 (Effective from 3<sup>rd</sup> July, 2015) ORDINANCE GOVERNING THE DEGREE OF MASTER OF SCIENCE, POST GRADUATE DIPLOMA AND POST GRADUATE CERTIFICATE IN HYDROGRAPHY** (Under section 24(1) of the Goa University Act, 1984.)

**OC-52.1 GENERAL**

**OC-52.1.1 Objectives**

To build competence in students to effectively undertake all the tasks pertaining to conduct of Hydrographic Survey and off-shore surveys for nautical charting, coastal zone management and industrial requirements, and subsequent production of nautical charts and publications including electronic charts.

**OC-52.1.2 Duration**

The M.Sc.Programme shall be a full time two year Programme comprising four Semesters, consisting of Basic 'Hydro' Programme for the first two semesters, a 3-5 year break of practical experience, followed by a Long 'Hydro' Programme in the third and fourth semester. The entire Programme shall be completed within 7 years.

Post Graduate Diploma in Hydrography shall be for two semesters consisting of the Long 'Hydro' Programme.

Post Graduate Certificate in Hydrography shall be for two semesters consisting of Basic 'Hydro' Programme.

**OC-52.1.3 Degree/ Diploma/Certificate to be awarded :**

**(Notified on 25<sup>th</sup> July, 2017)** The students joining 'Long Hydrography' Programme, who have completed the 'Basic Hydrography' Programme from National Institute of Hydrography, India, shall be eligible for award of Master of Science (Hydrography) Degree on successful completion of all four semesters.

The students joining 'Long Hydrography' Programme, who have not completed the 'Basic Hydrography' Programme from National Institute of Hydrography, India, shall be eligible for award of Post Graduate Diploma in Hydrography on successful completion of the third and fourth semesters. This will be subject to AIU clearance and acceptance of previous qualification by Goa University.

The students joining 'Basic Hydrography' Programme shall be eligible for award of Post Graduate Certificate in Hydrography on successful completion of the first and second semesters. This will be subject to AIU clearance and acceptance of previous qualification by Goa University.

**OC-52.1.4 (Notified on 25<sup>th</sup> July, 2017) Eligibility for admission:**

(a) Educational Qualification

Both Indian and International students shall be required to hold a B.Sc / B.E. / B. Tech Degree (or equivalent), with nautical background.

(b) Professional Qualifications

(i) The courses are open to Indian Officers, Officers from a foreign navy, and Civilian personnel of Port Trusts, Inland Waterways Authority of India and other Maritime Organisations from India and abroad.

(ii) For joining under 'Long Hydrography' Programme the student shall have qualified the Basic Hydrographic Programme in India or equivalent from any other institute from a country other than India, recognised by International Hydrographic Organisation (IHO) under category 'A' or 'B'.

(iii) However, students who have completed 'Basic Hydrography' Programme between 2010 – 2015 from National Institute of Hydrography, shall be eligible for award of Master of Science (Hydrography) Degree on successful completion of 'Long Hydrography' Programme, under the Ordinance OC-52, relating to the Degree of Master of Science in Hydrography, notified on 22<sup>nd</sup> January 2010.

**OC-52.1.4 Eligibility for admission**

(a) Indian Naval Officers, Officers from friendly Foreign Navies and Civilian personnel of Port Trust, Minor Port Survey Organisations, Inland Waterways Authority of India and other Maritime Organisations from India and abroad, with B.E./ B.Sc. / B.Tech degree or equivalent with nautical background, shall be eligible.

(b) International students who have completed Basic 'Hydro' Programme, deemed as equivalent to first two semesters, from any other International Hydrographic Organisation (IHO) recognized category 'A' / 'B' Institute or equivalent, from a country other than India, shall be eligible to register for the Long 'Hydro' Programme, to complete M.Sc. (Hydrography) of the University, subject to AIU clearance and transfer of credits.

(c) Students with B.E./ B.Sc. / B.Tech degree or equivalent, with nautical background are also eligible to register directly for Long 'Hydro' Programme towards award of PG Diploma in Hydrography.

(d) Candidates who have completed the Basic Hydrographic Programme conducted by any recognised institute approved by International Hydrographic Organisation (IHO) as category 'B', and have minimum two and half year experience in the field, shall also be eligible to register directly for Long 'Hydro' Programme towards award of M.Sc. (Hydrography).

## **OC- 52.2 PROGRAMME STRUCTURE**

**OC-52.2.1 (Notified on 25<sup>th</sup> July, 2017)** The instructional scheme for the Master of Science / PG Diploma / PG Certificate in Hydrography shall comprise classroom instructions, practical operation of equipment and collection of field data, processing of data on data logging systems/ work stations, and derivation of required products, and a Project Survey which shall include all aspects of hydrographic surveying.

For the award of Master of Science/ PG Diploma in Hydrography, a Case Study/ Professional Research shall form part of the curriculum.

For the award of PG Certificate the students shall submit a Class Work Journal.

**OC-52.2.2** The Basic 'Hydro' Programme work shall include training comprising assignments towards field work afloat / ashore which is mandatory prior to the second year. It shall also include seminars, prepared talks, guest lectures and participation in cruise programme onboard surveying vessels of Indian Navy.

**OC-52.2.3** The Courses leading to Master of Science / PG Diploma / PG Certificate in Hydrography may be allocated between first and second, and between third and fourth semesters as per the requirement of the institution in terms of planning of the various attachments for the Programme by Indian Naval Training Programme directives.

**OC-52.2.4** There shall be a Programme Officer to co-ordinate and closely monitor the Programme and its progress and shall be assisted by a Programme Instructor.

**OC-52.2.5** Number of Students in each class shall be as decided by Goa University from time to time.

**OC-52.2.6** The number of Courses per year shall be in keeping with the training directives of Indian Navy and as recommended by the Board of Studies, and approved by the Academic Council from time to time.

**OC-52.2.7 (Notified on 25<sup>th</sup> July, 2017)** The distribution of Courses and total number of contact hours and marks and credit distribution is as follows:

a) One Credit of a Theory Course shall comprise 15 contact hours.

b) One Credit of a Practical Course shall comprise 45 contact hours.

c) One credit shall be assessed for 25 marks.

SEMESTER I				
S. No.	Paper Code	Credits	Contact Hours	Marks
1	HP 01	3	45	75
2	HC 01	4	60	100
3	EDP	4	60	100
4	TT	2	30	50
5	CJ & D (P)	6	270	150
Total		19	465	475

SEMESTER II				
S. No.	Paper Code	Credits	Contact Hours	Marks
6	HP 02	3	45	75
7	HC 02	4	60	100
8	LA	2	30	50
9	ES	2	30	50
10	PR(P)	8	360	200
Total		19	525	475

Legend

S. No.	Paper Code	Paper Name
1	HP 01	Hydrographic Practice I
2	HC 01	Hydrographic Control I
3	EDP	Electronic Data Processing
4	TT	Tides & Tidal Streams
5	CJ & D (P)	Class Work Journal & Drawing
6	HP 02	Hydrographic Practice II
7	HC 02	Hydrographic Control II
8	LA	Legal Aspects
9	ES	Environment Science & Oceanography
10	PR (P)	Project Survey

SEMESTER III
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S. No.	Paper Code	Credits	Contact Hours	Marks
1	HC 01	8	120	200
2	HC 02	6	90	150
3	HC 03	4	60	100
4	HC 04	4	60	100
5	HC 05	3	45	75
6	HC 06	4	60	100
7	HC 08	3	45	75
8	HC 09	4	60	100
Total		36	540	900

SEMESTER IV				
S. No.	Paper Code	Credits	Contact Hours	Marks
9	HC 07	8	120	200
10	HC 10	8	360	200
11	HC 11	4	60	100
12	HC 12	2	30	50
13	HC 13	4	60	100
14	HC 14	4	60	100
Total		30	690	750

#### Legend

S. No.	Paper Code	Paper Name
1	HC 01	Earth Models
2	HC 02	Positioning
3	HC 03	Water Levels and Flow
4	HC 04	Geology and Geophysics
5	HC 05	Hydrography to Support Port Management and Coastal Engineering
6	HC 06	Survey Operations and Applications
7	HC 07	Underwater Sensors and Data Processing
8	HC 08	Maritime Legal Aspects
9	HC 09	Hydrographic Data Acquisition and Processing
10	HC 10	Complex Multidisciplinary Field Project
11	HC 11	Case Study / Professional Research Paper
12	HC 12	Lidar and Remote Sensing
13	HC 13	Management of Hydrographic Data
14	HC 14	Meteorology, Physical Oceanography and Measurements

**OC-52.3**

**SCHEME OF EXAMINATION**

**OC-52.3.1** Only those candidates, who have put in the attendance of 80% of lectures in each course and each practical separately, shall be eligible to appear for the examination. Defence personnel shall be governed by the rules/ regulations in force.

**OC-52.3.2** The minimum passing percentage shall be 55% for each course, 65% for case study/ Professional research and an aggregate of 60% to be declared as successful. A candidate passing in each individual course and failing to secure an aggregate of 60% shall be given an opportunity to re-appear in a maximum of two courses.

**Grading:** The grading to be awarded shall be as follows.

Aggregate percentage	Grade
70% and above	Grade O (outstanding)
65% to less than 70%	Grade A+
60% to less than 65%	Grade A
Below 60%	Grade F (Fail)

**OC-52.3.3** A candidate who obtains less than the passing percentage as per OC-52.3.2 in any course, shall be deemed to have failed and he/ she shall be given one additional attempt to appear and improve his/ her marks without being required to keep any terms. In such cases, the re-examination shall be held within the same semester or the next regular semester. Subject to his/ her successfully passing the re-examination, irrespective of the marks scored, he/ she shall be awarded minimum qualification marks for the particular course. If he/she fails the re-examination he/she shall be disqualified for award of Master of Science / PG Diploma / PG Certificate in Hydrography.

**OC-52.3.4** **(Notified on 25<sup>th</sup> July, 2017)** Re-appearance in failed courses shall be limited to  
(a) Two courses in Semesters I & II taken together.  
(b) Two courses in Semesters III & IV taken together.

A candidate will be disqualified in case of failure in:

- (a) Three Courses, in Semesters I & II taken together.
- (b) Three courses in Semesters III & IV taken together.

A student, who fails in assignments, shall be given an additional assignment. If he/she fails the re-examination/ reassignment, he/she shall be disqualified for award of Master of Science/ PG Diploma/ PG Certificate in Hydrography, as well as subsequent re-registration for the Programme.

**OC-52.3.5** A candidate securing less than 65% marks in Case study/Professional research shall be permitted to revise and resubmit the same before the end of the Programme. Non-submission of the revised Case study/Professional research within the stipulated time, or a subsequent non-acceptance of the same, shall disqualify the candidate.

**OC-52.3.6** Candidates who pass all the examinations prescribed for the Programme in the first attempt shall be eligible for ranking.

**OC-52.3.7** The results of the examination along with the record of marks/ grade of all the candidates appearing for the examination shall be submitted to the University within 30 days of the last date of the last examination. All successful candidates fulfilling all provisions mentioned above shall be considered for the award of Master of Science / PG Diploma / PG Certificate in Hydrography.

**OC-52.3.8** All cases for malpractice shall be dealt with as a case of violation of prevailing Naval Regulations.

**OC-52.3.9** The General Ordinances of Goa University shall not be applicable to these Programmes.

**OC-53** **New Ordinance relating to the Super-speciality disciplines of Surgery Degree-Magister Chirurgiae (M.Ch.) (Applicable from the academic year 2008-09)**

**OC-53** Ordinance relating to the Super-speciality disciplines of Surgery Degree- Magister Chirurgiae M.Ch., [Under Section 24(1) of Goa University Act, 1984]

**OC-53.1 General**

The ordinance shall come into force from the Academic Year 2008 and shall supersede all relevant existing notifications and circulars relating to the course- M.Ch. The ordinance shall apply to all examinations leading to the award of Super-speciality Degree–M.Ch.

**OC-53.1.1 Objectives**

The passing candidate should have acquired knowledge, skills, aptitude and attitudes to be able to function as an independent clinician/consultant and a teacher acquainted with research methodology.

The candidate

- i) Should be well acquainted with the current literature on relevant aspects of the basic, investigative, clinical and operative skills in the relevant Super-speciality.
- ii) Should have learned indications and skills for performance of common surgical operations in the relevant Super-speciality.
- iii) Should have acquired skills and ability to interpret relevant clinical investigations for the practice of surgery in the relevant Super-speciality.
- iv) Should be able to diagnose, plan investigations and treat common conditions in the Super-speciality, by relevant current therapeutic methods.
- v) Should be acquainted with allied and general clinical disciplines to ensure appropriate and timely referral.
- vi) Should be capable of imparting basic surgical training in the relevant Super-speciality.
- vii) Should be able to identify, frame and carry out research proposals in the relevant Super-speciality.
- viii) Should recognize the health needs of society and carry out professional obligations in keeping with principles of National Health Policy and professional ethics.
- ix) Should acquire the competence pertaining to the relevant Super-speciality to practice in the community at all levels of health care system.

**OC-53.1.2 Duration of Course**

- 1) The duration of Super-speciality course including examination, shall be three years and the candidate shall be full-time Senior Resident in the subject. Examination for Super-speciality Degree-M.Ch. shall be held at the end of the 3rd academic year (i.e. six academic terms). The academic term means six month training period.

### OC-53.1.3 Super - speciality Degree to be awarded

Successful candidates shall be awarded the degree Magister Chirurgiae in (relevant Super-speciality)

### OC-53.1.4 Eligibility for admission

Candidates applying for admission to the Magister Chirurgiae (M.Ch.) Degree in the relevant Super-speciality should:-

- i. Possess the M.B.B.S. degree of the Goa University or any other University Recognized as equivalent thereto by the Goa University and the Medical Council of India. Candidates who have failed more than two times during the M.B.B.S Course shall not be eligible for admission.
- ii. Possess a Degree of M.S. in General Surgery from the Goa University or any other University recognized as equivalent thereto by the Goa University (or) Diplomate National Board in Surgery or any other Post Graduate qualification in General Surgery considered as equivalent to M.S. Degree in General Surgery by the Medical council of India.
- iii. The candidate shall be selected according to the existing rules and regulations of Medical College/Institute affiliated to Goa University as notified by state government from time to time. The intake capacity shall be as laid down by MCI per academic year for the course.

### OC-53.2 Course structure for Super-speciality Degree

The syllabus of the Super-speciality course shall be as recommended by the Board of Studies in the concerned subject and revised from time to time in accordance with recommendation of Medical Council of India. The structure of three year Super-speciality course shall be:

**(i) Magister Chirurgiae – (in the relevant speciality)** shall have 4 compulsory theory papers of 100 marks each with 400 marks in aggregate and practicals of 400 marks as stipulated below:

**(a) Paper-I:** Shall deal with Basic sciences- comprising anatomy, physiology, pathology and Pharmacology.

**(b) Paper -II:** Shall deal with Practice of surgery in the relevant Super-speciality.

**(c) Paper -III:** Shall deal with Practice of surgery in the relevant Super-speciality.

**(d) Paper -IV:** Shall deal with Recent advances.

**(e) Practical:** Shall carry 400 marks including viva-voce.

**(ii)** The 400 marks allotted for Practical examination shall be distributed as follows:

<b>1.</b>	<b>Clinical examination of cases:</b>	<b>Total Marks- 200</b>
	<b>Long Clinical Case</b>	<b>80 marks</b>
	<b>3 Short Clinical cases: 3x40 marks each</b>	<b>120 marks</b>
<b>2.</b>	<b>Operative surgery, Viva-voce, Research Paper</b>	<b>Total Marks-200</b>
	<b>Operative surgery</b>	<b>50 marks</b>
	<b>Radiology</b>	<b>25 marks</b>
	<b>Pathology</b>	<b>25 marks</b>
	<b>Ward rounds*</b>	<b>25 marks</b>
	<b>Viva -Voce- Practicals</b>	<b>50 marks</b>
	<b>Research Paper submitted by candidate</b>	<b>25 marks</b>

\*Ward Rounds: The candidate shall be presented with at least 3 admitted cases with commonly encountered clinical problems. The candidate shall be evaluated on his/her ability to logically analyze the problem and suggest rational management of the condition.

**(iii)** All candidates joining the Super-speciality course shall work as full time post graduate student and Senior Resident during the period of programme, attending not less than 80% (Eighty percent) of the course during each academic year, and shall give full time responsibility, assignments and participation in all facets of the educational process.

**(iv) Research Paper:**

(a) The candidate shall submit a Research paper from the clinical material available in the department, at the time of Practical examination which shall be evaluated by the examiners at the time of Practical examination.

(b) Every candidate shall carry out work on an assigned research project under the guidance of a recognized Post Graduate teacher, the result of which shall be written up and submitted in the form of a Research paper fit for publication.

(c) Work for writing the research paper shall be done based on the available clinical material and shall be aimed at contributing to the spirit of inquiry, besides exposing the candidate to the critical analysis of results of management of surgical patients. The candidate shall access and consult the publications regarding latest advances in the medical field related to the topic of research. The Research paper shall be submitted at the time of practical examination for evaluation by the examiners.

(d) The examiners shall evaluate the Research paper and accord the marks which will be part of the marks for practical examination.

**(v)** The training department shall maintain minimum standards laid down by the Medical Council of India for training in Super speciality course.

**(vi)** The training given with due care to the candidates admitted to the Super- speciality course for award of M.Ch. Degree, shall determine the expertise of the specialist and/or medical teachers produced as a result of the educational programme during the period of stay in the institution.

**(vii)** The institution undertaking training programme for Super- speciality course shall set up an Academic cell or a curriculum committee, under the chairmanship of a senior faculty member, which shall work out the details of the training programme in consultation with other department faculty staff and also coordinate and monitor the implementation of the training programme.

**(viii)** The training programme shall be updated as and when required. The structured training programme shall be written up and strictly followed to enable the examiners to determine the training undergone by the candidates and the Medical Council of India inspectors to assess the same at the time of inspection.

**(ix)** Logbook of work done: The candidate shall maintain a Logbook of all surgical procedures performed independently /assisted during the period of the training programme. The Logbooks shall be checked and assessed by the faculty members imparting the training. The candidate shall submit the Logbook at the time of practical examination.

**(x)** During the training, there shall be proper training in basic medical sciences related to the relevant Super-speciality with emphasis on preventive and social aspects and emergency care.

**(xi)** The candidates joining the Super- speciality course shall participate in the teaching and training programme of undergraduate students and interns when required.

**(xii)** Training in Medical Audit, Management, Health Economics, Health Information System, Basics of statistics, exposure to Human Behaviour studies, knowledge of Pharmaco-economics shall be imparted to the candidates joining the Super speciality course.

**OC-53.3 Pattern of Evaluation:**

- (i) The University shall conduct not more than two examinations in a year, with an interval of not less than 4 and not more than 6 months between the two examinations.
- (ii) Evaluation of the examination shall be done by examiners appointed by the University.
- (iii) All the examiners for the Super-speciality course shall be recognized Post Graduate Teachers in the relevant subject.
- (iv) The minimum number of Examiners shall be four, out of which at least two (50%) shall be External Examiners, who shall be invited from other recognized universities from outside the State.
- (v) Under exceptional circumstances, examinations may be held with 3 (three) examiners provided two of them are external and Medical Council of India is intimated the justification of such action prior to the publication of result for its approval. Under no circumstances, result shall be published in such cases without the approval of Medical Council of India.

**OC-53.4 Standard of Passing:**

- (i) There shall be two heads of passing: (1) Theory (2) Practical including clinical and viva-voce. To pass the examination a candidate shall obtain 50% marks in each head of passing separately.
- (ii) There shall be no provision for exemption or to carry forward of marks.
- (iii) There shall be no provision for improvement of class.

**OC-54                    ORDINANCE RELATING TO THE FOUR-YEAR INTEGRATED PROGRAMME LEADING TO THE DEGREE OF BACHELOR OF ARTS AND BACHELOR OF EDUCATION (B.A.B.ED.) / DEGREE OF BACHELOR OF SCIENCE AND BACHELOR OF EDUCATION (B.SC.B.ED.) (w.e.f. ACADEMIC YEAR 2015-16)****OC-54.1                GENERAL****OC-54.1.1            PREAMBLE**

The four-year integrated programme aims at integrating general studies comprising social sciences or humanities/ science, and professional studies comprising foundations of education, pedagogy of school subjects, and practicum related to the tasks and functions of a school teacher for the B.A.B.Ed. and B.Sc.B.Ed. Programmes respectively. It maintains a balance between theory and practice, and coherence and integration among the components of the programme, representing a wide knowledge base of a secondary school teacher. The programme aims at preparing teachers for Middle and Secondary School education.

**OC-54.1.2            INTRODUCTION**

**(Notified on 25<sup>th</sup> July, 2017)** The Programme will be under the Faculty of Education without any lateral exit. An integrated approach to the teaching of social sciences or humanities/ science subjects shall be followed throughout the teaching program. Work experience, Health Education and Working with the Community shall also be an integral part of the curriculum as per recommendations of the National Council for Teacher Education (NCTE). A core training program for developing teaching skills shall also form part of the Programme.

**OC-54.1.3****DEGREE TO BE AWARDED**

The degree to be awarded shall be called Bachelor of Arts and Bachelor of Education (B.A.B.Ed.)/ Bachelor of Science and Bachelor of Education (B.Sc.B.Ed.).

**OC-54.1.4****DURATION OF THE PROGRAM**

The B.A.B.Ed. /B.Sc.B.Ed. Programme shall be full time, for four academic years of eight semesters, with a minimum of 5- 6 hours per day adding up to a minimum of 36 hours per week. A student-teacher may however be permitted to complete the Programme within a maximum period of six years from the date of admission to the Programme.

**OC-54.1.5****ELIGIBILITY**

- (i) **(Notified on 25<sup>th</sup> July, 2017)** (a) A candidate to be eligible for admission to the B.A.B.Ed. Programme is required to have passed the HSSCE of the Goa Board of Secondary and Higher Secondary Education, or any other examination recognized as equivalent thereto by the Goa University, with a minimum percentage as per NCTE norms.

**(Notified on 25<sup>th</sup> July, 2017)** (b) A candidate to be eligible for admission to the B.Sc.B.Ed. Programme is required to have passed the HSSCE in the Science Stream of the Goa Board of Secondary and Higher Secondary Education, or any other examination recognized as equivalent thereto by the Goa University, with a minimum percentage as per NCTE norms.

- (ii) **(Notified on 25<sup>th</sup> July, 2017) Eligibility for admission to Second Year B.A.B.Ed./ B.Sc.B.Ed.:**

Candidates who are eligible to appear for examinations of Semesters I and II shall be eligible for admission to the Second Year, irrespective of backlogs in Semesters I and II.

- (iii) **(Notified on 25<sup>th</sup> July, 2017) Eligibility for admission to Third Year B.A.B.Ed./ B.Sc.B.Ed.:**

Only those candidates, who have passed Semester I and II, fulfilled the requirement of the Semesters III and IV, and have not more than five papers as backlog from Semester III and IV together, shall be considered eligible for admission to the Third Year.

- (iv) **(Notified on 25<sup>th</sup> July, 2017) Eligibility for admission to Fourth Year B.A.B.Ed./ B.Sc.B.Ed.:**

Only those candidates, who have passed Semesters I, II, III and IV, fulfilled the requirement of the Semesters V and VI, and have not more than five papers as backlog from Semesters V and VI together, shall be considered eligible for admission to the Fourth Year.

- (v) **(Notified on 25<sup>th</sup> July, 2017)** In respect of the students, who appear for two consecutive Semesters, the result of the higher Semester can be declared, irrespective of the performance in the lower Semester. However, the remark, "Result Reserved for Lower Examination (RRLE)" shall be shown in the remark column of the even semester if there is a backlog in the preceding odd semester.

**OC-54.1.6      ADMISSION**

- (a) Admission shall be made on merit on the basis of marks obtained in the qualifying examination and in an entrance examination or any other selection process as per the policy of the State Government/University.
- (b) The admission procedure to the Programme shall be as determined by the State Government/University.
- (c) Number of seats under various reservation categories shall be in accordance with the directives of the Government of Goa and as adopted by the University.
- (d) **(Notified on 25<sup>th</sup> July, 2017)** There shall be a basic unit of fifty students.
- (e) The fee structure shall be as prescribed by the University/ Fee Fixation Committee/ State Government in accordance with provisions of NCTE, as amended from time to time.

**OC-54.2      PROGRAM STRUCTURE**

- (a) The B.A.B.Ed. and B.Sc.B.Ed. Programmes shall consist of Courses at par with those of Bachelor's Programmes in Arts and Science respectively, and supportive courses, pedagogic courses, and practicum including school experience and internship in teaching. The Programmes shall also include Information and Communication Technology (ICT), gender studies, yoga education, and inclusive education.
- (b) There shall be courses in
  - (i) Perspectives in Education;
  - (ii) Curriculum and Pedagogic Studies;
  - (iii) Language and Communication, and Development of Self;
  - (iv) Practicum including School Internship.
- (c)(i) Each instructional period mentioned therein shall be of 45 minutes duration.
- (ii) **(Notified on 25<sup>th</sup> July, 2017)** In the subject, where the field training/ work is a compulsory component of the curriculum, a minimum of 4 days equivalent to 24 clock hours of field training/work at First Year and 12 days equivalent to 72 clock hours at each of the Second, Third and Fourth years, shall be undertaken.
- (iii) This work shall be deemed equivalent to one practical period per week per batch of 15 students for the respective Semesters.

**OC-54.2.1      B.A.B.Ed.**

**(A) SEMESTER I**

- (a) Course Structure:
  - (i) A Core Course in English
  - (ii) A Course in an Optional Language (Hindi/ Marathi/ Konkani)
  - (iii) A Course in each of the three subjects selected from the Major category at the B.A. Programme.
  - (iv) **(Notified on 25<sup>th</sup> July, 2017)** A Foundation Course as offered at the B.A. Programme.
  - (v) A Course in Education.



- (vi) A Course in Environmental Studies.
- (vii) **(Notified on 25<sup>th</sup> July, 2017)** Practicum: Physical Education, Co-curricular activities including Performing Arts and Fine Arts.

**(b)** Instructional Periods:

**(Notified on 25<sup>th</sup> July, 2017)** The six Courses listed at (i) to (iv), shall have five instructional periods per week. Courses in Education and Environmental Studies shall have two instructional periods per week.

The batch size for the practical component of those Subjects such as Geography having practicals, shall not exceed 25 students, and instructional periods as prescribed by the respective BoS.

Performing Arts, Fine Arts and Physical Education shall have a batch size not exceeding 25 students per batch, and shall have three instructional periods per batch per week.

**(c)** Maximum Marks:

The six Courses listed at (i) to (iv) shall carry 100 marks each. The Courses in Education, Environment Studies and Practicum shall carry 50 marks each.

Notwithstanding the selection of subjects at the time of admission to Semester-I, the Principal of the college may permit a student to change one or more subjects taken by the student within a period of fifteen days from the date of commencement of the Programme.

**(B) SEMESTER II**

**(a)** Course Structure:

- (i) A Core Course in English.
- (ii) A Course in an Optional Language (Hindi/ Marathi/ Konkani)
- (iii) A Course in each of the same three subjects from the Major category opted in Semester I.
- (iv) **(Notified on 25<sup>th</sup> July, 2017)** A Core Course in Self-development.
- (v) A Course in Education.
- (vi) A Core Course in Environment Studies.
- (vii) **(Notified on 25<sup>th</sup> July, 2017)** Practicum: Co-curricular Activities including Performing Arts and Fine Arts, Observation of 10 Lessons of teachers.

- (b) (Notified on 25<sup>th</sup> July, 2017)** Instructional Periods: The six Courses listed at (i) to (iv) shall have five instructional periods per week. The Courses in Education and Environment Studies shall have two instructional periods per week.

The batch size for the practical component of those Subjects such as Geography having practicals, shall not exceed 25 students, and instructional periods as prescribed by the respective BoS.

Performing Arts and Fine Arts shall have a batch size not exceeding 25 students per batch, and shall have three instructional periods per batch per week.

- (c) Maximum Marks:**  
The six Courses listed at (i) to (iv) shall carry 100 marks each.  
Courses in Education, Environment Studies and Practicum shall carry 50 marks each.

**(C) SEMESTER III**

**(a) Course Structure:**

- (i) A Core Course in English.
- (ii) A Course in each of the same three Major subjects as opted in Semester I and Semester II.
- (iii) A Course in a subject allied to any one of the Major subjects in (ii) above. The list of Allied Subjects shall be as notified by the University.
- (iv) A Core Course in ICT.
- (v) A Course in Education.
- (vi) **(Notified on 25<sup>th</sup> July, 2017)** -Deleted –
- (vii) **(Notified on 25<sup>th</sup> July, 2017)** Practicum: Micro-teaching, Co-curricular Activities including Performing Arts and Fine Arts, and Internship (two-week duration).

- (b) (Notified on 25<sup>th</sup> July, 2017)** Instructional Periods: The six Courses listed at (i) to (iv) shall have five instructional periods per week. Course at (v) shall have two instructional periods per week.

The batch size for the practical component of those Subjects such as Geography having practicals, shall not exceed 25 students, and instructional periods as prescribed by the respective BoS.

Performing Arts and Fine Arts shall have a batch size not exceeding 25 students per batch, and shall have three instructional periods per batch per week.

- (c) (Notified on 25<sup>th</sup> July, 2017)** Maximum Marks: The six Courses listed at (i) to (iv) shall carry 100 marks each. Each of the Course in Education shall carry 50 marks. Practicum shall carry **100** Marks.

**(D) SEMESTER IV**

**(a) Course Structure:**

- (i) A Core Course in English.

- (ii) A Course in each of the same three subjects from the Major category as opted in Semester III.
  - (iii) A Course in the same subject allied to one of the Major subjects as opted in Semester III.
  - (iv) A Course in Education.
  - (v) **(Notified on 25<sup>th</sup> July, 2017)** -Deleted –
  - (vi) **(Notified on 25<sup>th</sup> July, 2017)** Practicum: Micro-teaching and Integration Lesson, Physical Education, Co-curricular Activities including Performing Arts and Fine Arts, and Internship (two-week duration).
- (b) (Notified on 25<sup>th</sup> July, 2017)** Instructional Periods: The six Courses listed at (i) to (iv) shall have five instructional periods per week.

The batch size for the practical component of those Subjects such as Geography having practicals, shall not exceed 25 students, and instructional periods as prescribed by the respective BoS.

Performing Arts and Fine Arts shall have a batch size not exceeding 25 students per batch, and shall have three instructional periods per batch per week.

- (c) (Notified on 25<sup>th</sup> July, 2017)** Maximum Marks: The six Courses listed at (i) to (iv) shall carry 100 marks each. Practicum shall carry 150 Marks.

**(E) SEMESTER V**

**(a) Course Structure:**

- (i) Three Courses in one of the subjects such as English/ Hindi/ Konkani/ Marathi/ Geography/ History, as opted for in Semesters I – IV.
- (ii) A Course in Education.
- (iii) Two Courses in Methodology cum Content in two School subjects such as English/ Hindi/ Konkani/ Marathi/ Geography/ History.
- (iv) A Project on a topic preferably related to any one of the Major subjects in (i) or from the Education component of the programme. The Project shall be undertaken during Semesters V & VI. The assessment of the planning and process of the project will be done during Semester V, and assessment of the report at the end of Semester VI.
- (v) **(Notified on 25<sup>th</sup> July, 2017)** Practicum: Peer Teaching, Co-curricular Activities, Health and Physical Education, Work Experience including Working with the Community and Internship (four-week duration).

- (b) Instructional Periods:**  
Each of the four Courses at (i) and (ii) shall have five instructional periods per week. Both the Courses at (iii) shall each have three instructional periods per week.

The Project Course shall have instructional periods as defined in the Project Manual.

Project work shall be assigned to a single student or upto a group of 5 students. The staff shall be assigned one or more such groups according to the requirement of the subject/college.

- (c) Maximum Marks:**  
Each of the four Courses under (i) and (ii) shall carry 100 marks. The two Courses on Methodology cum Content shall carry 50 marks each. Practicum will carry 200 marks. The project shall carry 50 marks for the Planning and Process.

**(F) SEMESTER VI**

**(a) Course Structure:**

- (i) Three Courses in the same/ other subject under the Major category (English/ Hindi/ Konkani/ Marathi/ Geography/ History) offered at Semester V, but not other than those opted for in Semesters I – IV.
- (ii) A Course in Education.
- (iii) Two Courses in Methodology cum Content in the same two School subjects opted at Semester V.
- (iv) Continuation of the Project from Semester V and submission of a Report.
- (v) **(Notified on 25<sup>th</sup> July, 2017)** Practicum: Practice Teaching, Co-curricular Activities, Health and Physical Education, Working with the Community, and Internship (four-week duration).

- (b) Instructional Periods:**  
Each of the four Courses at (i) and (ii) shall have five instructional periods per week and Courses at (iii) shall have three instructional periods per week.

The Project Course shall have instructional periods as defined in the Project Manual.

- (c) Maximum Marks:**  
Each of the four Courses at (i) and (ii) shall carry 100 marks. Each of the Courses on Methodology cum Content at (iii) and the Project report shall carry 50 marks each, and Practicum shall carry 200 marks.

**(G) SEMESTER VII**

**(a) Course Structure:**

- (i) **(Notified on 25<sup>th</sup> July, 2017)** Three Courses in the same/other subjects under the Major category (English/ Hindi/ Konkani/ Marathi/ Geography/ History) as opted in Semester V but not other than those opted for in Semesters I – IV.
- (ii) A Course in Education.

(iii) Two Courses in Methodology cum Content in the same two School subjects opted at Semesters V and VI.

(iv) **(Notified on 25<sup>th</sup> July, 2017)** Practicum: Practice Teaching, and Internship (four-week duration).

**(b)** Instructional Periods:

Each of the four Courses at (i) and (ii) shall have five instructional periods per week and Courses at (iii) shall each have three instructional periods per week.

**(c)** Maximum Marks:

Each of the four Courses at (i) and (ii) shall carry 100 marks. Two Courses on Methodology cum Content shall carry 50 marks each. Practicum shall carry 250 marks.

**(H) SEMESTER VIII**

**(a)** Course Structure:

(i) **(Notified on 25<sup>th</sup> July, 2017)** Three Courses in the same subject under the Major Category opted in Semester VII.

(ii) **(Notified on 25<sup>th</sup> July, 2017)** Four Courses in Education.

(iii) **(Notified on 25<sup>th</sup> July, 2017)** Practicum: Practice Teaching, and Internship (four-week duration).

**(b)** Instructional Periods:

Each of the three Courses at (i) shall have five instructional periods per week and Courses at (ii) shall each have two instructional periods per week.

**(c)** **(Notified on 25<sup>th</sup> July, 2017)** Maximum Marks: Each of the three Courses at (i) shall carry 100 marks. Four Courses in Education at (ii) shall carry 50 marks each. Practicum shall carry 250 marks.

**(I)** Transaction of practicum for all semesters will be as prescribed by the National Council For Teacher Education (NCTE).

**OC-54.2.2**

**B.Sc.B.Ed.**

**(A) SEMESTER I**

**(a)** Course Structure:

(i) Two Courses each in three subjects from either Group I (Physics, Chemistry and Mathematics) or from Group II (Chemistry, Botany and Zoology).

Generally, each Course shall have a Theory component and a Practical component. In the case of Mathematics and similar subjects, both the Courses shall have theory component only.

(ii) A Course in Education.

(iii) A Core Course in Environment Studies.

(iv) **(Notified on 25<sup>th</sup> July, 2017)** Practicum: Physical Education, Co-curricular activities including Performing Arts and Fine Arts.

(b) **(Notified on 25<sup>th</sup> July, 2017)** Instructional Periods: All the six Courses at (i) shall have three instructional periods per week for the Theory component and three instructional periods for the Practical component. However, for Courses having Theory component only, there shall be five instructional periods per week. The Course at (ii) and Environment Studies shall have two instructional periods each per week.

Performing Arts, Fine Arts and Physical Education shall have a batch size not exceeding 25 students per batch, and shall have three instructional periods per batch per week.

(c) Maximum Marks:

The six Courses at (i) shall carry 100 marks each (75 marks for Theory and 25 marks Practical components). The Courses without Practical component shall carry 100 marks each. The Course on Environment Studies shall carry 50 marks, (40 marks for Theory and 10 marks for Practical components). The Course on Education and Practicum shall carry 50 marks each.

Notwithstanding the selection of subjects at the time of admission to Semester I, the Principal of the college may permit a student to interchange between Group I and Group II subjects taken by the student, within a period of fifteen days from the date of commencement of the Programme.

**(B) SEMESTER II**

(a) Course Structure:

(i) Two Courses in the subjects as opted in Semester I.

(ii) A Course in Education.

(iii) A Core Course in Environment Studies.

(iv) **(Notified on 25<sup>th</sup> July, 2017)** Practicum: Observation of Lessons of Teachers, Co-curricular activities including Performing Arts and Fine Arts.

(b) **(Notified on 25<sup>th</sup> July, 2017)** Instructional Periods:

Performing Arts, Fine Arts and Physical Education shall have a batch size not exceeding 25 students per batch, and shall have three instructional periods per batch per week.

(c) Maximum Marks:

The marks allotted to each Course, shall be as given under Semester I.

**(C) SEMESTER III**

**(a) Course Structure:**

- (i) Two Courses in the subjects as opted in Semester I – II.
- (ii) Two Courses in Education.
- (iii) **(Notified on 25<sup>th</sup> July, 2017)** Practicum: Micro-teaching, Co-curricular activities including Performing Arts and Fine Arts, and Internship (two-week duration).

**(b) (Notified on 25<sup>th</sup> July, 2017) Instructional Periods:**

Each of the Courses shall have instructional periods as given under Semester I.

Performing Arts, Fine Arts and Physical Education shall have a batch size not exceeding 25 students per batch, and shall have three instructional periods per batch per week.

**(c) Maximum Marks:**

The marks allotted to each Course, shall be as given under Semester I.

**(D) SEMESTER IV**

**(a) Course Structure:**

- (i) Two Courses in the subjects as opted in Semester I – II.
- (ii) One Course in Education.
- (iii) **(Notified on 25<sup>th</sup> July, 2017)** Practicum: Micro-teaching, Co-curricular activities including Performing Arts and Fine Arts, and Internship (two-week duration).

**(b) (Notified on 25<sup>th</sup> July, 2017) Instructional Periods:**

Each of the Courses at (i) above shall have instructional periods as given under Semester I. The Course on Education shall have five instructional periods per week.

Performing Arts, Fine Arts and Physical Education shall have a batch size not exceeding 25 students per batch, and shall have three instructional periods per batch per week.

**(c) Maximum Marks:**

The marks allotted to each Course at (i), shall be as given under Semester I.

The Course on Education shall carry 100 marks.

The Practicum component shall carry 50 marks.

**(E) SEMESTER V**

**(a) Course Structure:**

- (i) Three Courses in any one subject from Physics/ Chemistry/ Mathematics/ Botany/ Zoology, of which two Courses shall be of Theory component and one Course shall be of Practical component. Subjects not having practical component shall have all the three Courses in Theory only.
- (ii) A Course in Education.
- (iii) Two Courses in Methodology cum Content in two School subjects such as Physical Sciences/ Biological Sciences/ Mathematics.
- (iv) A Project on a topic preferably related to any one of the Major subjects in (i) or from the Education component of the programme. The Project shall be undertaken during Semesters V and VI. The assessment of the planning and process of the project will be done during Semester V, and assessment of the report at the end of Semester VI.

(v) **(Notified on 25<sup>th</sup> July, 2017)** Practicum: Peer Teaching, Health & Physical Education, Work Experience, and Internship (four-week duration).

**(b)** Instructional Periods:

Each Theory Course at (i) shall have four instructional periods per week.

Each Practical (Laboratory Exercises) Course at (i) shall have eight instructional periods per week.

The Course at (ii) shall have five instructional periods per week. The Courses at (iii) shall have three periods per week.

The Project Course shall have instructional periods as defined in Project Manual.

Project work shall be assigned to a single student or upto a group of 5 students. The staff shall be assigned one or more such groups according to the requirement of the Subject/College.

**(c)** Maximum Marks:

The four Courses at (i) and (ii) shall carry 100 marks each.

The Course on Content cum Methodology shall carry 50 marks each.

Practicum shall carry 200 marks. The project shall carry 50 marks for the Planning and Process.

**(F) SEMESTER VI**

**(a)** Course Structure:

(i) **(Notified on 25<sup>th</sup> July, 2017)** Three Courses in the same subject under the Major category from Physics/ Chemistry/ Mathematics/ Botany/ Zoology opted in Semester V, of which two Courses shall be of Theory component and one Course shall be of Practical component. Subjects not having practical component shall have all the three Courses in theory only.

(ii) One Course in Education

(iii) Two Courses in Methodology cum Content in two School subjects such as Physical Sciences/ Biological Sciences/ Mathematics.

(iv) Continuation of the Project from Semester V and submission of a Report.

(v) **(Notified on 25<sup>th</sup> July, 2017)** Practicum: Peer Teaching, Co-curricular Activities, Health & Physical Education, Working with the Community, and Internship (four-week duration).

**(b)** Instructional Periods:

Each of the Courses at (i) shall have instructional periods as given under Semester V.

Each Course at (ii) and (iii) shall have five instructional periods per week.

The Project Course shall have instructional periods as defined in Project Manual.

**(c)** Maximum Marks:

The four Courses under (i) and (ii) above shall carry 100 marks each. Courses at (iii) shall carry 50 marks each.

The Practicum shall carry 200 marks and Project Report shall carry 50 marks.

**(G) SEMESTER VII**

**(a)** Course Structure:

(i) **(Notified on 25<sup>th</sup> July, 2017)** Three Courses in the same/ other subjects opted under Semester V, but not other than those opted for in Semesters I – IV.

(ii) One Course in Education.

(iii) Two Courses in Methodology cum Content in the same two School subjects opted at Semesters V and VI.



- (iv) **(Notified on 25<sup>th</sup> July, 2017)** Practicum: Practice Teaching and Internship (four-week duration).
- (b) **Instructional Periods:**  
Each of the Courses at (i) shall have instructional periods as given under Semesters V and VI.  
The Course at (ii) shall have five instructional periods per week. Courses at (iii) shall have three periods per week.
- (c) **Maximum Marks:**  
The three Courses at (i) and (ii) shall carry 100 marks each.  
Courses at (iii) shall carry 50 marks each.  
Practicum will carry 250 marks.

**(H) SEMESTER VIII**

- (a) **Course Structure:**
  - (i) **(Notified on 25<sup>th</sup> July, 2017)** Three Courses in the same subjects as opted in Semester VII.
  - (ii) **(Notified on 25<sup>th</sup> July, 2017)** Four Courses in Education.
  - (iii) **(Notified on 25<sup>th</sup> July, 2017)** Practicum: Practice Teaching and Internship (four-week duration).
- (b) **Instructional Periods:**  
Each of the Courses at (i) shall have instructional periods as given under Semesters V to VII. Each Course at (ii) shall have two instructional periods per week.
- (c) **(Notified on 25<sup>th</sup> July, 2017)** **Maximum Marks:** Each of the three Courses at (i) shall carry 100 marks. Four Courses in Education at (ii) shall carry 50 marks each. Practicum shall carry 250 marks.

**(I)** Transaction of practicum for all semesters will be as prescribed by the NCTE.

**OC-54.3**

**OC-54.3.1**

**SCHEME OF EXAMINATION**

There shall be continuous Intra-Semester Assessment (ISA) and Semester End Examination (SEE), for each of the Programmes. Examinations in Laboratory exercises shall be conducted for Courses having practical component.

- (a)(i) The continuous ISA shall be conducted by using various-modes of evaluation such as assignment, presentation, orals, of which a written test shall form a compulsory component.  
Generally, ISA for a given Course shall be conducted by the teacher(s) teaching that Course.  
ISA shall not be conducted for the Practical component of a Course.  
The schedule for the ISA component shall be notified to all at the beginning of the semester.  
The marks of ISA shall be communicated to the students within two weeks.
- (ii)(a) **(Notified on 25<sup>th</sup> July, 2017)** The ISA components of Courses that do not have a practical module, shall carry 30% of maximum marks and the SEE components shall carry 70% of maximum marks allotted for the courses.
- (b) **(Notified on 25<sup>th</sup> July, 2017)** For Courses that have a practical module, the Practical component shall be assessed for 25% marks and the Theory component for 75% marks. The ISA for Theory shall carry 20% of maximum marks and the SEE shall carry 80% of maximum marks allotted.
- (c) **(Notified on 25<sup>th</sup> July, 2017)** The ISA components for Education related Courses that have a practical component shall carry 40% of maximum marks and the SEE components shall carry 60% of maximum marks allotted for the courses.

- (iii) Every College shall appoint a three member committee to monitor the ISA in the college. There shall be no remission in workload or remuneration for carrying out this work.
  - (iv) A student who fails to appear for a test due to a genuine reason shall be given another opportunity.
  - (v) A student who does not appear for the ISA tests shall not be eligible to answer SEE of that Course.
- (b)(i)** The SEE shall be conducted at the conclusion of a given Semester.
- (ii) A candidate shall be considered to have successfully fulfilled the requirements of a Semester and deemed eligible to appear for the SEE provided he/she fulfills the minimum attendance requirements as per the relevant Ordinance of the University.
  - (iii) A tentative schedule of SEE examination, evaluation, declaration of results, and such matters, shall be prepared by the respective College(s), preferably at the beginning of each academic year for first four Semesters and shall be notified to the students with a copy to the University. Setting of the question papers, evaluation of answer-scripts and declaration of results shall be done by the respective College.
  - (iv) The pattern of question papers to be set for the SEE in a given subject and the scheme of marking shall be decided by the Board of Studies in that subject. For this purpose, the Board of Studies shall frame specimen question papers in the concerned subject for each semester for the information of the students. If two or more Colleges desire to have the same question paper in any of the subjects, a common paper may be set by the teachers from the concerned college. For this purpose, a Committee of senior teachers shall be constituted by the Principal of the concerned College.
  - (v) Assessment of answer-scripts of SEE of Semesters I to IV shall be organized by the colleges. The assessment of the SEE answer scripts at the Semesters I to IV shall be done by the teachers of respective colleges.
  - (vi) **(Notified on 25<sup>th</sup> July, 2017)** The Schedule of the Examination and the setting of question papers for SEE for Semesters V to VIII shall be done centrally by the University, by the paper setters designated for the relevant subjects of the B.A.B.Ed. and B.Sc.B.Ed. Programmes.
  - (vii) **(Notified on 25<sup>th</sup> July, 2017)** The duration of SEE theory paper carrying up to 30 marks shall be of one hour; the theory paper carrying above 30 marks up to 40 marks shall be of one and half hour, and the theory paper carrying above 40 marks up to 80 marks shall be of two hours.
- (c)(i)** For Courses having practical components, marks shall be allotted for journal/lab record book, field work, experiments, and oral/viva voce during the examination: 20% for journals, 60% for the experiment and 20% for the orals, or as recommended by the BoS and approved by the Academic Council, and notified by the University.
- (ii) Examiners shall take into account the regularity of the candidate in attending the Laboratory course, completeness of the exercises, presentation and style of writing the journal.
  - (iii) For subjects having field work, the candidate shall be required to submit the report of such field excursion(s) along with the journals for assessment.
  - (iv) For assessing the performance of the candidate in the assigned experiment, the examiner shall take into account the planning, procedure and technique followed by the candidate along with the readings/observations, results and presentation.
  - (v) For the viva/oral examination, the examiner(s) shall assess the knowledge of the candidate in the Course, as well as the experiment(s) performed by the candidate.
  - (vi) Record of the breakup of marks thus obtained by the candidate shall be maintained by the respective college for Semesters I to IV, in a sealed envelope for a minimum period of 4 years.
  - (vii) The practical examination shall be treated as an independent head of passing.

- (viii) A candidate may be permitted, strictly on medical or other genuine grounds, to appear for a practical examination out of turn, irrespective of the timetable and the batch allotted to him/her, in the examination Programme for Semester V to Semester VIII issued by the University.
- (ix) Such permission may be granted by the University if so recommended by the Principal of the college.
- (x) This 'out of turn' appearance may be in the same college in a different batch or in a different college.
- (xi) The candidate shall be required to remit the requisite fee for his/her being examined out of turn.
- (xii) The project shall be assessed by the Internal Examiner (Project Supervisor) and External Examiner for 50 marks each, as per the guidelines defined in the project manual.

**OC-54.3.2 REVALUATION**

- (a) There shall be no revaluation of answer books of the candidates at Semester I to Semester IV examinations. However, personal verification of marks shall be granted to the candidate in the presence of the Principal/Vice-Principal and the concerned Examiner, provided he has applied for the same along with payment of prescribed fees within one week of the declaration of result.
- (b) The following shall be the procedure for the verification of marks:
  - (i) On a notified day and time, which should be not later than 10 days after the receipt of application from the candidate, the candidate shall be shown the answer book in the chamber of the Principal/Vice-Principal in the presence of the Examiner concerned.
  - (ii) If the candidate is not satisfied with the result on personal verification of the answer book, he may apply within a week to the College Examination Grievances Redressal Committee (CEGRC) as defined in OC-54.4.2.
  - (iii) The CEGRC shall take appropriate action as per the relevant Ordinance and inform the candidate of the decision taken accordingly.
  - (iv) The provisions of Ordinance OA-5.15 for revaluation/ verification of marks shall be applicable to Semesters V to VIII.

**OC-54.3.3 STANDARD OF PASSING**

- (a) A student is required to score a minimum of 40% of the maximum marks in ISA and SEE components taken together, to pass in a course in Semesters I to VIII.
- (b) A student is required to score a minimum of 50% marks to pass in practicum of each of the semesters.
- (c) If a student fails a course, the marks secured in the ISA of that Course, shall be carried forward.
- (d) An unsuccessful candidate who obtains the minimum percentage of marks prescribed for passing in a Course shall be exempt from reappearing in that course.

- OC-54.3.4(a)** To be eligible for a class, a student is required to complete the program in the minimum prescribed period and is required to pass all Courses of Semesters V, VI, VII and VIII in the first attempt.
- (b) The class shall be awarded on the basis of the aggregate total of marks scored at Semesters V, VI, VII and VIII taken together as follows:
    - 70% and above – Distinction
    - 60% to <70% - First Class
    - 50% to <60% - Second class
    - 40% to <50% - Pass Class
  - (c) A candidate who does not clear all the Courses of Semesters V, VI, VII and VIII in the first attempt, shall not be eligible for any Class and shall be declared as "PASSES".

**OC-54.3.5 IMPROVEMENT OF PERFORMANCE**

- (a) A candidate who has passed the B.A.B.Ed/B.Sc.B.Ed. Degree Examination and desires to improve his/her performance/total score shall be permitted to appear again.
- (b) **(Notified on 25<sup>th</sup> July, 2017)** However, such a candidate shall be allowed to reappear only in the SEE component of all the Courses of Semester I/II/III/IV/ V / VI / VII / VIII examinations. For this purpose, the marks scored at the first appearance, as also in ISA component of the other Courses, shall be carried forward for tabulation of the result under "improvement of performance".
- (c) **(Notified on 25<sup>th</sup> July, 2017)** - Deleted -
- (d) **(Notified on 25<sup>th</sup> July, 2017)** This facility to reappear under "improvement" shall be available at the end of the fourth semester for semesters I, II, III and IV, and during the immediately subsequent regular Semester examinations for Semesters V to VIII.
- (e) **(Notified on 25<sup>th</sup> July, 2017)** The candidate availing of this provision shall be considered to have passed Semesters I/II/III /IV/ V / VI / VII / VIII "under improvement" and this fact shall be recorded on his/her statements of marks and other relevant documents.
- (f) The candidate shall be required to surrender the original statement of marks and other relevant documents at the time of receiving the fresh statement of marks in the event of improvement of performance/ total score.
- (g) **(Notified on 25<sup>th</sup> July, 2017)** A candidate can appear only once at the end of Semester IV, and semesters V, VI, VII and VIII under this clause.
- (h) The performance of a candidate, who appears under this provision and fails to improve, shall be ignored.

- OC-54.3.6(a)** The statement of marks for the Semesters I to IV shall be issued by the respective colleges.
- (b)** The statement of marks issued to the candidate at the end of Semesters V to VIII by the University shall indicate Course-wise marks of the respective Semester along with the Semester-wise aggregate marks of the previous Semester examinations conducted by the University.

**OC-54.3.7 SUPPLEMENTARY EXAMINATION**

A supplementary examination shall be conducted, preferably after 15 days from the declaration of results of Semester II and IV examinations.

Candidates are allowed to answer at this examination those Courses in which they are unsuccessful.

**OC-54.4 COLLEGE COMMITTEES FOR EXAMINATION, UNFAIR MEANS INQUIRY, AND EXAMINATION GRIEVANCES REDRESSAL.**

The following committees shall be constituted by the Principal of the college for a tenure of 3 years each.

1. College Examination Committee
2. College Unfair Means Inquiry Committee
3. College Examination Grievance Redressal Committee

1. College Examination Committee
  - (a)** The committee shall consist of:
    - (i) A senior teacher who shall be the Chairperson
    - (ii) Two or four regular teachers other than the Chairperson
  - (b)** This Committee shall be generally in-charge of all matters pertaining to the first four Semesters examination in the College.

- (c) The Committee shall prepare the examination time-table, arrange to get the question paper sets printed/ cyclostyled and answer books assessed.
  - (d) The Committee shall arrange to get the results prepared, announced and individual statement of marks prepared and issued to the candidates.
- 2. College Unfair Means Inquiry Committee (CUMIC)**
- (a) The Committee shall comprise:
    - (i) Vice-Principal or a senior teacher as Chairperson
    - (ii) Two members of the College Examination Committee
  - (b) The committee shall investigate cases of unfair means and malpractices reported, in a manner as prescribed below and shall recommend to the Principal a course of action as prescribed in OA-5.14
    - (i) A candidate alleged to have used unfair means at the Semesters I to IV B.A.B.Ed./B.Sc.B.Ed. examinations shall be served with a show cause notice and made aware of the charges/ allegations reported against him/ her so as to enable him/ her to prepare his/ her defense at the time of appearance before the CUMIC and informing him/ her thereby of the proposed action to be taken in his/ her case, with a request to bring a written reply at the hearing as to why the action proposed should not be taken against him/ her.
    - (ii) The reply received by the Committee from the candidate when he appears before it shall be considered by the Committee and the final recommendation in the matter be taken and reported to the Principal for his approval.
    - (iii) The punishment finally awarded shall be equal to or less than what is mentioned in the show cause notice, but not more than what is mentioned therein.
    - (iv) CUMIC is a recommendatory body. The Principal has to exercise his/her power under Statute SB-13(iv) of the University and issue a final order.
    - (v) The category of malpractice and the quantum of punishment for each category thereof shall be as given in Ordinance OA-5.14.19.
    - (vi) In addition to these guidelines, each case be examined in detail and punishment awarded on the merit of each case.
- 3. College Examination Grievance Redressal Committee:**
- (a) The Committee shall comprise:
    - (i) Vice-Principal/Senior member of teaching staff as Chairperson, provided that he is not the Chairperson of CUMIC.
    - (ii) Two regular teachers, who are not members on CUMIC or the College Examination Committee.
  - (b) In case the grievance concerns any member of the committee, the Principal shall reconstitute the committee, excluding the concerned member.

- (c) This committee shall investigate into written complaints from the students referred to them by the Principal in the conduct of examinations in a manner as prescribed below, and recommend a course of action to the Principal as prescribed in OA- 5.14.

**OC-55**                    **Ordinance relating to post-graduate diploma programmes in the Faculty of Medicine (Pre-clinical, Para-clinical and Clinical)** (Under Section 24(1) of Goa University Act, 1984). (Effective from the Academic Year 2013-2014).

**OC – 55.1**                **General**  
This Ordinance shall apply to all the post-graduate diploma programmes in Pre-clinical, Para-clinical and Clinical subjects.

**OC – 55.2**                **Objectives**

- a) To bring the post-graduate diploma curriculum on par with model curriculum recommended by Medical Council of India (MCI).
- b) To impart quality post-graduate medical education.
- c) To offer new, relevant and need-based post-graduate diploma programmes recognized by the MCI.
- d) To produce competent specialists:
  - (i) Who shall recognize the health needs of the community, and carry out professional obligations ethically and in keeping with the objectives of the National Health Policy
  - (ii) Who shall have mastered most of the competencies, pertaining to the specialty that is required to be practiced at the secondary and tertiary levels of the Health care delivery system.
  - (iii) Who shall be aware of the contemporary advances and developments in the discipline concerned, and
  - (iv) Who shall have acquired a spirit of scientific inquiry and be oriented to the principles of research methodology and epidemiology.

**OC-55.3**                    **Duration of Programme**  
The duration of the post-graduation diploma programmes including the period of examination shall be two years with four academic terms. Each academic term shall be of six months training period.

**OC-55.4**                    **Post-graduate diplomas to be awarded**

- A)        **PARA-CLINICAL SUBJECT:**
- 1)        Diploma in Forensic Medicine and Toxicology (D.F.M.)
- B)        **CLINICAL SUBJECTS:**
- 1)        Diploma in Child Health (D.C.H.)
  - 2)        Diploma in Psychological Medicine (D.P.M.)
  - 3)        Diploma in Medical Radio-Diagnosis (D.M.R.D.)
  - 4)        Diploma in Dermatology, Venerology and Leprosy (D.V.D.)
  - 5)        Diploma in Public Health (D.P.H.)
  - 6)        Diploma in Anesthesiology (D.A.)
  - 7)        Diploma in Obstetrics and Gynaecology (D.G.O.)

And other such subjects as may be recognized by the MCI and introduced by the University.

**OC-55.5 Eligibility for admission to post-graduate diploma programmes:**

**OC-55.5.1** A candidate shall have passed final year M.B.B.S. examination after pursuing a study in a medical college affiliated to the University, or from a recognized medical college affiliated to any other University recognized as equivalent by MCI, and has completed compulsory rotatory internship in a teaching institution affiliated to this University or any other institution recognized by MCI.

**OC-55.5.2** A candidate shall have obtained permanent registration of the State Medical Council or Indian Medical Council, or shall be required to obtain the permanent registration within a period of 30 days from the date of admission to the post-graduate diploma programme.

**OC-55.5.3** A candidate shall be selected in accordance with the regulations of MCI and the existing rules and regulations of the Medical College affiliated to the University.

**OC-55.5.4** The intake capacity for each post-graduate diploma programmes shall be as per the MCI guidelines.

**OC-55.6 Programme Structure:**

**OC-55.6.1** Every Programme shall comprise 3 Theory Papers and a Practical. The syllabi for the various post-graduate diploma programmes shall be as recommended by the respective Board of Studies and approved by the Academic Council of the University and revised from time to time in accordance with the recommendations of the MCI.

**OC-55.6.2** All the training departments shall maintain minimum standards laid down by MCI for post-graduate diploma programmes.

**OC-55.7 Field training/work during the programme of study:**

**OC-55.7.1** A candidate joining the post-graduate diploma program shall work as a full-time post-graduate student/resident during the period of training, attending a minimum of 80% of the training period during each academic year and be given full time responsibility, assignments and participation in all facets of educational process.

**OC-55.7.2** Every Institution undertaking post-graduate diploma training programme shall set up an Academic Cell/Curriculum Committee, under the chairmanship of a senior faculty member, which shall work out the details of the training programme in each speciality, and also co-ordinate and monitor the implementation of these training programmes. The training programmes shall be updated from time to time keeping in view the scientific developments.

**OC-55.7.3** The structured training programme shall be strictly followed to enable the Examiners to determine the training undergone by the candidate and to enable the MCI Inspectors to assess the same at the time of Inspection.

**OC-55.7.4** Every post-graduate student shall maintain a record/log book of the work carried out by him/her and the training programme undergone during the period of training, including details of surgical operations assisted or done independently by him/her. The record books shall be checked and assessed periodically by the faculty members imparting the training.

**OC-55.7.5** During the training for diploma programmes in clinical disciplines, there shall be proper training in basic medical sciences related to the discipline concerned. During the training for post-graduate diplomas in basic medical sciences, there shall be training in applied aspects of the subject and there shall be training in allied subjects related to the discipline. In all post-graduate diploma training programmes, emphasis shall be laid on preventive and social aspects and emergency care.

- OC-55.8**                    **Scheme of Examination:**
- OC-55.8.1**                The examination shall be conducted on the basis of marks system to evaluate and certify the candidate's level of knowledge, skill and competence at the end of the training period. There shall be two heads of passing, namely: 1) Theory and 2) Practicals including clinical, table work and viva-voce.
- OC-55.8.2**                There shall be three theory papers, each of 100 marks and three hours duration. Each paper shall comprise 2 long essay questions of 20 marks each, and 6 short essay questions of 10 marks each. All questions shall be compulsory.
- OC-55.8.3**                The practical examination shall carry 200 marks for clinical and 100 marks for table work and viva-voce.
- OC-55.9**                    **Pattern of Evaluation:**
- OC-55.9.1**                The University shall conduct not more than 2 examinations in an academic year for any post-graduate diploma programme, with an interval of not less than 4 months and not more than 6 months between the two examinations.
- OC-55.9.2**                Evaluation of the examination shall be done by the Examiners appointed by the University in accordance with the guidelines of the MCI. The examiners appointed shall be from the Panel of Examiners recommended by the Board of Studies and approved by the Academic Council of the University.
- OC-55.9.3**                For all post-graduate diploma examinations, the minimum number of examiners shall be four, out of which at least 50% shall be external examiners, who shall be invited from other recognized Universities from outside the State. The senior-most internal examiner shall be the Convener and shall moderate the question papers. Under exceptional circumstances, examinations may be held with 3 examiners, provided 2 of them are external, with the prior approval of the University.
- OC-55.10**                 **Standard of passing:**
- OC-55.10.1**                A candidate to be declared successful at an examination shall obtain an aggregate of a minimum of 50% of total marks for theory, and 50% of total marks in practical (including clinical, table work and viva-voce).
- OC-55.10.2**                There shall be no provision for grace marks or carry-forward marks. An unsuccessful candidate shall have to reappear for all components of theory and practical examination.
- OC-55.10.3**                A successful candidate shall be awarded a post-graduate diploma in the concerned speciality.
- OC-55.11**                 All other rules and regulations shall be followed as per the general Ordinances of the University.



**Ordinance OC-56 relating to the Degrees of Allied Health Sciences under Faculty of Medicine** (Under Section 24(1) of the Goa University Act, 1984) (effective from the Academic Year 2013 -2014).

**OC – 56.1. Objectives:**

1. To impart knowledge and training techniques in Under-Graduate Allied Health Sciences and to maintain high standards of Allied Health Education.
2. To offer theoretical and practical training in all the Allied Health Sciences branches of health activity.
3. To attain self-sufficiency in Under-Graduate Allied Health education to meet need of Allied Health Sciences personnel.

**OC-56.1.1 Introduction:**

The various courses under Allied Health Sciences shall be under the Faculty of Medicine and will impart an integrated approach to the teaching of the various subjects under Allied Health Sciences.

**OC-56.1.2 Degrees to be awarded:**

The following degrees shall be awarded after successful completion of the course:

1. Bachelor of Physiotherapy (B.P.T.)
2. Bachelor of Optometry (B. Opt)
3. Bachelor of Occupational Therapy (B.O.T.)
4. Bachelor of Science in Medical imaging Technology in Radiodiagnosis (B.Sc. MIT)
5. Bachelor of Science in Anaesthesia Technology (B.Sc. AT)
6. Bachelor of Audiology and Speech Language Pathology (BASLP)

**OC-56.1.3 Duration of the Programmes:**

The duration of the programmes shall be three years with one year internship for B.Opt , B.Sc. MIT , B.Sc. AT and BASLP Degrees, and four years with six months internship for B.P.T. and B.O.T. Degrees.

**OC-56.1.4 Eligibility for admission:**

A Candidate to be eligible for admission to the Degree Programmes of Allied Health Sciences:

- (i) Shall be 17 years of age or shall attain that age on or before the thirty first day of December of the year of admission.
- (ii) Shall have passed in the second division or equivalent grade, (except for candidates belonging to the Schedule Castes/Schedule Tribes/Other Backward Classes), the Higher Secondary School Certificate Examination conducted by the Goa Board of Secondary and Higher Secondary Education or an equivalent examination conducted by a Board or University and deemed by the University to be equivalent to the Higher Secondary School Certificate Examination after a period of 12 years study, the last two years of study comprising Physics, Chemistry, Biology and Mathematics or any other elective subject, and English not below the core level; and

(iii) (a) Shall have passed the subjects of Physics, Chemistry, Biology and English with 50% marks taken together in Physics, Chemistry & Biology at the qualifying examination, provided that in cases of admission on the basis of a competitive examination, a candidate must have obtained not less than 50% marks in English and 50% marks in Physics, Chemistry and Biology taken together both at the qualifying and competitive examination. However, for physically handicapped/ SC/ ST/ OBC category, the passing percentage shall be 45%.

(b) In cases of admission on the basis of competitive examination to be determined by Goa University/ Goa Government, a candidate shall have passed in the subject of English, Physics, Chemistry and Biology individually and shall have obtained a minimum of 50% in Physics, Chemistry and Biology taken together in the competitive examination. Candidates for the Degrees of Allied Health Sciences Courses for being eligible for admission to the Medical College / College of Allied Health Sciences affiliated to this University.

**OC-56.2 Programme Structure:**

The structure for the various Allied Health Sciences programmes shall be as recommended by the Board of Studies in Allied Health Sciences and approved by the Academic Council of the University.

**OC-56.3** Number of instructional days in each year shall not be less than 180 days.

**OC-56.4 Course of Study:**

A candidate shall be required to undergo a period of certified study extending over 3 academic years, consisting of 6 semesters, except for BPT and B.O.T. which shall be of 4 years consisting of 8 semesters. The candidate shall have to successfully complete the compulsory Internship Training of one year duration in the manner prescribed, subsequent to his/her passing the Final University Examination. In the case of BPT and B.O.T. the duration of compulsory internship shall be of six months.

**OC-56.5 Scheme of Examinations:**

**OC-56.5.1** There shall be periodic internal assessment and an annual examination at the end of each academic year conducted by the University. The weightage of the internal assessment shall be 20% of the total marks in each course.

**OC- 56.5.2 (Effective from 6<sup>th</sup> June, 2016)** The candidate shall be allowed to keep terms for one academic year only, provided he/she fails in a maximum of any two Subjects. However, he/she has to clear those Subjects in the supplementary exam, in order to keep terms subsequently.

- OC-56.5.3** The Degree in BASLP shall have a semester system as recommended by the regulatory body. A candidate shall appear for the Semester examinations at the end of each semester conducted by the University.
- OC-56.5.4** The Scheme of Examinations for all the Allied Health Sciences programme shall be as recommended by the Board of Studies in Allied Health Sciences and approved by the Academic Council of the University.
- OC-56.6** **Eligibility to appear at the Examinations:**
- OC-56.6.1** A candidate shall be required to complete at least 75% attendance in theory and 75% in non-lecture teaching such as tutorials, demonstrations, practical, hospital or institutional posting, bedside training for each subject of examination and shall produce certificate from the head of the Department / Dean of Medical College /Principal of College of Allied Health Sciences of having satisfactorily completed the course of study, both in theory and practical, in the subject of the examination.
- OC-56.6.2** A candidate shall be required to secure at least 35% of the total marks allotted for internal assessment in that course.
- OC-56.6.3** Failure to pass an examination shall not debar a candidate from appearing at subsequent examinations on the submission of a new application, the payment of fees and the production of the certificates showing that he/she has, during the interval between the declaration of his/her failure and subsequent reappearance at the examination, pursued a further course of study in the subject of the examination to the satisfaction of the Dean of the Medical College /Principal of Allied Health Sciences and attained an attendance of 75% in lectures and 75% in non-lecture teachings such as practicals, demonstrations, seminars, group discussions, tutorials, bed-side clinics.
- OC- 56.7** **(Effective from 6<sup>th</sup> June, 2016) Appointment of Examiners:**  
For university examinations, no person shall be appointed as an examiner in any of the subjects of the Allied Health Sciences examinations, unless he has had at least 3 years of total teaching experience in that subject at undergraduate level at a faculty position in a college affiliated to a recognized university. For University examination, there shall be a minimum of 2 examiners out of which one shall be external examiner. The internal examiner shall act as Convenor. The External examiners shall not be ordinarily from the same University and preferably be from outside the State. The External examiners shall rotate at an interval of 2 years. There shall be a Chairman of the Board of paper setters who shall be internal examiner and shall moderate the questions.

- OC-56.8**      **Scheme of Evaluation:**  
The evaluation of answer books of written test(s) in any of the course(s) of the examinations shall be done by double evaluation method. There shall be no reevaluation of answer books of written test(s) in any of the course(s) of the examinations.
- OC-56.9**      **Standard of Passing:**
- OC-56.9.1**      A candidate shall be considered as failed/deemed to have failed at an examination, if his/her name has been submitted by the Dean of the Medical College /Principal of Allied Health Sciences for inclusion in the list of candidates appearing for the examination, and if he/she has failed to pass the examination either because he/she has not attained the standard of passing / been absent from the whole examination or from any part of it.
- OC-56.9.2**      To pass in an examination, a candidate shall obtain a minimum of 50% in the theory cum orals and a minimum of 50% in the practical examination, separately, in one and the same sitting.
- OC-56.9.3**      A candidate who has passed any of the courses by obtaining 50% marks as mentioned above shall be exempted from appearing in that course at the subsequent examination and shall be declared to have passed the whole examination when he has passed in all the courses in that examination.
- OC-56.9.4**      The successful candidates shall be awarded the class as mentioned below:  
Distinction                      – 75% and above  
First Class                        – 60% and above but less than 75%  
Second Class                     – 55% and above but less than 60%  
Pass Class                         – 50% and above but less than 55%
- OC- 56.9.5**      **(Effective from 6<sup>th</sup> June, 2016)** Grace marks up to a maximum of five marks may be awarded at the discretion of the University to a student who has failed in a maximum of 2 Subjects that is theory and/ or practical of the Examination.
- OC- 56.10**      **Internship:**
- OC-56.10.1**      **(Effective from 6<sup>th</sup> June, 2016)** A student shall be eligible to commence the Compulsory Rotatory Internship only after having successfully completed final year University Examination.
- OC-56.10.2**      **(Effective from 6<sup>th</sup> June, 2016)** A candidate for being eligible for the award of Degree of Allied Health Sciences Programme shall be required to successfully undergo prescribed Compulsory Internship training to the satisfaction of the Head of the Institutions.
- OC-56.10.3**      **(Effective from 6<sup>th</sup> June, 2016)** No period of absence from Internship can be condoned by the authorities of the College and/or University.
- OC-56.11**      All other rules and regulations shall be followed as per the general Ordinances of the University.

**ORDINANCE OC-57 RELATING TO B.SC INTERNATIONAL HOSPITALITY MANAGEMENT PROGRAMME OF GOA UNIVERSITY** (effective from the academic year 2014-2015)

**OC-57.1 GENERAL**

**OC-57.1.1 Degree to be awarded**

The Degree to be awarded shall be Bachelor of Science (International Hospitality Management)

**OC-57.1.2 Objective of the Programme**

To develop adequate skills and competencies in participants to enable candidates for employability and entrepreneurial ventures in society.

**OC-57.1.3 Duration of the Programme**

- (i) The B.Sc. Programme shall be of a duration of 3 years full-time, or 4 years part-time through evening or week-end instruction.  
A student shall be permitted to exit the Programme after completion of the Credit requirements of a Diploma Programme of 1 Year duration, or a minimum of a single Credit Course for a Certificate Course, which shall form a subset of the requirement for the B.Sc. Programme.
- (ii) A student once admitted, shall be required to complete the Programme in a maximum of twice the duration of the Programme.
- (iii) A student shall not opt for more than 30 instructional hours in a week.
- (iv) The student shall be considered to have completed the Programme when he/she completes the required minimum number of credits. However, the student may opt to undertake additional credits for the same Programme, which shall be indicated in the grade sheet.

**OC-57.1.4 Eligibility and Admission**

- (i) Eligibility  
A student who passes the Higher Secondary School Certificate (Std. XII) examination of the Goa Board of Secondary and Higher Secondary Education, or equivalent, shall be eligible for admission to the Programme.
- (ii) Admission procedure  
The procedure for admission to the Programme shall be decided by the Admissions Committee for the academic year, appointed by the Head of the Institution, and shall consist of selected faculty members of the Institution and one representative of the Faculty. A class size shall not exceed sixty students. Allocation of supernumerary seats shall be as per Government rules.

**OC-57.2 PROGRAMME STRUCTURE**

**OC-57.2.1** The Programme shall be divided into trimesters or semesters. Each trimester shall comprise a minimum of 11 weeks of instruction, and each

semester shall comprise a minimum of 15 weeks of instruction. Courses shall be allocated to trimesters/semesters by the Departmental Council of the Department offering the Programme, or an equivalent body of faculty members constituted by the Principal/Head of the Institution.

- OC-57.2.2**
- (i) The Programme structure shall comprise Core Courses, Optional Courses and Internships. The Departmental Council of the Department offering the Programme(s) or equivalent body of faculty members of the affiliated institution shall decide the Core and Optional Courses to be offered in a particular academic year.
  - (ii) Five percent of the sessions for Core and Optional Business Courses shall be conducted by executives from industry.
  - (iii) Internships shall be undertaken by the students in established organizations.

- OC-57.2.3**
- (i) The credits for a course other than for Internships can range from one to six. One credit stands for 15 contact hours or 45 hours of internship.
  - (ii) The minimum credit requirements for Courses shall be as indicated below:

Courses Courses		Number of Credits for		
		B.Sc. Programme	Diploma Program me	Certificate Course
Core Courses	Core Hospitality Courses (CHC)	58	14	Any 1 Core/ Optional Course
	Core Soft Skill Courses (CSSC)	9	2	
Optional Courses	Optional Hospitality Courses (OHC)	33	7	
	Non Hospitality Courses (NHC)	14	2	
Internships	Internships in Organizations and Reports	16	8	
	Internship Seminars	6	2	
Total Minimum Credits for the Programme excluding Internships in Organizations and Reports		120	27	1
Total Minimum Credits for the Programme		136	35	1

- (iii) Optional Courses may include Project Courses and/or Courses of Independent Study. No single Project or Course of Independent Study shall exceed 3 credits.

- OC-57.2.4**
- (i) Optional Courses shall be decided by the Departmental Council of the Department offering the Programme(s) or equivalent body of faculty members of the affiliated institution, and shall be announced to the students every year.
  - (ii) For Optional Courses, prerequisite Courses, if any, shall be specified.
  - (iii) A student shall be permitted to register for Project Courses and/or Courses of Independent Study subject to a maximum of 30% of the total credits for Optional Courses of the Programme. Project Courses and Courses of Independent Study shall be carried out under the supervision of Guides who shall be from among regular or visiting teachers of the

Department/Institution offering the Programme.

**OC-57.2.5**

- (i) The Department/affiliated Institutions offering the Programme shall obtain the course syllabi for the Optional Courses to be offered in that year, giving objectives and broad outlines, from regular and visiting teachers from other Departments / Institutions affiliated to Goa University/ other Institutions, and professionals from industry, and shall communicate the same to the Faculty Board of the University.
- (ii) For all Courses, course session outlines comprising Objectives in Behavioural Terms, Reading Material, Prior Preparation by Students, Learning method and in-class activities, shall be obtained from the teachers before the commencement of the Course.
- (iii) The sessions will be conducted using all or any of the methods of pedagogy such as lectures, exercises, practicals, seminars, case studies, role plays and problem solving, to enable the students to learn in an interactive mode.

**OC-57.3**

**GRIEVANCE COMMITTEE**

There shall be a College Grievance Committee in accordance with the General Ordinance of the University.

**OC-57.4**

**SCHEME OF EXAMINATION**

- (i) The evaluation pattern for each Course shall comprise a planned series of different evaluation methods involving group /individual evaluation, to assess the various competencies of the student, with a sum total weightage of 100%, and a record of the actual implementation, with reasons for deviation, if any, as shown in the table below:

Planned				Implemented				
Competenc Assessed	Evaluation Method Planned	Group / Individual Evaluation	Weightage	Competenc Assessed	Evaluatio n Method Planned	Group / Individual Evaluation	Weightage	Reasons for Deviations
Total (100%)				Total (100%)				

- (ii) No individual component of evaluation shall exceed 40% weightage of the total evaluation, in the case of Courses of 2 or 3 credits, and 30% in the case of Courses of 4, 5 and 6 credits.
- (iii) Examinations shall be open book examinations except short quizzes to test preparation for the classes. The text books that are common to all the students of the Institution as well as other hand-written notes of the student shall only be used by the student while answering the examinations. Non-scientific calculators shall be permitted for use in the examinations.
- (iv) The method as well as the content of evaluation of Internships, Internship Report, Internship Seminar, Project Courses and Courses of Independent Study shall be decided by the concerned guide with the consent of the Departmental Council of the Department offering the Programme(s) or equivalent body of faculty members of the affiliated institution using the evaluation pattern given in OC-57.4 (i). The respective teacher/ guide shall do the assessment as well as grading.

- (v) All Internship Seminars shall be organized as open seminars, unless the organizations on which the work was done require the results to be kept confidential. In the latter case, only the examiners shall be present during the Seminar. The Internship Seminars shall be examined by two examiners, one of which shall be from the Industry.
- (vi) Credit transfers for students registered with Goa University shall be done from other Faculties of Goa University with the consent of the Departmental Council of the Department offering the Programme(s) or equivalent body of the faculty members of the concerned institution. The equivalence of grades and grade points shall be determined by the Departmental Council of the Department offering the Programme(s) or the equivalent body of the faculty members of the concerned institution, and graded as indicated in OC-57.5 (ii).
- (vii) Credit transfers from institutions other than Goa University Institutions shall be done with the consent of the concerned Faculty Board of the University. The equivalence of grades and grade points shall be determined by the Faculty Board.
- (viii) There shall be a maximum limit of 25% of the in-class credits of any Programme for inward transfer of credit except in the case of approved exchange Programmes.
- (ix) Credit transfer in the case of students who transfer registration from approved institutions other than Goa University to Goa University shall be done on a case to case basis by the Faculty Board of the University.
- (x) Transfer of Credits and Grades obtained by a student, to another Institution, shall be permitted on request by the student and the Institution.

**OC-57.5**

**Minimum requirements for Passing and Grading.**

- (i) Evaluation shall be in terms of Grades allotted for individual components of a Course, as indicated below:

Grade	Grade Point
A+	10.0
A	9.0
A-	8.0
B+	7.5
B	6.75
B-	6.0
C+	5.9
C	5.7
C-	5.5
D+	5.0
D	3.4
D-	1.7
F	0

- (ii) The over-all Grading for each Course shall be as follows:

Grade



A	Excellent	8.00 upwards
B	Good	6 to < 8
C	Satisfactory	5.5 to < 6
D	Low Pass	5 to < 5.5
F	Failed	0 to < 5

- (iii) The grade points awarded for a course shall be rounded off to two decimals for determining grades for the course.
- (iv) The Weighted Grade Points of a Course shall be obtained by multiplying the Grade Points scored, by the number of Credits of the respective Course.
- (v) The cumulative Grade Point Average (CGPA) for the Programme, shall be computed by dividing the total number of the Weighted Grade Points by the total number of Credits obtained by the student for the Programme.
- (vi) The GPA shall be converted to the Final grade, as shown in the table below:

Grade		
A	Excellent	8.00 upwards
B	Good	6 to < 8
C	Satisfactory	5.5 to < 6
D	Low Pass	5 to < 5.5
F	Failed	0 to < 5

- (vii) Ordinarily, Grades or Grade Points shall not be converted to marks, class, distinctions. In exceptional cases, where an employer or an Institution insists on specifying equivalent marks or such classifications, the following scheme shall be used.

Equivalent Marks = Grade Point Average multiplied by 10.

Grade A	:	Distinction
Grade B	:	First Class
Grade C and D	:	Second Class
Grade F	:	Failed

#### **OC-57.6**

#### **Eligibility for award of Degree/Diploma/Certificate**

- (i) To obtain a pass in B.Sc. the student shall have obtained a weighted average Grade Point of at least 5.00 for the Courses as a whole and should not have obtained F grades in more than three Courses.
- (ii) To obtain a Certificate for any individual course, the student shall not have obtained F in that course. The Certificate for a Certificate Course shall be awarded by the Department/Institution offering the Course.

#### **OC-57.7**

#### **Academic Audit Committee (AAC)**

- (i) There shall be an Academic Audit Committee (AAC) which shall meet at least twice in a year, to review the manner in which classes are conducted and the method as well as the content of evaluation of each Course of each term. The AAC shall be constituted from amongst a panel of experts submitted by the Institution and approved by the Vice-Chancellor. The AAC shall consist of at least three members, of which preferably at least two shall be from outside the Institution. At least one of the members shall preferably from the corporate sector and one from a premier institution. If the quantum of work for the AAC is high, more than one AAC may be appointed. The AAC shall see that the training imparted is consistent with the needs of the industry. The format for the Audit shall be as given below:

Batch		Program	
Term		Institution	
Subject Code		Subject	
Credits		Instructor	

The comments and action plans, against each item below, are to be filled up based on the inputs.

No.	Item	Comments / Suggestions / Decisions by AAC	Status of Implementation For the Subsequent Batch
1.	Whether the Evaluation Scheme clearly articulates the Competencies to be Developed in Behavioural Terms.		
2.	Whether the Competencies to be developed are consistent with the Objectives of the Syllabus.		
3.	Whether the topics dealt with were adequate to develop the required competencies		
4.	Whether the Course Outline clearly articulates the Competencies to be developed in Behavioral terms for each Session.		
5.	Whether each session had experiential (active rather than passive learning) exercises such as cases, problems, exercises etc. rather than pure theoretical/conceptual discussions.		
6.	Whether the exercises were spelt out in specific terms (such as Problem Numbers, Case Title, etc.) in the Course Outline.		
7.	Whether these exercises were reality or practice oriented rather than purely conceptual or theoretical.		
8.	Whether these exercises were adequate to develop the envisaged competencies.		
9.	Whether reading materials for each session for prior reading were given with page numbers specified in the Course Outline.		
10.	Whether executives were invited for some of the Sessions as per the Ordinance, wherever applicable.		
11.	Whether the workload for the students was realistic.		
12.	Whether a textbook followed, other than the one recommended, is appropriate for the subject.		

13.	Whether the measures of evaluation chosen to assess the competencies were appropriate.		
14.	Whether the assessment was evenly spread during the Term.		
15.	Whether weight for any item of Evaluation exceeds limits (except for 1 Credit Subjects with prior permission) given by the Ordinance.		
16.	Whether the questions were appropriate for open book examinations.		
17.	Whether the Assignments were appropriate for developing the required competencies (In contrast to those where cut/ paste/ copy could be adopted)		
18.	Whether qualitative comments were given in Answer Sheets / Assignments.		
19.	Whether grades rather than marks were adopted for individual items of evaluation.		
20.	Whether Grades are available against each Competency.		
21.	Whether the full spectrum of grades was used. (Was grading too liberal or too conservative?)		
22.	Whether grading was fair (based on sample check of answer sheets and grievances expressed, if any, by the students).		
23.	Whether AAC recommends any change in the grades awarded. (Give reasons)		
24.	Overall comments and instructions to Instructor for further action.		
25.	Action required at the level of the Institution.		
26.	Action required at the level of the University.		

Names and Signatures of AAC Members with Date.

<sup>1</sup>Documents required are in the footnote (3).

The Process to be adopted is outlined in the footnote (4).

<sup>2</sup>Original shall be filed in the AAC File of the Batch, one Copy for the Subject File, one copy for the Instructor.

<sup>3</sup> Documents Required (These are to be submitted through a File or Files numbered Volume I, II, III, etc.)

- a. Syllabus
- b. Course Outline with implemented Column filled up
- c. Evaluation Scheme with implemented Column filled up
- d. Hard/Soft copies of Materials discussed other than Text Books prescribed
- e. Attendance Sheet with Number of hours engaged with % Attendance for each Student
- f. Grade Sheet with Item wise and Overall Grades
- g. Question Papers for Assignments and Tests
- h. Answer Sheets of Assignments (Soft/Hard)/ Tests
- i. Feedback Rating by Students and Qualitative Comments

<sup>4</sup> Process to be Adopted:

- a. Perusal of above Documents
- b. Discussions with the Batch Coordinator, Instructor and Students
- c. Random Check of Sample Answer Sheets
- d. Random Check of Grade Sheets, etc.

(ii) All course outlines, reading materials, question papers, answer sheets, assignments, project reports, grade sheets, formal student feedback, and other related matter, shall be made available for the scrutiny of the AAC.

The results of the term shall be finalized after the approval of the AAC with suitable modifications, if any, suggested by them. The AAC shall also examine all grievances related to evaluation and grading, and recommend a course of action.

- (iii) The Grades approved by the AAC for the B.Sc. or Diploma Programme shall be handed over to the Controller of Examinations in a tabulated Grade Sheet form.
- (iv) The Grade Sheet shall specify credits, grades and grade points obtained by the student for each Course, his/her rank in the class in the respective institution for each course, and the overall Grade and CGPA.
- (v) There shall not be any University wide ranking of the students.

#### **OC-57.8 Improvement of Grades**

- (i) A student shall have the option to improve his/her Grade(s) by registering for Course(s) currently offered, by paying the appropriate fee. The examination(s) for improvement of Grade(s) shall be completed within twice the duration of the Programme from the date of initial registration. In all cases of re-registration for a Course, the Grade so obtained shall be considered final.
- (ii) When a student acquires more than the required credits for a given Programme, the student shall have the option to include all/ select the additional number of Credits for the CGPA for the award of the Degree. He/she shall intimate the Institution about the Courses that shall be considered for the calculation of the CGPA.

#### **Ordinance OC-58 relating to award of the Degree of Master of Arts (Wellness Counselling) (effective from the academic year 2014-2015)**

##### **OC-58.1 GENERAL**

##### **OC-58.1.1 Objectives :**

Wellness Counselling Programme is designed to help students acquire knowledge, skills and attitudes for maximizing their potential for academic progress, career development, and personal and social growth, to help students be aware of their strengths and abilities, and to build on them. The Programme is aimed at training students to become counsellors.

##### **OC-58.1.2 Duration of the Programme :**

The Programme shall comprise two academic years divided into six trimesters of a minimum of ten instructional weeks each and an additional trimester of a minimum of ten weeks of supervised internship.

##### **OC-58.1.3 Degree to be awarded :**

The Degree to be awarded shall be Master of Arts (Wellness Counselling).

**OC-58.1.4 Eligibility for Admission :**

To be eligible for admission, the student shall be required to have a graduate degree in any discipline with a minimum of 50% of aggregate marks.

The admission to the Programme shall be as notified in the College handbook. The fee structure shall be as approved by the University from time to time.

**OC-58.2 PROGRAMME STRUCTURE**

- (i) The Ordinance is based on the Choice Based Credit System of Instruction.
- (ii) The Programme shall comprise compulsory Core Courses, Elective Courses and Internship.
- (iii) A student shall be required to acquire a minimum of 90 credits to be eligible for the award of the Degree.
- (iv) One credit shall represent 15 contact hours of class learning activities.
- (v) He/She shall be required to complete 20 Core Courses with a total of 60 Credits and 10 Elective Courses with a total of 30 Credits, as recommended by the Board of Studies (BoS) and approved by the Academic Council.
- (vi) A student shall not be permitted to register for less than 9 Credits or more than 21 Credits in a trimester.
- (vii) Every Course shall have a practical component.
- (viii) The student shall be required to obtain the 60 credits of Core Courses of the Programme. He/she may be permitted to earn 15 credits of Elective Courses from other Programmes of the College, or from outside the College or University, as approved by the Faculty Council consisting of the Principal as Chairperson, Programme Coordinator as Member Secretary, and regular Faculty teaching the Programme.
- (ix) The student may be permitted to earn additional credits in Elective Courses. The final grade shall be computed based on the performance in the Core Courses and the best performance in Elective Courses to fulfill the minimum number of 90 credits. Additional credits, if any, shall be recorded on the marks sheet/ final transcript.
- (x) The student may be permitted to transfer credits, on a case to case basis, in the case of institutions outside Goa University. Such Courses, when opted for, shall require prior recommendation by the Faculty Council and approval of the BoS.

**OC-58.3 PATTERN OF INSTRUCTION**

- (i) There shall be a Coordinator for the Programme. The Faculty member teaching an individual Course shall be the Course Coordinator. Ordinarily one teacher shall teach an entire course, unless the course requires more than one teacher to meet intra- and inter-disciplinary requirements. When more than one teacher is involved in teaching a course, preferably a regular teacher shall be identified as

the Course Coordinator by the Faculty Council. He/she shall coordinate the teaching, examination and evaluation of the Course, and maintain records of all assessments/tests/ examinations.

- (ii) The Department shall notify the Core and Elective Courses to be offered in the following trimester.
- (iii) The course outline/session plan of each course, describing the objectives of the course and the themes in terms of both teaching/learning and assessment, offered during the trimester, shall be submitted by the teacher to the Faculty Council before the commencement of teaching of the said course. The course-wise time-table of internal assessment shall be displayed at the beginning of each trimester.
- (iv) There shall be continuous review of the teaching Programme by the Faculty Council in every trimester.
- (v) The Faculty Council shall be responsible for the proper implementation and conduct of the credit-based Master's Degree Programme.
- (vi) At the end of the teaching of every trimester there shall be an assessment of the teacher, of the Course taught, and of the overall Programme by the students, the records of which shall be retained by the Principal.

#### **OC-58.4 SCHEME OF EXAMINATION**

- (i) There shall be a continuous Intra Trimester Assessment (ITA) and End Trimester Assessment (ETA).
- (ii) Ordinarily a teacher of a particular Course or part thereof, shall assess the performance of the student in that Course. Guest faculty/contributory teachers teaching a Course or part thereof shall conduct such assessment in consultation with the Course Coordinator.
- (iii) The nature of assessment may be written/oral, open/closed book, scheduled/surprise, objective/multiple choice, short-answer-type, essay type, seminar, assignment, experimental work, field work, viva voce, peer group assessment, class participation, as described in the course outline.
- (iv) It shall be ensured that module(s) of the syllabus taught is/are reflected in the question paper/assessment pattern and there is a rational distribution of items and questions and their weightage vis-à-vis the teaching time of the module(s).
- (v) A three Credit Course shall carry 100 marks.
- (vi) The weightage for the continuous ITA and ETA in all courses shall be 40% and 60% respectively.
- (vii) Each ITA shall be equivalent to 20% of the total marks of the course. The number of ITA for each Course shall be two. In the event of a student having missed an ITA due to genuine reason, he/she shall make a request for an additional ITA to the Programme Coordinator, who shall place it before the Faculty Council for consideration and recommendation, and approval by the Principal.

- (viii) A course shall have a single head of passing, based on the combined performance at the continuous ITA and ETA.
- (ix) Fractional marks shall be rounded off to the nearest integer only at the time of calculating the course grade.
- (x) The minimum standard for passing shall be 40% in each Course.
- (xi) The ETA shall be held in the week following the completion of the teaching of the Course.
- (xii) The Examination Committee comprising the Principal, Programme Coordinator and one senior faculty member of the Programme, shall work out the examination schedule for ETA in consultation with the teachers of the Courses of that trimester, and after the approval of the Faculty Council, display it on the College notice board at least 30 days in advance.
- (xiii) The Course Coordinator shall be responsible for finalizing the assessment pattern and for taking care that the assessment reflects the teaching/learning-time and weightage assigned to the topic/unit/module as prescribed in the Course outline.
- (xiv) The duration of an ITA examination shall be of 1 lecture period. The duration of an ETA examination shall be of 3 hours.
- (xv) The ETA answer scripts shall be assessed by the teacher concerned, within one week from the date of the examination. Before finalizing the scores obtained, the answer scripts should be shown to the students after specifying the date and time on the notice board well in advance.
- (xvi) The assessed answer scripts shall be shown to the students by the teacher and submitted to the Principal along with the question paper in a sealed envelope, within seven days after the conduct of each assessment. The results of each assessment shall be displayed on the Notice Board.
- (xvii) Students who are unable to complete the Programme in seven trimesters, shall be permitted to re-register for additional trimester/s and opt for Courses offered in that Trimester. Such students shall be treated as supernumerary.

**OC-58.5 PASSING AND GRADING**

- (i) The percentage awarded in the combined ITA and ETA shall be added for awarding the grade and grade points for each course, as indicated in the table below:

Range of % scored	Grade	Grade Points
75 to 100	O	6

65 to < 75	<b>A</b>	<b>5</b>
55 to < 65	<b>B</b>	<b>4</b>
50 to < 55	<b>C</b>	<b>3</b>
45 to < 50	<b>D</b>	<b>2</b>
40 to < 45	<b>E</b>	<b>1</b>
0 to < 40	<b>F</b>	<b>0</b>

- (ii) A student shall have to obtain a minimum of E grade to pass the Course.
- (iii) Students who do not obtain E grade in Core Course(s) shall have the option of answering ETA component in the following trimester(s) when the Course(s) is/are offered. If the student so wishes he/she can repeat the Course when it is offered again. In case of Elective Courses the student may answer the ETA component the next time the Course is offered, or repeat the Course, or register for an alternative Elective Course to obtain the required number of credits. While answering ETA supplementary the ITA score shall be carried forward.
- (iv) Calculation of weighted grade points of a course shall be done by multiplying the grade points scored, by the credits of the respective course.
- (v) A student obtaining 'F' grade in any Course shall not be entitled to earn any Credits for that Course.
- (vi) On completion of 90 Credits, or more, the Grade Point Average (GPA) shall be computed by dividing the total number of the weighted grade points in all the six trimesters corresponding to 90 Credits divided by the maximum number of 90 Credits.
- (vii) When a student acquires more than 90 Credits, the best performance in Elective Courses to fulfill the minimum number of 90 Credits shall be included for the GPA. However, the additional Credits acquired shall be recorded on the marks sheet/ final transcript.
- (viii) The GPA shall be calculated up to two decimal places. If the GPA is higher than the indicated upper limit in the three decimal digit, then the next higher grade shall be awarded. Thus, a student with GPA 4.492 shall be awarded 'A' grade. A student who has not earned 90 Credits shall be given the final grade 'F' and be declared unsuccessful.



- (ix) The GPA shall be converted to Final Grade as shown in the table below:

Grade Point Average (GPA)	Final Grade
5.50 – 6.00	O
4.50 – 5.49	A
3.50 – 4.49	B
2.50 – 3.49	C
1.50 – 2.49	D
1.00 – 1.49	E
<90 Credits	F

- (x) The ITA scores shall be sent to the Controller of Examinations (CoE) after the approval of the Faculty Council, within one week of the last teaching day of each trimester. The ETA scores shall be finalized within a week of the last examination and approved by the Faculty Council. The Examination Committee shall prepare the grades and GPA and send the same along with the ETA scores, to the CoE who shall declare the results within two weeks.

**OC-58.6 AWARD OF DEGREE**

A student shall have to acquire a minimum of 90 Credits, with a minimum of E Grade, within a minimum of six trimesters, to be eligible for award of the Degree.

**OC-58.7 ACADEMIC AUDIT COMMITTEE**

- (i) There shall be an annual academic audit of the Programme, conducted by an Academic Audit Committee (AAC).
- (ii) The AAC consisting of three members shall be constituted by the Vice-Chancellor from the panel of experts prepared by the BoS.
- (iii) The AAC shall meet for one or two days not later than two months after the declaration of results.
- (iv) The conduct of the academic audit by the AAC shall consist of the following:
- (1) Review question papers of the assessments held during the trimesters of the preceding year:
    - (a) to determine the adequacy of coverage of the syllabus, and
    - (b) to determine the standard of questions in relation to the syllabus.
  - (2) Review the sample answer scripts to check for objectivity and uniformity of assessment.
  - (3) Scrutinize the records of ITA and ETA maintained by the college, in order to determine the suitability and adequacy of the methods of assessment.
  - (4) Evaluate and suggest remedial measures on the basis of feedback obtained from the students.

- (v) The AAC shall prepare a report and submit it to the Vice-Chancellor, who, after making the necessary observations, shall forward it to the Chairperson, BoS. The BoS shall make suitable recommendations to the Principal for necessary action.

**OC-58.8            GRIEVANCE COMMITTEE**

- (i) A Grievance Committee of three faculty shall be constituted at the commencement of every academic year. No teacher against whom a grievance is made shall participate in the meetings of the Committee.
- (ii) The Grievance Committee shall examine and decide on the grievances relating to the marking of answer scripts/evaluation of tests of the students, or any other matter related to examination and evaluation.
- (iii) Grievance(s) of a student shall be addressed to the Principal, and at the first instance, be placed before the Faculty Council for resolution. If the grievance(s) is/are concerning a Course(s) taught by the Principal, the grievance(s) shall be addressed to the University.
- (iv) If the student continues to feel aggrieved, the appeal shall be addressed to the University.
- (v) If the Grievance Committee finds that there is a prima facie case, it may refer the respective answer-scripts/assignments to an expert decided by the University, for which the student shall have to pay the prescribed fee. The result of such an evaluation will be final and binding.
- (vi) The decision of the Grievance Committee shall be communicated to the student within one month of his/her filing of the grievance.

**ORDINANCE OC -59 RELATING TO AWARD OF POST-GRADUATE MASTER OF SCIENCE (NURSING) DEGREE OF GOA UNIVERSITY (effective from 25<sup>th</sup> September, 2014)**

**OC-59.1            Nomenclature:**

The nomenclature of the Degree shall be Master of Science (Nursing), (M.Sc. Nursing) in the given Speciality.

**OC-59.1.1        Objectives:**

To enable candidates:

1. To utilize/apply the concepts, theories and principles of Nursing Science
2. To learn advance competence in practice of Nursing
3. To practice as a nurse specialist
4. To demonstrate leadership qualities and function effectively as a nurse educator and manager
5. To demonstrate skill in conducting nursing research, interpreting and utilizing the findings from health related research
6. To demonstrate the ability to plan and effect change in nursing practice and in the health care delivery system.
7. To establish collaborative relationship with members of other disciplines
8. To demonstrate interest in continued learning for personnel and professional advancement

**OC-59.1.2 Eligibility for Admission :**

A candidate to be admitted for the M.Sc. Nursing Programme:

- a) Should have passed the B.Sc. Nursing/Post Basic B.Sc. Nursing Programme from a Nursing institution recognized by the Indian Nursing Council, with a minimum of 55% aggregate marks.
- b) Should be a Registered Nurse and Registered Midwife or equivalent
- c) Should have a minimum of one-year work experience after B.Sc. Nursing, OR one-year prior to, or after, Post Basic B.Sc. Nursing.

**OC-59.1.3 Duration of Course:**

M.Sc. Nursing Programme shall be for two academic years.

**OC-59.1.4 Admission Procedure:**

- (i) A candidate shall be selected in accordance with the regulations of Indian Nursing Council (INC) and the rules and regulations of the State Government as adopted by Goa University.
- (ii) The intake capacity for the Post-Graduate Programmes shall be as per the INC guidelines.

**OC-59.1.5 Minimum Duration of the Academic Year:**

The minimum duration of the academic year shall be of at least 45 weeks which shall include 43 weeks with 40 hours of teaching per week, and two weeks of examinations.

**OC-59.2 Course Structure:**

- (i) In the first year there shall be four Theory Courses, one of which shall be in the Clinical Speciality. Each Course shall include a practical component.
- (ii) In the second year there shall be two Theory Courses, one of which shall be in the Clinical Speciality. Both Courses shall include a practical component. There shall also be a Dissertation.
- (iii) The syllabi for the various Courses shall be as recommended by the respective Board of Studies (BoS) and approved by the Academic Council of the University, and revised from time to time in accordance with the regulations of the INC.
- (iv) All the training Departments shall maintain standards as laid down by INC.

**OC-59.3 SCHEME OF EXAMINATION:**

**OC-59.3.1 Eligibility to appear for examinations:**

- (i) A candidate shall have a minimum of 80% attendance in theory and practical in each Course, to be eligible to appear for the examination. However, a candidate shall be required to have 100% attendance in each of the practical components, which shall be certified by the College/Institute, before the declaration of the results.
- (ii) A candidate shall be required to secure a minimum of 50% in the internal assessment in theory and practical Courses separately.
- (iii) In case a candidate fails to secure 50% marks in the internal assessment in any Course, he/she shall not be permitted to appear for the external examination in that Course. However he/she can appear for the external examination in other Courses of that year.
- (iv) A candidate who has failed to secure 50% marks in the internal assessment in any Course, and secures 50% marks after additional internal assessment(s) as specified under clause OC-59.3.2(ii) (b), shall be permitted to appear for a Supplementary external examination.
- (v) A candidate shall be required to pass the external examination of all the Courses of the first year to be eligible to appear for the second year examination.  
However,
  - (a) A candidate who fails in two, or less than two Courses in the external examination shall be permitted to continue to the second year.
  - (b) A candidate who fails in the external examinations of more than two Courses shall not be permitted to continue to the second Year.

### **OC-59.3.2 Pattern of Evaluation**

- (i) Each Course shall be evaluated as shown in the table below:

No.	Course	Theory Marks		Practical Marks	
		Internal	External	Internal	External
	<b>First Year</b>				
1	Nursing Education	25	75	50	50
2	Advance Nursing Practice	25	75		
3	Nursing Research & Statistics	25*	75**		
4	Clinical Speciality-I	25	75	100	100
		<b>100</b>	<b>300</b>	<b>150</b>	<b>150</b>
	<b>Second Year</b>				
1	Nursing Management	25	75		
2	Clinical Speciality-II	25	75	100	100
3	Dissertation & Viva			100	100***
	<b>Total</b>	<b>50</b>	<b>150</b>	<b>200</b>	<b>200</b>

Nursing Research 15 marks and Statistics 10 marks

\*\* Nursing Research 50 marks and Statistics 25 marks

\*\*\* Dissertation 75 marks and Viva 25 marks

\*

**(ii) Internal Assessment:**

- For Theory and Practical Courses, internal assessment for each Course, shall be based on the average score in three tests, conducted at three month intervals.
- A candidate who fails to secure 50% marks shall be given up to two additional tests before the external examination, and the internal score shall be computed as the average of the best three tests.

**(iii) External Examination:**

For Theory and Practical Courses, the External Examination shall be conducted by the University. Each Theory Examination shall be of 3 hours duration. The Practical Examination shall be as per the schedule notified by the University.

**OC-59.3.3 Supplementary Examination:**

- Candidates who have not appeared for, or who have failed the annual examination shall be permitted to appear for a Supplementary Examination, which shall be held within six weeks from the date of declaration of the annual examination results.
- A candidate shall not be allowed to appear for the supplementary examination for the purpose of improvement of his/her scores.

**OC-59.3.4 Number of attempts:**

- A candidate shall be permitted a maximum of three attempts to pass the examination for each Course including the supplementary examinations.
- A candidate shall not be allowed to continue the Programme if the he/ she does not pass an Examination in three attempts

**OC-59.3.5 Dissertation:**

- There shall be a Research Committee (RC) a minimum of five members, comprising at least one faculty member from each of the five Clinical Speciality areas, and the Head of the Institution/College, who shall be the Chairperson.
- A guide shall be appointed by the RC, for a candidate, based on the Clinical Speciality of the dissertation. There shall be not more than four candidates assigned to a Guide.

- (iii) The dissertation proposal, in consultation with the Guide, shall be submitted to the RC, end of the ninth month of the first academic year.
- (iv) The criteria for internal assessment shall be determined by the BoS.
- (v) Two soft bound copies of the final completed dissertation prepared under the direction of the guide, shall be submitted to the College/Institute, three months before the date of commencement of the Second Year examination.
- (vi) The candidate shall incorporate modifications/corrections, if any, suggested by the external examiner and resubmit the modified dissertation copy prior to the conduct of Viva-Voce. The final certified hard bound copy of the dissertation shall be submitted to the College/Institute before the declaration of the results.
- (vii) A candidate who fails the dissertation, shall be required to redo the dissertation. The reasons for failure and suggestions for improvement shall be communicated to him/her in writing.

**OC-59.3.6 Appointment of Examiners:**

- (a) To be appointed as an examiner, a Master's Degree in the concerned subject with a minimum of three years of teaching experience after Master's is essential. He/she must be a recognized post-graduate teacher of an University.
- (b) An examiner for the dissertation shall be a Nursing Faculty/Nursing Expert in the Clinical Speciality, holding Ph.D./M.Phil./M.Sc. Nursing, with a minimum of three years in guiding research projects for post-graduate nursing students. The guide will be the internal examiner.

**OC-59.3.7 Conduct of examination:**

- (a) There shall be one internal and one external examiner for the conduct of the final examination. The internal examiner shall be the Convener. The Examiners shall do the Paper setting and Evaluation.
- (b) Theory papers shall be evaluated by two examiners as a double evaluation procedure. The average score shall be the final marks. There shall be no provisions for revaluation.
- (c) The practical examination shall be conducted jointly by the internal and the external examiner.
- (d) The Dissertation shall be jointly evaluated by one internal and one external examiner prior to the conduct of Viva-Voce. The Viva-Voce shall be jointly conducted by both the examiners.

**OC-59.3.8 Standard of Passing**

- (a) The theory and practical components of a course are to be considered as separate heads of passing.
- (b) A candidate must pass both Theory and Practical components of a Course in one and the same sitting.
- (c) The minimum marks for passing shall be 50% in each of the Theory and Practical components separately, both in the internal assessment and the external examination.
- (d) For the Theory Courses, the pass marks for the internal assessment shall be 13 out of 25 marks and for the external examination shall be 37 out of 75 marks.
- (e) If a candidate fails in either theory or practical component of a Course, he/she shall be required to re-appear for both components. Such marks shall be shown with the remark "N.E." (Not Exempted) on the statement of marks.

**OC-59.3.9 Award of Class:**

Class shall be awarded at the final year examination on the basis of the aggregate marks obtained at the first and second year examinations taken together, to

candidates who pass the examinations in a single attempt. The award of class shall be as indicated below:

Distinction - 75% and above

First Class - 60% and above but below 75%

Second Class - 50% and above but below 60%

A candidate who passes any of the examinations in more than one attempt shall be declared as 'Pass'. The remark against his/her results shall be 'Passes'

#### **OC-59.4 College Grievance Committee**

- (a) The Committee shall be constituted by the Principal /Head of the College /Institute for a term of 3 years, and shall work under the control and supervision of the Principal.
- (b) The terms of reference of the Committee shall be to investigate into written complaints from the students referred to them by the Principal /Head and recommend a course of action.
- (c) The College Grievance Committee shall comprise:
  - i) Vice-Principal/Senior member of teaching staff as Chairperson
  - ii) Two regular teachers,
  - iii) In case the grievance concerns any member of the committee, the Principal shall reconstitute the committee, excluding the concerned member.
- (d) Procedure for Investigation of Grievance by the College Grievance Committee.
  - 1) The candidate shall submit a written grievance to the Principal/Head.
  - 2) The grievance shall be accompanied with a fee as prescribed by the College /Institute, which shall be refundable if the grievance is found genuine.
  - 3) The Principal /Head shall refer the grievance to the College Grievance Committee.
  - 4) The Committee shall invite a reply to the allegations by the candidate from the concerned person(s) involved.
  - 5) After considering the reply of the concerned person(s), the committee shall recommend a course of action in writing to the Principal /Head, within a month.
  - 6) The Principal /Head shall inform the candidate, the findings of the Committee.
  - 7) If the grievance is found to be genuine and the same is recorded giving reasons, appropriate action shall be taken.
  - 8) If the grievance is found to be not genuine, a fine as prescribed by the College/Institute, shall be imposed on the candidate.

- OC-60 (Effective from 3<sup>rd</sup> July, 2015) ORDINANCE RELATING TO BACHELOR OF PERFORMING ARTS (THEATRE) – B.P.A.(T)**
- OC-60.1 Aim and Objective of the Programme**  
The objective of this Programme is to impart a full time professional training in Performing Arts (Theatre) leading to the Degree of Bachelor of Performing Arts (Theatre). It aims at creating trained graduates in Performing Arts dedicated to theatre.
- OC-60.2 Duration of the Programme**  
Duration of the Bachelor of Performing Arts (Theatre) Programme shall be of four academic years consisting of a total of eight Semesters.
- OC-60.3 Eligibility and Admission**  
Candidates who have passed Higher Secondary School Certificate Examination HSSCE (Std. XII) or an equivalent examination of a recognized Board/Body and pass the Entrance Examination with a minimum of 40% marks, as well as successfully clear the interview for selection conducted by the Institution offering the Programme, shall be eligible for admission to the B.P.A.(T) Programme.
- OC-60.4 Structure and Syllabus of the Programme**  
Structure and Syllabus of the Bachelor of Performing Arts (Theatre) Programme shall be as specified below:
- OC-60.4.1 Structure**
- (i) The Programme shall consist of a total of four academic years of eight Semesters.
  - (ii) There shall be five courses in Theory, one course in Performance (Practical), and a course on Environmental Studies, in each of the Semesters I and II.
  - (iii) There shall be six courses comprising Theory and Practicals, in each of the Semesters III to VI.
  - (iv) All Theory Courses shall carry three credits each. All non-Theory Courses including Practicals, Performances, and Graduation Projects shall carry four credits each.
  - (v) One credit shall be equivalent to 15 lectures of one hour each or 15 practical sessions of three hours each.
  - (vi) In addition to the Theory and Practical Courses, students shall be required to attend Workshops, Seminars, Guest lectures and Guest performances.
  - (vii) The Scene Work/ Production which is a component of Practical Course shall have at least four weeks of teaching time, with a minimum of 18 hours per week and a maximum of 36 hours per week.
- OC-60.4.2 Syllabus**  
The syllabus for the B.P.A.(T) Programme shall be as proposed by the Board of Studies (BoS) in the Subject and approved by the Academic Council, from time to time.
- OC-60.5 Scheme of Examination**
- (i) The pattern of examination shall comprise of Internal and External components of assessment for all Theory courses.
  - (ii) The marks allocation for the Courses shall be as recommended by the BoS and approved by the Academic Council.
  - (iii) A candidate is required to obtain not less than 40% marks to pass in each course.



- (iv) There shall be separate heads of passing in the theory and non-theory components of a course. However there shall be a combined head of passing for Internal and External component of theory courses.

**OC-60.6 Attendance**

To be eligible to appear for the External Examination at the end of each semester, the minimum semester-wise attendance for all Theory and Practical Courses shall be 75% as prescribed under Ordinance OA-17.

**OC-60.7 Admission to higher Semester**

- (i) A candidate admitted to Semester I shall be subsequently eligible for admission to Semester-II provided he/she has 75% attendance in Semester-I.
- (ii) From Semesters III to VIII, a candidate shall be eligible for admission to the next semester, provided that he/she has passed in all the Theory and Practical/ Performance courses of all, but the immediate preceding, semesters, and must have 75% attendance in the immediate preceding semester.

**OC-60.8 Revaluation**

A student may apply for revaluation in the External component of assessment of the course as prescribed under Ordinance OA-5.15.

**OC-60.9 Exemption**

A student who obtains minimum passing marks prescribed in each theory paper shall be exempted from reappearing for that paper only.

**OC-60.10 Examiners**

**OC-60.10.1 Board of Examiners**

For each Course there shall be one Internal Examiner and one External Examiner. The appointment of Examiners shall be as per Ordinance OB-4.

**OC-60.10.2 Eligibility for appointment as External Examiner**

Master's Degree or its equivalent in the relevant subject from a recognized University, and minimum of three years teaching experience at undergraduate level.

**OR**

A performing artist having excellence in the subject concerned and having a minimum of eight years experience as a performer.

**OC-60.11 Setting of question papers**

The question papers for external examinations for all semesters shall be set by internal examiners in consultation with the external examiners. Internal examiner shall be the Convener of the Board of Examiners for the respective course. The same examiner may be appointed as the Convener for more than one paper, if required. The Performance/ Practical examinations of a course shall be conducted jointly by the internal and external examiners.

**OC-60.12 Declaration of Results and award of Grades**

- (i) While declaring the results, Grades shall be awarded as prescribed under Ordinance OA-16, to the candidates who have appeared for the Final Semester Examination based on their cumulative performance of all eight semesters.

- (ii) Eligible candidates shall be awarded grace marks as prescribed under Ordinance OA-5.16.
- (iii) A candidate desiring to improve his/her Grade shall be permitted to do so as per the University rules governing the same.

**OC-60.13 Repeat Examination**

A student failing in Final Year (Semester-VII and Semester-VIII) Examination shall be eligible to appear in the next examination as an external candidate and complete the Programme within a total period of eight years from the date of registration for Semester-I. In case, a student has failed in a Production or any group practical work, he/ she will have to attend the necessary classes again to reappear for the examination. Appropriate fees shall be charged for the same.

**OC-61 Ordinance relating to the Bachelor of Education (B.Ed.) Programme of Goa University.**

**OC-61.1 Preamble**

The Bachelor of Education Programme (B.Ed.) is a professional two year programme that prepares teachers to teach at upper primary or middle level, secondary level and senior secondary level.

**OC-61.2 Admission**

- (a) Candidates with at least 50% marks either at the Graduate or Post-Graduate Degree in Sciences/Social Sciences/Humanities, or Graduate Degree in Engineering or Technology with specialization in Science and Mathematics with 55% marks, or any other qualification equivalent thereto, are eligible for admission to the programme.
- (b) The reservation and relaxation for SC/ST/OBC/PWD and other categories shall be as per the rules of the State Government.
- (c) Further, candidates must have at Graduation/Post graduation at least one subject that is taught at school/higher secondary level and provided that such subjects are available as subject pedagogies in the institution in which the candidate seeks admission.
- (d) A candidate, upon admission to the B.Ed. Programme, shall not be permitted to hold any appointment whatsoever, whether full-time or part-time, and shall not be permitted to be enrolled for any other degree, diploma or certificate programme conducted by any statutory body.
- (e) **(Effective from 11<sup>th</sup> February, 2019)** *Admission shall be made on merit on the basis of marks obtained in the qualifying examination /any other selection process as per the policy of the State Government/University*

**OC-61.3 Duration of the Programme**

The B.Ed. Programme shall be full-time, of a duration of two academic years, which may be completed in a maximum of three years from the date of admission to the programme.

**OC-61.4 Course Structure:**

## **1. FIRST YEAR B.ED**

### **(i) PART A: Theory Courses**

#### A.1 Core Courses

There shall be three courses: EDU 01, EDU 02 and EDU 03.

#### A.2 Developing Teacher Sensibilities

There shall be two courses: EDU 04 and EDU 05.

#### A.3 Pedagogy Courses

There shall be two courses: EDU 07 (Part 1) and EDU 08 (Part 1): Subject Pedagogies I: Methodology of Teaching in any two given subjects as recommended by the Board of Studies, approved by the Academic Council and notified in the handbook of the Institute from time to time.

### **(ii) PART B: Practice Teaching**

There shall be three components:

#### B.1 Micro Teaching

B.2 Practice Teaching Lessons (20) inclusive of Peer Teaching, and excluding Micro Teaching lessons

#### B.3 Internship of 4 weeks

### **(iii) PART C: Skill Development Course**

C.1 There shall be one course in Communication Skills: EDU 06

### **(iv) PART D: Other Practical Work**

The components of practical work shall be as recommended by the Board of Studies, approved by the Academic Council and notified in the handbook of the Institute from time to time.

## **2. Second Year B.Ed.**

### **(i) PART A: Theory Courses**

#### A.1 Core Courses

There shall be one course: EDU 09

#### A.2 Developing Teacher Sensibilities

There shall be three courses: EDU 10, EDU 11 and EDU 12

#### A.3 Pedagogy Courses

There shall be two courses: EDU 07 (Part 2) and EDU 08 (Part 2): Subject Pedagogies II: Methodology of Teaching in any two given subjects as recommended by the Board of Studies, approved by the Academic Council and notified in the handbook of the Institute from time to time.

### **(ii) PART B: Practice Teaching**

There shall be two components:

#### B.1 Practice Teaching Lessons (20)

#### B.2 Internship of 16 weeks

### **(iii) PART C: Skill Development Courses**

There shall be two courses: EDU 13 and EDU 14

Compulsory and optional units under EDU 14 shall be as recommended by the Board of Studies, approved by the Academic Council and notified in the handbook of the Institute from time to time.

### **(iv) PART D: Other Practical Work**

The components of practical work shall be as recommended by the Board of Studies, approved by the Academic Council and notified in the handbook of the Institute from time to time.

## **OC-61.5 Records to be maintained in the College**

- (i) The Head of the Institution/Principal shall maintain all records of:
  - a) Project work/Assignments in each of the Theory Papers.
  - b) Observation of the 20 lessons.
  - c) Lesson plans/notes of the 40 lessons.
  - d) The school based activities conducted during Internship of both the years.
  - e) All practical work under Parts A, B, C and D mentioned above.
- (ii) The Principal of the college shall forward a statement of internal assessment to the University at the end of each academic year.

#### **OC-61.6 Academic Audit**

- (i) There shall be an Academic Audit Committee (AAC) to review the Internal Assessment.
- (ii) The AAC shall comprise three members who shall be nominated by the Vice-Chancellor from the panel of experts from Institutes of Education, prepared by the BoS and approved by the Academic Council. The term of the AAC shall be for a period of three years.
- (iii) The audit shall be conducted upon completion of the Internal Assessment of each Academic Year, and shall examine adherence to procedures followed, maintenance of records, adequacy of coverage of the syllabus, and, objectivity and uniformity in assessment.

#### **OC-61.7 Eligibility for Examinations**

##### **1. Eligibility for the First Year B.Ed. Examination**

To be eligible for the First Year Bachelor of Education Examination, a candidate shall be required to have:

- (a) Successfully kept terms for the First and the Second Terms, over a maximum period of two consecutive academic years, with a minimum of 80% attendance of the total working days in Part A and with a minimum of 90% attendance of the total working days in Parts B, C and D.  
However, those candidates not meeting the minimum requirement in attendance shall fulfill the course requirements within three years from the date of initial registration.
- (b) Completed all internal assessment in Part A and practical work requirements as detailed in Parts B, C and D extending over the academic year.

##### **2. Eligibility for A.T.K.T. for Students of First Year B.Ed.**

A candidate who has failed in First Year B.Ed. examination in any of the Parts A, B, C or D shall be allowed to keep terms for the Second Year B.Ed. Programme. However, the results of the Second Year B.Ed. Examination of the candidate shall not be declared, unless he/she has passed the First Year B.Ed. Examination.

##### **3. Eligibility for the Second Year B.Ed. Examination**

A candidate to be eligible for the Second Year Bachelor of Education Examination shall be required to have:

- (a) Successfully kept two terms for the Third and the Fourth Term over a maximum period of two consecutive academic years, with a minimum of 80% attendance of the total working days in Part A and a minimum of 90% attendance of the total working days in Part B. Candidates not meeting the minimum requirement in attendance shall be required to fulfill the course requirements within three years from the date of initial registration.

- (b) Completed all internal assessment in Part A and practical work requirements as detailed in Parts B, C and D extending over the Second academic year of the programme.

**OC - 61.8 Scheme of Examination**

**1.A FIRST YEAR B.Ed.**

The examination for the First Year B.Ed. shall be held at the end of the academic year and shall consist of Theory in Part A, Practice Teaching in Part B and Course Work in Parts C and D. The total marks awarded shall be as follows:

**(i) PART A : Theory Courses**

Theory courses shall be assessed for a total of 500 marks.

- (a) EDU 01 to EDU 05 Courses shall have external and internal assessment.
- (b) In papers EDU 01 to EDU 03 the external assessment shall be a written examination of 2 hours duration, assessed for 100 marks each, of which the external component shall be of 65 marks and the Internal component shall be of 35 marks.
- (c) EDU 04 and EDU 05 shall have a written examination of 1 hour duration and shall be assessed for 50 marks each of which the external component shall be of 30 marks and internal component shall be of 20 marks.
- (d) EDU 07 and EDU 08 Courses shall have 100% internal assessment of 50 marks in each course carried forward to the second year of the Programme.

**(ii) PART B - Practice Teaching**

Practice teaching shall have only internal assessment for a total of 200 marks.

**(iii) PART C - Skill Development Courses**

EDU 06: Skill Development Courses shall have only internal assessment for a total of 50 marks, which shall be converted into a grade.

**(iv) PART D - Other Practical Work**

Other Practical work shall have only internal assessment for a total of 100 marks, which shall be converted into a grade.

**1. B** The allotment of marks/ grade for the **First Year B.Ed. Examination** is as shown in the table below:

PART A	EDU 01	EDU 02	EDU 03	EDU 04	EDU 05		EDU 07 (Part 1)	EDU 08 (Part 1)
INT	35	35	35	20	20		50	50
EXT	65	65	65	30	30		-	-
PART B	Practice Teaching-Internal			Method I		Method II		
				( )		( )		
				100	100			200
								Grade
PART C	Skill Development Courses- Internal					EDU 06		
PART D	Other Practical Work – Internal							Grade

	1. Working with community									
	2. Internship comprising school based activities									
	3.Co-curricular Activities									
	GRAND TOTAL									

**1.C** Grades shall be awarded as shown below:

Grade	Qualitative Description	Equivalence of Grade in Percentage of marks
O	Outstanding	85% and above
A	Very Good	70% - <85%
B	Good	55% - <70%
C	Average	50% - <55%
F	Fails	<50%

**2.A SECOND YEAR B.ED.**

The examination for the Second Year B.Ed. shall be held at the end of the academic year and shall consist of Theory in Part A, Practice Teaching in Part B and Course Work in Parts C and D. The total marks awarded shall be as follows:

**(i) PART A - Theory Courses**

Theory courses shall be assessed for a total of 450 marks

- (a) EDU 09 Course shall have external and internal assessment. The external assessment shall be a Written Examination of 2 hours duration and shall be assessed for 100 marks, of which the external component shall be of 65 marks and the Internal component shall be of 35 marks.
- (b) EDU 11, EDU 12 and EDU 13 shall have a written examination of 1 hour duration and shall be assessed for 50 marks each of which the external component shall be of 30 marks and internal component shall be of 20 marks.
- (c) EDU 07 and EDU 08 Courses shall have external and internal assessment. The external assessment shall be a written examination of 2½ hours duration. Each Course shall be assessed for 100 marks, of which the external component shall be of 75 marks and the internal component shall be of 25 marks.

**(ii) PART B - Practice Teaching**

**Practice teaching shall have only internal assessment for a total of 200 marks.**

**(iii) PART C - Skill Development Courses**

EDU 10 and EDU 14 Skill Development Courses shall have only internal assessment for a total of 100 marks, which shall be converted into a grade.

**(iv) PART D - Other Practical Work**

Other Practical work shall have only internal assessment for a total of 100 marks which shall be converted into a grade.

**2.B** The allotment of marks for the **B.Ed. Examination** shall be as in the table below:

PAR T A	EDU 01	ED U 02	ED U 03	ED U 04	ED U 05		ED U 07	ED U 08	ED U 09		ED U 11	ED U 12	ED U 13		TOTAL		
INT	35	35	35	20	20		75	75	35		20	20	20		390		
EXT	65	65	65	30	30		75	75	65		30	30	30		560		
TOTAL															950		
PART B	Practice Teaching-Internal					Method I		Method II									
						( )		( )									
						200		200								400	
																Grade	
PART C	Skill Development Courses- Internal											EDU 06					
												EDU 10					
												EDU 14					
PART D	Other Practical Work – Internal													Grade			
						1. Working with community											
						2. Internship comprising school based activities											
						3.Co-curricular Activities											
GRAND TOTAL															1350		

### 3. Pattern of the question paper

The pattern of the question papers for the University examination shall be determined by the BoS and communicated to the students at the beginning of the academic session.

#### OC-61.9 Standard of Passing

##### 1. First Year

- To pass the First Year Examination in part A, a candidate must obtain a minimum of 40% marks in the Courses EDU 01, EDU 02 and EDU 03 in external and internal components separately and a minimum aggregate of 50% marks in each Course. In Course EDU 04, EDU 05 and EDU 06 a candidate must obtain a minimum of 50% marks.
- To pass the Examination in Part B, a candidate must obtain a minimum of 50% marks on the aggregate.
- To pass the Examination in Part C and in Part D, a candidate must obtain a minimum of C Grade.

##### 2. Second Year

- To pass the Second Year Examination in part A, a candidate must obtain a minimum of 40% marks in the Courses EDU 09, EDU 07 and EDU 08 in external and internal components separately and an aggregate of 50% marks in each Course. In Course EDU 10, EDU 11, EDU 12, EDU 13 and EDU 14 a candidate must obtain a minimum of 50% marks in each course.
- To pass the Examination in Part B, a candidate must obtain a minimum of 50% marks on the aggregate.
- To pass the Examination in Part C and in Part D, a candidate must obtain a minimum of C Grade.

### **OC-61.10 Award of Class**

1. To be eligible for the award of a class, a student is required to obtain a minimum Grade C or above, in Part C and Part D.
2. A Class shall be awarded after adding marks of Part A and Part B as follows:

<b>Range of marks</b>	<b>Class</b>
70% & above	Distinction
60 to <70%	First class
50 to <60%	Second Class
Below 50%	Fail

3. A candidate passing at repeat examinations shall be declared as 'Passes'.

### **OC-61.11 Exemptions**

1. In the case of a candidate who has completed Part B, Part C and Part D in the First Year but has not completed Part A, he/she shall be permitted to complete Part A within two subsequent academic years from the year of registration.
2. In the case of a candidate who has completed Part B, Part C and Part D in the Second Year but has not completed Part A, he/she shall be permitted to complete Part A within two subsequent academic years from the initial registration for the programme.
3. A candidate who fails in Part B in any year shall give five additional lessons with a minimum of 50% marks in each subject method, within a period of three academic years from the year of registration. Similarly, a candidate who fails in Part C and Part D shall be required to complete the course requirements and obtain the minimum passing grades.
4. A candidate who is declared 'Fails' and desires to appear at a subsequent attempt at Part A, shall be exempted from appearing in Course(s) where he/she has obtained a minimum of 50% marks.
5. A candidate who has failed the First Year B.Ed. Final written examination shall be permitted to re-appear in examinations conducted in the following two years. Further, if modifications are effected in the syllabi or in the question paper pattern, the candidate shall answer the question papers set for the current year.
6. A candidate who has failed the Second Year B.Ed. Final written examination shall be allowed to re-appear in examinations conducted in the following year. Further, if modifications are effected in the syllabi or in the question paper pattern, the candidate shall answer the question papers set for the current year.
7. A candidate shall not continue to be registered for the B.Ed. Programme beyond a period of three academic years from and including the year of initial registration.
8. The eligibility for the award of class to the candidates who reappear shall be governed under provisions of the Ordinance OA-16.
9. Grace marks to candidates shall be determined by the common ordinance of the University.



- OC-62                   ORDINANCE RELATED TO THE BACHELOR OF PHYSICAL EDUCATION (B.P.ED.) PROGRAMME (w.e.f. Academic Year 2015-16)**
- OC-62.1                PREAMBLE**
- The Bachelor of Physical Education Programme (B.P.Ed.) is a professional two year programme that prepares teachers to teach physical education and sports activities in schools upto higher secondary level.
- OC-62.2                DURATION**
- (i) The B.P.Ed. Programme shall be full time, of two years comprising four semesters which shall consist of 200 instructional days, exclusive of admission and examination, with a minimum of 36 hours per week.
- (ii) A student shall keep terms for four consecutive semesters in two years from the date of admission in the College/Department of Physical Education. However, he/she shall be permitted to complete the programme within maximum period of three years from the date of admission to the programme.
- OC-62.3                ELIGIBILITY AND ADMISSION**
- (i) A candidate who has obtained a Graduate/Post Graduate Degree with a minimum of 45% marks from Goa University or from any other statutory body recognized by University Grants Commission and has passed the entrance test including the physical efficiency and skills test in two games conducted by the college shall be eligible for admission to the B.P.Ed. Degree Course.  
Number of seats under various reservation categories specified by the State Government, shall be in accordance with the directives of the Government of Goa and as adopted by Goa University. Candidates applying for admission under these categories shall be required to submit a valid certificate to that effect issued by the Officer of the rank of the Deputy Collector or any other authorized Officer as notified by the State Government.
- (ii) A candidate admitted to the B.P.Ed. Course shall not be permitted to hold any regular employment whether full time or part time. Further, a candidate shall not be permitted to enroll for any other degree, diploma or certificate programme conducted by any statutory body or University while doing the course.
- OC-62.4                PROGRAMME STRUCTURE**
- 1.(a) The Programme shall comprise compulsory theory and practical courses, as well as compulsory school internship.
- (b) Each Semester shall consist of Courses I to IV.
- (c) The practicum shall extend over all four semesters and consist of:-
- (i) Theory, Practicals, Practice Teaching and Internship.
- (ii) Practice Teaching and internship shall be of not less than 15 days per year, at standards V to XII of Schools selected by the Principal/Head. In addition to these lessons, there shall be micro teaching lessons and simulated lessons for each academic year.
- (iii) Observation of Practice Teaching lesson in school: 30 lessons, of which 15 shall be in compulsory method, 10 in optional method personally developed and 5 in other optional methods.
- (iv) Participation in Curricular and Extracurricular activities.
- (v) Project Work and Assignments.
- (vi) **(Notified on 29<sup>th</sup> May, 2017)** In addition to the above, the student shall be required to earn a minimum of 2 additional Credits during the two year

programme, by participation in any of the following activities duly certified by the Head of the Institution/ Department.

Sr. No.	Special Credits for Extra Co-curricular Activities	Credit
1.	Sports achievement at State level Competition (Medal winner)	1
	Sports Achievement National level Competition (Medal Winner)	2
	Sports participation International level Competition	4
2.	Inter Uni. Participation (Any one game)	2
3.	Inter College Participation (min. two games)	1
4.	National Cadet Corps/ National Service Scheme	2
5.	Blood donation/ Cleanliness drive/ Community services	2
6.	Mountaineering-basic camp, Advance Camp/ Adventure activities	2
7.	Organization/ Officiating-State/ National level in any two games	2
8.	News Reporting/ Article writing/ book writing/ progress report writing	1
9.	Research Project	4

## 2. (effective from 30<sup>th</sup> November, 2016) Course Structure

- Theory Courses shall be of four Credits each. The Course on physical education activities and practice teaching in Physical Education shall be of 10 Credits.
- Each Credit shall have 30 instructional/activity hours.
- Each Credit shall be evaluated for 25 marks.
- Course content shall be as recommended by the Board of Studies (BoS) and approved by the Academic Council from time to time.

### OC-62.5 SCHEME OF EXAMINATION

- 1.(a) (effective from 30<sup>th</sup> November, 2016)** There shall be continuous Intra Semester Assessment (ISA) and Semester End Assessment (SEA) evaluated for total of 25 marks and 75 marks respectively. The Physical Education activities courses and practice teaching shall have ISA (50%) and SEA (50%).

  - The ISA shall be evaluated by the concerned teacher of the Course as per the scheme recommended by the BoS and approved by the Academic Council.
  - The SEA shall be evaluated by an examiner from the Panel of Examiners as recommended by the BoS and approved by the Academic Council.
  - For the SEA in each semester, a student must apply to the University as per the prescribed procedure of the University through the Principal of the College.
  - An assessment of upto 25 marks shall be of one hour duration, and of 75 marks shall be of three hours duration.
  - The pattern of the question paper shall be as recommended by the BoS and approved by the Academic Council.
  - The students shall have to obtain a minimum of 40% marks at the ISA and at the SEA to qualify in each Course.

2. Allowed To Keep Terms (ATKT)  
A student shall be allowed to keep term for Semester II and III irrespective of the number of Courses in which he/she has failed in the previous Semester(s).

### 3. Repeat Examination

- (a) A student who fails the course shall have the opportunity to reappear for the SEA of that course and his/her marks of the ISA shall be carried over. He/she shall however not be entitled for grade and be declared as 'Passes'.
- (b) A student who is unable to answer the examination, must apply to the Head of the Institution giving reason(s) for absence along with the necessary documents and testimonials.
- (c) The repeat examination for a student who fails in ISA shall be conducted by the College within 30 to 45 days from the date of declaration of result and marks of the same shall be sent to the University.
- (d) A student who fails the SEA in a particular semester shall reappear for the examination along with SEA of the following Semester.

### 4. Grading System

Marks awarded in each Course shall be represented in the form of Grades. The Final result shall be declared as Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA).

- (i) The percentage awarded in the ISA and SEA shall be added for awarding the grade for each course, as indicated in the table below.

Range of percentage scored	Grades	Grade Points
90 – 100	O (Outstanding)	10
75 – <90	A+ (Excellent)	9
65 – <75	A (Very Good)	8
55 – <65	B+ (Good)	7
50 – <55	B (Above Average)	6
45 – <50	C (Average)	5
40 – <45	P (Pass)	4
0 – <40	F (Fail)	0
	Ab (Absent)	0

Every student shall have to secure a minimum of 'P' grade to pass the course.

- (ii) Weighted grade points of a course shall be calculated by multiplying the grade points scored, by the number of Credits of the respective course.
- (iii) (a) The SGPA is the ratio of the sum of the product of the number of Credits with the grade points scored by a student in all the courses taken by a student and the sum of the number of credits of all the courses undergone by a student:

$$SGPA (S_i) = \frac{\sum(C_i \times G_i)}{\sum C_i}$$

where "C/" is the number of credits of the *l*th course and *G<sub>i</sub>* is the grade point scored by the student in the *l*th course.

- (b) The SGPA shall be rounded off to 2 decimal points and reported in the transcripts.
- (c) For each course a student securing 'F' or 'Ab' grade in the course shall not be entitled to earn any credits for that course and provisions of OC-62.5.3 shall be applicable.
- (iv)(a) On completion of all Credits, the CGPA shall be computed by dividing total number of the weighted grade points in all the semesters.
- (b) The CGPA shall also be calculated in the same manner taking into account all the courses undergone by a student over all the semesters of a programme:

$$CGPA = \frac{\sum(C_i \times S_i)}{\sum C_i}$$

where  $S_i$  is the SGPA of the  $i$ th semester and  $C_i$  is the total number of credits in that semester.

- (c) The CGPA shall be converted to the Final grade, as shown in the table below:

CGPA	Grades
9.5 – 10.0	O(Outstanding)
9.0 – <9.5	A+ (Excellent)
8.0 – <9.0	A (Very Good)
7.0 – <8.0	B+ (Good)
6.0 – <7.0	B (Above Average)
5.0 – <6.0	C (Average)
4.0 – <5.0	P (Pass)
< 88 Credits	F (Fail)

- (d) The CGPA shall be calculated upto two decimal places. If the CGPA is higher than the indicated upper limit in the two decimal digits by a factor of  $\geq 0.005$ , then the higher grade will be awarded. Eg. A candidate with CGPA  $\geq 4.995$  will be awarded 'C' grade.
- (e) The final grade sheet shall be submitted by the examiner(s) for each Course along with the attendance to the Head of the Institution.

#### **OC-62.6 MAINTENANCE OF RECORDS**

- (a) The Head of the Institution in which the student is studying will be required to keep record of all the work done in the College/Department and practicing School and certify that the work has been completed satisfactorily by the student(s).

- (b) The following Records are required to be maintained and certified by the Head of Institution:
  - (i) A file containing notes of Lessons given and critical evaluation made there on.
  - (ii) Note book of observations of at least 30 Lessons of which 10 shall be in each of the special methods and the other 20 lessons from other methods.
  - (iii) A journal of experiments of Psychology.
  - (iv) Record of Organization of Practice Teaching.
  - (v) Record of conducting Practical Examination.
  - (vi) Record of Terminal Examination.
  - (vii) Record of Practical Work of Physical Education Activities.
  - (viii) Record of Project work/Assignments.
  - (ix) Record of various programmes, competitions, intramurals, Athletic meet, Scout and Guide training camp, Hike-Picnic, Educational excursions conducted by the College/Department.

**OC-62.7. CO-ORDINATION COMMITTEE**

- (a) There shall be a Co-ordination Committee to scrutinize original records of evaluation of Internal Assessment, consisting of:
  - (i) Chairperson, Board of Studies in Physical Education
  - (ii) Chairperson, B. P. Ed. Examination
  - (iii) The Principal of the Institution where the ISA of a Course is conducted.
- (b) For each semester the Co-ordination Committee shall go through the ISA marks and the grades awarded to the students of different Institutions of Physical Education. If any discrepancy is found in the standard of marking and /or grading by college, the Principal/Head concern would be required to modify the marks accordingly as per the directions given by the Coordination Committee. The Committee is authorized to check all the internal work of the student/s of all the Colleges /Department to verify the marks awarded by the College/Department and make necessary changes wherever required.

**OC-62.8 GRIEVANCE REDRESSAL**

- (a) College Grievance Redressal Committee (CGRC) shall comprise:
  - (i) Principal/Senior member of teaching staff as Chairperson.
  - (ii) Two regular teachers, who are not members of the College Co-ordination Committee.
- (b) In case the Grievance concerns any member of the CGRC, the Principal shall reconstitute the committee, excluding the concerned member.
- (c) This committee shall investigate into written complaints from the students referred to them by the Principal in the conduct of examinations and recommend a course of action to the Principal as prescribed in OA- 5.14.

**OC-62.9 AWARD OF DEGREE**

A student shall be required to successfully complete all courses for the award of the B.P.Ed. Degree.

**OC-63 Ordinance related to two years B.Ed Special Education (B.Ed. Spl.Ed.) Programme (Effective from 27<sup>th</sup> May, 2016).**

**OC-63.1 Preamble**

The B.Ed. Spl.Ed. aims to develop a task force of special teachers / educators who can effectively deliver in all settings: inclusive, special, open or home based, and in all roles such as classroom teacher, resource teacher, itinerant teacher or cross disability teacher facilitators.

**OC-63.2 Degree to be awarded**

The Degree to be awarded by the Goa University shall be Bachelor of Education Special Education (Area of Specialization) such as (Mental Retardation/Intellectual Disability)

**OC-63.3 Eligibility for Admission**

To be eligible for admission to Bachelor of Education Special Education (MR/ID) Degree Programme, a candidate shall be required to have passed a Bachelor/Masters Degree of Goa University, or an equivalent Degree of any other University recognized by the University Grants Commission, in Sciences, Social Sciences or Humanities with a minimum of 50% marks; or Bachelor in Technology with specialisation in Science or Mathematics with a minimum of 55%.

**OC-63.4 Duration of the Programme and Medium of Instruction**

- 1 (a) The B. Ed Special Education Degree Program shall be full time, of two years duration, comprising four Semesters. The candidate shall be permitted to complete the Programme in a maximum of three years from the date of admission to the Programme.
- (b) A candidate shall not be permitted to enrol for any other full time Programme during that period.
- 2 (a) The medium of Instruction shall be English
- (b) Related Practical work could be in regional language and/or English, wherever necessary.

**OC-63.5 Programme Structure**

- (a) The Programme shall comprise Core and Optional Courses with a total of 80 credits.
- (b) One Credit is equivalent to 15 hours teaching and shall carry a weightage of 25 marks.
- (c) The following are the areas of specialization
  - (i) Hearing Impairment (HI)
  - (ii) Visual Impairment (VI)
  - (iii) Mental Retardation/ Intellectual Disability (MR/ID)
  - (iv) Autism Spectrum Disorders (ASD)
  - (v) Multiple Disabilities (MD)
  - (vi) Learning Disability (LD)

and any other specialization as notified by RCI, recommended by the Board of Studies (BoS) and approved by the Academic Council, from time to time. The Institute may offer one or more of the above mentioned Courses as per the need of the State.

**1. Course Structure**

Code	Courses	No. of	Total No.
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			Courses	of Credits
A	Theory	Core Courses	5	20
B	Theory	Cross Disability and Inclusive Education Courses	6	12
C	Theory	Disability Specialisation Courses	5	18
D	Theory	Enhancing Professional Capacities /Professional Development Courses	3	06
E	Practical Related to Disability		2	12
F	Field Engagement/School Internship		3	12
Total			24	80

Each Semester shall consist of Theory and Practicum.

#### **Area – A: Core Courses**

A1	Human Growth & Development
A2	Contemporary India and Education
A3	Learning, Teaching and Assessment
A4	Pedagogy of Teaching: (Anyone)
	PART I: Science
	PART II: Mathematics
	PART III: Social Studies
A5	Pedagogy of Teaching English

#### **Area- B: Cross Disability and Inclusion**

B6	Inclusive Education
B7	Introduction to Sensory Disabilities (VI, HI, Deaf-Blind)
B8	Introduction to Neuro Developmental Disabilities (LD, MR(ID), ASD)
B9	Introduction to Locomotor & Multiple Disabilities (CP, MD)

#### **Skill-based Optional Course (Papers) (Cross Disability and Inclusion)**

##### **ANY ONE (B10)**

Guidance and Counselling
Early Childhood Care & Education
Applied Behavioural Analysis
Community Based Rehabilitation
Application of ICT in Classroom
Gender and Disability
Braille and Assistive Devices

**Skill-based Optional Course (Disability Specialization)  
ANY ONE (B11)**

Orientation & Mobility
Communication Options: Oralism
Communication Options: Manual Options (Indian Sign Language)
Augmentative and Alternative Communication
Management of Learning Disability
Vocational Rehabilitation & Transition to Job Placement

**AREA –C: Disability Specialization Courses**

Institutions/Organisations offering B.Ed. Spl.Ed. are expected to decide on specific Disability Area for Specialisation out of ASD/HI/LD/MR(ID)/MD/ VI

C12	Assessment and Identification of Needs
C13	Curriculum Designing, Adaptation and Evaluation
C14	Intervention and Teaching Strategies
C15	Technology and Disability
C16	Psycho Social and Family Issues

**AREA- D: Enhancement of Professional Capacities (EPC)**

D17	Reading and Reflecting on Texts
D18	Drama and Art in Education
D19	Basic Research & Basic Statistic

**AREA - E: Practical Related to disability**

E1	– Cross disability and Inclusion (Part of Area B)
E2	– Disability Specialization (Part of Area C)

**AREA- F: Field Engagement/School Attachment/ Internship**

F1	– Main Disability Special School (related to Area C)
F2	– Other Disability Special School (related to Area B)
F3	- Inclusive school related to Area B & C

**OC-63.6 Records to be Certified by the Principal**

The Head of the Institution/ Principal shall ensure the completion of records with marks of all internal theory as well as practical, and forward a statement of these internal marks at the end of each semester to the University to prepare the final marks sheet indicating marks and grades, and declaration of results.



### **OC-63.7 Scheme of Examination**

- (a) There shall be continuous Internal and Semester End External Assessment for Theory Courses and Internal Assessment for Practicum.
- (b) The duration of a written examination carrying 25 marks shall be of 1 hour, that carrying 50 marks shall be of two hours and that carrying 100 marks shall be for three hours.
- (c) The format of the question paper shall be as decided by the BoS from time to time and communicated to students at the beginning of the academic session.

#### **1. Eligibility**

To be eligible to appear for the Semester End Examination a candidate shall be required to have :

- (i) A minimum of 80% attendance of the total working days for theory, 90% for all practicum, and 100% for school internship of which 5% attendance may be condoned by the Head of Institution on genuine grounds.
- (ii) Completed all Internal Assessments in Theory Courses and Practicum component in each of the semesters, as certified by the Head of the Institution.

#### **2. Standard of Passing**

- (a) A candidate shall be required to obtain a minimum of 50% marks in all Courses to pass.
- (b) He/she shall be required to pass in Theory and Practicum separately, in all four Semesters, within two academic years, or, a maximum period of three years from the initial date of registration for the Programme, to be eligible for the award of the Degree.

#### **3. Grading**

- (a)(i) Marks awarded in each Course shall be represented in the form of Grades using a ten point grading scale.
  - (ii) The Final result shall be declared as Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA).
- (b) Grades for each Course shall be awarded as follows:

Range of percentage scored	Grades	Grade Point
90-100	O (Outstanding)	10
80-<90	A+ (Excellent)	9
70-<80	A (Very Good)	8
65-<70	B+ (Good)	7
60-<65	B (Above Average)	6
55-<60	C (Average)	5
50-<55	P (Pass)	4
0-<50	F (Fail)	0
	Ab (Absent)	0

To be declared successful in each semester a candidate shall obtain a minimum of Grade P in each Course of Theory with an overall Grade P and a minimum of Grade P in each component of Practicum, with an overall Grade C, failing which, he/she shall not be entitled to earn an SGPA in that Semester.

- (c) Weighted grade points of a course shall be calculated by multiplying the grade points scored, by the number of Credits of the respective course.
- (d)(i) The SGPA shall be the ratio of the sum of the product of the number of Credits with the grade points scored by a candidate in all the Courses taken by a candidate and the sum of the number of credits of all the Courses undergone by a candidate:

$$SGPA (S_i) = \frac{\sum (C_i \times G_i)}{\sum C_i}$$

Where “C<sub>i</sub>” is the number of credits of the i<sup>th</sup> course and “G<sub>i</sub>” is the grade point scored by the candidate in the “i”<sup>th</sup> Course.

- (ii) The SGPA shall be rounded off two decimal places and reported in the transcript.
- (iii) For each Course a candidate securing ‘F’ or ‘Ab’ grade in the Course shall not be entitled to earn any credits for that Course and provisions of OC 63.8 shall be applicable.
- (iv)(a) On completion of all Credits, the CGPA shall be computed by dividing total number of the weighted grade points in all the Semesters.
- (b) The CGPA is also calculated in the same manner taking into account all the courses undertaken by a student over all the Semesters of the Programme:

$$CGPA = \frac{\sum (C_i \times S_i)}{\sum C_i}$$

Where S<sub>i</sub> is the SGPA of the “i”<sup>th</sup> semester and C<sub>i</sub> is the total number of credits in that Semester.

- (c) The CGPA shall be converted into final grade as shown below:

<b>CGPA</b>	<b>Grades</b>
9.5-10.0	O (Outstanding)
9.0-<9.5	A+(Excellent)
8.0-<9.0	A (Very Good)
7.0-<8.0	B+(Good)
6.0-<7.0	B (Above Average)
5.0-<6.0	C (Average)
4.0-<5.0	P (Pass)
<4.0	F (Fail)

- (d) The CGPA shall be calculated upto two decimal places. If the CGPA is higher than the indicated upper limit in the two decimal digits by a factor of  $\geq 0.005$ , then the higher grade will be awarded. Eg. A candidate with  $CGPA \geq 4.995$  will be awarded “C” grade.

- (e) The final grade shall be submitted by the examiner(s) for each Course along with the marks obtained and attendance to the Head of the Institution.

**OC –63.8 Exemptions**

- (a) In the First Year, a candidate who has passed Practicum component of each of the Semesters, but has not passed in Theory Courses of any/both semesters I and II, shall be permitted to complete Theory within three years or six semesters from the date of registration.
- (b) In the Second Year, a candidate who has passed Practicum component of each of the Semesters, but has not passed Theory Courses of any/both semesters III and IV, shall be permitted to complete Theory Courses within three years from the date of Registration.
- (c) A candidate who has not completed Practicum component of Semester I or III of the First or Second Year respectively, may complete that particular components of Practicum component within the same academic year under a resource room teacher who will be assigned to the candidate as supervisor.
- (d) A candidate may complete his/ her Course requirements in Practicum component during the following academic year paying only the required academic fees, provided that this is within three years from the year of Registration.
- (e) An unsuccessful candidate shall be required to pass in Theory Courses and Practicum component separately, in all four semesters, within three years (six semesters) from initial date of registration of the programme, to be eligible for the award of Degree.
- (f) An unsuccessful candidate who scores an overall Grade F (Fails) in Theory Courses at the end of four Semesters, shall have to pass all the Courses in Theory within three years (six semesters) from the time of registration.
- (g) An unsuccessful candidate who scores an overall Grade F (Fails) in Practicum component at the end of four Semesters, shall have to enrol again, provided the candidate fulfils the admission criteria for that year.
- (h) Due to sickness or unavoidable circumstances if a candidate has attended 60% of instructional days & 90% of practicum, he/she shall be allowed to enrol in the next Semester. However, if such conditions are not fulfilled, then the candidate has to repeat the current semester.
- (i) Under the new scheme there shall be no system of revaluation.

<b>OC -63.9</b>	<b>Eligibility for Award of Degree</b>
	To be eligible for the award of the Degree, a candidate shall be required to have successfully completed all Courses of a total of 80 credits within a maximum period of six consecutive Semesters and obtained an overall Grade P in Theory Courses and Practicum component combined, of all four Semesters.

**OC-64**                    **ORDINANCE RELATING TO THE FOUR-YEAR INTEGRATED DEGREE OF BACHELOR OF SCIENCE IN AGRICULTURE** (w.e.f. Academic Year 2015-16)

**OC-64.1**                **GENERAL**

**1. Objectives**

To train manpower with greater practical orientation to cater to the needs of public, private and corporate sectors in Agriculture, to impart knowledge and training in interdisciplinary production-oriented courses in Agriculture and, to provide experiential learning and hands-on training for developing entrepreneurial skills.

**2. Introduction**

This Degree Programme requires hands-on practical experience in Crop Production and allied activities to prepare the candidate to carry out crop husbandry in an economically and ecologically sustainable manner.

For Quality Assurance in Agricultural Education, it is essential to develop norms and standards. This relates to the trinity of function – education, research and extension education – and other functions, such as NCC, NSS, Physical Education, Hostel Management, Student Counselling and Placement, Cultural and Sports Activities. [Report of IV Deans Committee on Agricultural Education in India, 8/8/2006]

**3. Degree to be Awarded**

The Degree to be awarded after successful completion of the Programme shall be Bachelor of Science (Agriculture) [B.Sc. (Agriculture)].

**4. Duration of the Programme**

The Programme shall comprise eight Semesters in four Academic Years, which shall include six Semesters of Course Work and one Semester each of Hands-on Training (HOT) and Rural Agricultural Work Experience Programme (RAWEP).

A student shall be required to complete a minimum of 163 Credits for the award of the Degree. The number of Credits shall exclude non-credit Courses for Language, Physical Education/NCC/NSS.

**5. Eligibility and Admission**

- (a) A candidate who has passed the HSSC Examination of Goa Board of Secondary and Higher Secondary Education, or its equivalent, with Physics, Chemistry, Biology/ Vocational Horticulture/ Floriculture, and Mathematics, and obtained minimum 50% marks in aggregate, shall be eligible for admission.
- (b) A candidate who does not have Mathematics at the HSSC Examination or its equivalent, shall be eligible for admission, which shall be subject to completion and passing a Deficiency Course in Mathematics in the first Semester itself.
- (c) Percentage in the qualifying examination and number of seats for candidates under various reservation categories specified by the State Government, shall be in accordance with the directives of the Government of Goa and as adopted by Goa University. A candidate applying for admission under these categories shall be required to submit a valid certificate to that effect issued by the Officer of the rank of the Deputy Collector or any other authorized Officer as notified by the State Government.

- (d) The admission procedure to the Programme shall be as determined by the State Government/ University.

## **OC-64.2 PROGRAMME STRUCTURE**

- (a) The structure for the four year Degree Programme in B.Sc. (Agriculture) comprising eight Semesters shall consist of Courses, each assigned a number of Credits as per the Course requirement.
- (b) The maximum number of Credits per Semester shall not exceed twenty-three.
- (c) One credit shall be equivalent of one hour Theory lecture or three hours Laboratory / Field work per week.
- (d) Each instructional period shall be of one hour duration.

### **1. Course Structure**

#### **(a) Semester I**

- (i) There shall be nine compulsory Courses in the area of Agronomy, Botany, Soil Science, Plant Pathology, Horticulture, Agricultural Extension, and Animal Science and Dairy Science, comprising a total of 19 Credits, of which 12 shall be Theory and 7 shall be Practical.
- (ii) Physical Education is a non-credit and optional Course.
- (iii) A student who has not studied Mathematics in HSSCE, shall have to complete the Deficiency Course in Mathematics in the First Semester itself.

#### **(b) Semester II**

- (i) There shall be eight compulsory Courses in the area of Agronomy, Soil Science, Plant Pathology, Botany, Agricultural Economics, Agricultural Extension, Agricultural Engineering, and Statistics, comprising a total of 20 Credits, of which 13 shall be Theory and 7 shall be Practical.
- (ii) NSS/NCC is a non-credit and optional Course offered.

#### **(c) Semester III**

There shall be nine compulsory Courses in the area of Agronomy, Botany, Plant Pathology, Entomology, Horticulture, Agricultural Engineering, and Agricultural Economics, comprising a total of 21 Credits, of which 12 shall be Theory and 9 shall be Practical.

#### **(d) Semester IV**

There shall be nine compulsory Courses in the area of Agronomy, Botany, Soil Science, Plant Pathology, Entomology, Horticulture, Agricultural Economics, and Animal Science and Dairy Science, comprising a total of 22 Credits, of which 13 shall be Theory and 9 shall be Practical.

#### **(e) Semester V**

There shall be nine compulsory Courses in the area of Agronomy, Botany, Plant Pathology, Agricultural Economics, Agricultural Extension, Animal Science and Dairy Science, Agricultural Engineering, Entomology, and Soil Science, comprising a total of 22 Credits, of which 13 shall be Theory and 9 shall be Practical.

#### **(f) Semester VI**

There shall be nine compulsory Courses in the area of Agronomy, Botany, Horticulture, Agricultural Economics, Agricultural Extension, Animal Science and Dairy Science, Agricultural Engineering, and Entomology, comprising a total of 19 Credits, of which 10 shall be Theory and 9 shall be Practical.

**(g) Semester VII**  
**(applicable to batch from academic year 2016-17 onwards)**

Rural Agricultural Work Experience Programme (RAWEP)

- (i) The students will work in the villages in the area of Agronomical Intervention, Plant Protection interventions, Extension & transfer of technology, Village survey, rural Economics and Agro-based industries comprising of 20 credits.
- (ii) The duration of the RAWEP is 20 weeks including 1 week of orientation and 1 week of report writing, of which 13 weeks compulsory rural village stay. 5 weeks are allotted for Agro-based Industry attachment.
- (iii) RAWEP will be implemented in the VII Semester.
- (iv) The evaluation will comprise of skills learnt, proficiency in project execution, project report and *viva-voce*.
- (v) A minimum attendance for this programme is 85%.
- (vi) Students shall complete the record work based on daily field observation notebooks and weekly diaries maintained by them.
- (vii) The Course Coordinator and/or a designated evaluation Committee shall evaluate the RAWEP.

**(h) Semester VIII**  
**(applicable to batch from academic year 2016-17 onwards)**

Experiential Learning/Hands-on Training

- (i) Students are required to opt for any two Courses/Modules of ten Credits each, adding up to 20 Credits from the available list of 21 Courses/Modules.

- (ii) The Students must have adequate hands-on experience on different aspects for which the final year of the Programme is restructured to provide for six months of experiential learning or six months of attachment with industry/modern horticulture farm. For this purpose the students shall be required to prepare a work plan in the area selected with an end-to-end approach, that is, from purchasing the input, to producing a product and marketing. It would also have components of project development, monitoring and accounting. Students at the end of completion of project shall submit a report for evaluation. There shall be an advisor to guide the student(s), and the Committee appointed by the Dean of the College shall evaluate the project.
- (iii) The evaluation shall comprise skills learnt, proficiency in project execution, project report and *viva-voce*.

#### **OC-64.2.2**

#### **Attendance**

***(applicable to batch from academic year 2016-17)***

Students are required to have a minimum attendance of 85% per course to be eligible to appear for the final examination. If a student fails to secure 85% in a particular course but secures 85% overall, s/he will be permitted to appear for the examination except for that particular course.

Exemptions as per OA-17 shall be applicable.

#### **OC-64.3 SCHEME OF EXAMINATION**

- 1.(a) There shall be Intra Semester Assessment (ISA) and Semester End Assessment (SEA).
- (b) Each Course shall be evaluated for 100 marks.
- (c) Courses of Semesters I to VI having theory and/or practical component shall be evaluated as indicated below:

(i) Courses with Theory and Practical Components	Maximum Marks
1. Intra Semester Assessment (ISA)	20
2. Semester End Assessment (SEA)	50
3. Practical Examination (SEA)	20
4. Submissions/Report/Records (SEA)	10
Total	100
(ii) Courses with only Theory	Maximum Marks
1. Intra Semester Assessment (ISA)	20
2. Semester End Assessment (SEA)	50
3. Submissions/Report/Records (SEA)	30
Total	100
(iii) Courses with only Practical Component	Maximum Marks
1. Practical Work (Crop Production, HOT and RAWEP)	60
2. Record and Assignment (SEA)	10
3. Semester End Assessment (SEA)	30
Total	100

- |   |               |
|---|---------------|
| (d) Courses with only practical component<br>(Semesters VII and VIII) | Maximum Marks |
| 1. Practical Work   | 60            |
| 2. Project Report (SEA)   | 30            |
| 3. <i>Viva Voce</i> Examination (SEA)                                 | 10            |
| Total   | 100           |
- (e) Practical examinations shall be conducted by the Course Instructor(s) and one teacher nominated by the Head of Department (HoD).
2. The ISA component shall carry 20% of maximum marks and the SEA component shall carry 80% of maximum marks allotted for the Course, except for Crop Production, RAWEP and HOT, which are practical based Courses.
- (a) The ISA shall be conducted twice in a given Semester for the theory component of a Course, once through a written class test and the other by using alternate modes of evaluation such as assignment, presentation, orals.
- (b) ISA shall not be conducted for the Practical component of a Course.
- (c) Generally, the ISA for a given Course shall be conducted by the teacher(s) teaching the Course.
- (d) The schedule for the ISA component shall be notified at the beginning of the Semester.
- (e) The marks of ISA shall be communicated to the students within two weeks.
- (f) The test shall preferably be completed by the end of July for odd Semesters and end of January for even Semesters. Students who fail to appear for the test due to a genuine reason shall be given another opportunity by the end of August/February on a date pre-determined by the College. The other component of ISA will be completed as decided by the teacher but before the end of the Semester.
- (g) Every College shall appoint a three member committee to monitor the ISA in the College. There shall be no remission in workload or remuneration for carrying out this work.
- (h) A student who does not appear for both the ISA tests shall not be eligible to answer SEA of that paper.
3. The SEA shall be conducted at the conclusion of a given Semester. SEA shall cover the course of studies prescribed for the respective Semester.
- (a) A candidate shall be considered to have successfully fulfilled the requirements of a Semester and deemed eligible to appear for the SEA provided he/she fulfils the minimum attendance requirements as per the relevant Ordinance of the University.
- (b) The duration of the SEA theory paper shall be of two hours.



- (c) A tentative schedule of SEA examination, evaluation, declaration of results shall be prepared by the respective College(s), preferably at the beginning of each academic year and shall be notified to the students with a copy to the University. Setting of the question papers, evaluation of answer-scripts and declaration of results shall be done by the respective College.
- (d) The pattern of question paper(s) to be set for the SEA in a given subject and the scheme of marking shall be decided by the Board of Studies (BoS) in that subject. For this purpose, the BoS shall frame specimen question paper(s) in the concerned subject for each Semester for the information of the students. If two or more Colleges desire to have the same question paper in any of the subjects, a common paper may be set by the teachers from the concerned colleges. For this purpose, a Committee of senior teachers shall be constituted by the Principals of the concerned Colleges.
- (e) Assessment of answer-scripts of SEA for Semesters I to VIII shall be done by the teachers of the respective college(s).

#### **4. Revaluation**

- (a) There shall be no revaluation.
- (b) However, in Semesters I to VI, personal verification of marks of answer books of the candidates shall be granted to the candidate.
  - (i) The candidate shall apply for verification along with payment of prescribed fees within one week of the declaration of result.
  - (ii) On a notified day and time, which shall be not later than 10 days after the receipt of application from the candidate, the candidate shall be shown the answer book in the office of the Dean/Vice-Principal in the presence of the Examiner concerned.
- (c) If the candidate is not satisfied with the result on personal verification of answer book, he/she may apply within a week to the College Grievance Committee (CGC) as defined in OC-64.4.3 along with payment of the prescribed fees.
  - (i) The CGC shall take appropriate action as per the relevant Ordinance and inform the candidate of the decision taken accordingly.
- (d) At Semesters VII and VIII examinations, in case the candidate is not satisfied with the result, he/she may apply to the CGC along with payment of the prescribed fees. The CGC shall verify the field records and project report, and, if it deems fit, shall direct to re-conduct the *viva voce* examination.

5. **Standard of Passing**  
***(applicable to batch from academic year 2015-16 onwards)***

- (a) A student is required to score a minimum of 60% of the maximum marks equal to 6.00/10.00 Grade Point in each Course.
- (b) There shall be a combined head of passing for the ISA and SEA components to pass a Course.

6. **Grading System**  
***(applicable to batch from academic year 2015-16 onwards)***

(a) To be eligible for a grade/class, a student is required to complete the Programme in the minimum prescribed period and is required to pass in Semesters I to VIII.

(b) (I) The marks obtained in each course will be converted to grade points in a ten point scale, where the grade point is equal to one-tenth of the percent of marks obtained by the student.

(b) (II) The grade points will be converted to credit points. Credit points will be calculated by multiplying grade points by the respective number of course credits.

(c) The semester Grade Point Average (GPA) and Cumulative Grade Point Average (CGPA) will be computed as per the method stated in the General Ordinance OA-16 for 10 point scale as in sub-section (b) above.

(d) The grade/class shall be awarded on the basis of the total aggregate marks scored in Semesters I to VIII as follows:

<b>Percentage</b>	<b>Grade</b>	<b>Class</b>	<b>Grade Points</b>
90% and above	A	Distinction	<b>9.0 &amp; above</b>
80% to <90%	B	First Class	<b>8.0 to &lt;9.0</b>
70% to <80%	C	Second Class	<b>7.0 to &lt;8.0</b>
60% to <70%	D	Pass Class	<b>6.0 to &lt;7.0</b>

**OC-64.3.7**

**Declaration of Results**  
***(applicable to batch from academic year 2015-16 onwards)***

(a) The statement of marks or Grade Card on the ten point scale for Semesters I to VIII shall be issued by the respective College signed by the Examination Committee Chairperson and Principal.

(b) The consolidated Grade Card at the end of Semester VIII, indicating the course-wise Grade points & Credit points of each Semester and the Cumulative Grade Point Average (CGPA), shall be issued by the University.

## **8. Improvement of Grade**

- (a) A candidate who has passed the B.Sc. (Agriculture) Degree examination and desires to improve his/her performance/total score shall be permitted to appear again.
- (b) However, such a candidate shall be allowed to reappear only in the SEA component of all the Courses of Semesters I to VI.
- (c) In such a case, the marks of the ISA component of Courses of Semesters I to VI, as well as the marks scored in Courses of Semesters VII and VIII at the first appearance, shall be carried forward for tabulation of the result under "improvement of performance".
- (d) This facility to reappear under "improvement" shall be available only during the immediate subsequent regular Semester examinations.
- (e) The candidate availing of this provision shall be considered to have passed "under improvement" and this fact shall be recorded on his/her statements of marks and other relevant documents.
- (f) The candidate shall be required to surrender the original statement of marks and other relevant documents at the time of receiving the fresh statement of marks in the event of improvement of performance/total score.
- (g) The performance of a candidate, who appears under this provision and fails to improve, shall be ignored.
- (h) A candidate can appear only once for each Semester under this clause.

## **9. Supplementary Examination**

- (a) An unsuccessful candidate who obtains the minimum percentage of marks prescribed for passing in a Course shall be exempt from reappearing in that Course.
- (b) A supplementary SEA shall be conducted, preferably after 15 days from the declaration of results of Semester examinations, for those Courses in which a candidate is unsuccessful, and the marks secured in ISA shall be carried forward.
- (c) He/she shall be declared to have passed the full examination on passing in the remaining Courses.

## **OC-64.4. COLLEGE COMMITTEES**

The following committees shall be constituted by the Principal of the college for tenure of three years each.

1. College Examination Committee
2. College Unfair Means Inquiry Committee
3. College Grievance Committee

1. The College Examination Committee shall consist of:

- i) A senior teacher who shall be the Chairperson
- ii) Two to four regular teachers (In addition to the Chairperson)  
There shall be no remission in work-load.

- (a) This Committee shall be in-charge of all matters pertaining to all the Semester examinations in the College.

- (b) The Committee shall prepare the examination time-table, arrange to get the question paper sets printed, answer books assessed, results tabulated and announced, and individual statement of marks prepared and issued to the candidates.
2. The College Unfair Means Inquiry Committee (CUMIC) shall be constituted with the following members.
    - i) Vice-Principal or a senior teacher as Chairperson
    - ii) Two members of the College Examination Committee
- (a) This Committee shall investigate into the cases of unfair means and malpractices reported in a manner prescribed below and shall recommend to the Principal a course of action as prescribed in OA-5.14
  - (b) The following procedure shall be followed for investigating the cases of candidates alleged to have used unfair means at the Semesters I to VIII.
    - (i) The candidate shall be served with a show cause notice and made aware of the charges/ allegations reported against him/her so as to enable him/her to prepare his/her defence at the time of appearance before the CUMIC and informing him/her thereby of the proposed action to be taken in his/her case, with a request to bring a written reply at the hearing as to why the action proposed should not be taken against him/her.
    - (ii) The reply received by the Committee from the candidate when he appears before it shall be considered by the Committee and the final recommendation in the matter be taken and reported to the Principal for his approval.
    - (iii) The punishment finally awarded shall be equal to or less than what is mentioned in the show cause notice, but not more than what is mentioned therein.
    - (iv) The CUMIC is a recommendatory body. The Principal has to exercise his/her power under Statute SB-13(iv) of the University and issue a final order.
    - (v) The category of malpractice and the quantum of punishment for each category thereof shall be as given in Ordinance OA-5.14.19.
    - (vi) In addition to these guidelines, each case be examined in detail and punishment awarded on the merit of each case.
3. College Grievance Committee (CGC) shall be constituted as under:-
    - i) Vice-Principal/Senior member of teaching staff as Chairperson, provided that he is not the Chairperson of CUMIC.
    - ii) Two regular teachers, who are not members on CUMIC or the College Examination Committee.
- (a) In case the grievance concerns any member of the committee, the Principal shall reconstitute the committee, excluding the concerned member.
  - (b) This committee shall investigate into written complaints from the students referred to them by the Principal in the conduct of examinations in a manner as prescribed below, and recommend a course of action to the Principal as prescribed in OA- 5.14.

- (i) The Committee shall consider the written complaint of a student on the conduct of examination provided that
  - (i) the complaint is submitted within 15 days after the declaration of results;
  - (ii) the complaint is accompanied with a prescribed fee of Rs.200/- or as notified from time to time, which shall be refundable if the complaint is found genuine; and
  - (iii) the matter is referred to the Committee by the Principal.
- (ii) The Committee shall seek necessary explanation in connection with allegations made by the student, from the concerned party.
- (iii) After considering the explanation from the concerned party, the committee shall recommend a course of action in writing to the Principal.
- (iv) The Principal shall inform the student about the findings of the Committee and shall take appropriate action including reassessment of the said answer book. However, if the marks are reduced after revaluation of the said answer book the original marks shall be retained and the student informed that there is no change in his/her result.
- (v) A minimum fine of Rs.200/- extending upto Rs.500/, shall be imposed on the student complainant, if the said allegation(s) is/ are found to be a deliberate attempt at casting aspersions on the teacher(s) concerned. If the allegations are found to be genuine and the same is recorded giving reasons, the action shall be taken as provided under OA-5.2.6

**OC-64A RELATING TO THE FOUR-YEAR INTEGRATED DEGREEPROGRAMME OF BACHELOR OF SCIENCE (HONS.) IN AGRICULTURE B.Sc. (Hons.) Agriculture (w.e.f. Academic Year 2019-20)**

**OC-64A.1 GENERAL**

**1. Objectives**

To equip human resources with greater practical skills to cater to the needs of public, private and corporate sectors in Agriculture, to impart knowledge and training in interdisciplinary production-oriented courses in Agriculture and, to provide experiential learning and hands-on-training for developing entrepreneurial skills.

**2. Introduction**

This Degree Programme provides hands-on practical experience in crop production and allied activities to prepare the candidate to carry out crop husbandry in an economically and ecologically sustainable manner.

For Quality Assurance in Agricultural Education we give priority to the maintenance of norms and standards with regard to education, research and

extension. NCC, NSS, Physical Education, Hostel Management, Student Counselling and Placement, Cultural and Sports Activities are encouraged.

**3. Degree to be Awarded**

The Degree to be awarded after successful completion of the Programme shall be Bachelor of Science (Hons.) Agriculture [B.Sc. (Hons.) Agriculture].

**4. Duration of the Programme**

The Programme shall comprise eight Semesters in four Academic Years, which shall include six Semesters of Course Work and one Semester each of Rural Agricultural Work Experience Programme (RAWEP) and Hands-on Training (HOT) Experiential Learning Module.

A student shall be required to complete a minimum of 181 Credits for the award of the Degree. The number of credits for calculating CGPA shall exclude non-graded Courses for Education Tour, Heritage, Human Values and Ethics, Forestry, Physical Education, NCC/NSS.

**5. Eligibility and Admission**

- (a) A candidate, who has passed the HSSC Examination of Goa Board of Secondary and Higher Secondary Education, or its equivalent, with Physics, Chemistry, Biology/Vocational Horticulture/Floriculture, and Mathematics and obtained minimum 50% marks in aggregate, shall be eligible for admission.
- (b) A candidate who does not have Mathematics at the HSSC Examination or its equivalent, shall be eligible for admission, which shall be subject to the completion and passing a Bridge Course in Mathematics in Semester I.
- (c) A candidate who does not have Biology at the HSSC Examination or its equivalent shall be eligible for admission, which shall be subject to the completion and passing a Bridge Course in Biology in Semester I.
- (d) Percentage in the qualifying examination and the number of seats under various reservation categories, shall be in accordance with the directives of the Government of Goa and as adopted by Goa University. A candidate applying for admission under these categories shall be required to submit a valid certificate to that effect issued by the Officer of the rank of the Deputy Collector or any other authorized Officer as notified by the Government of Goa.
- (e) The admission procedure to the Programme shall be as determined by the Government of Goa/ Goa University.

**OC-64A.2 PROGRAMME STRUCTURE**

- (a) The structure for the four year Degree Programme in B.Sc.(Hons.) Agriculture comprising eight Semesters shall consist of Courses, each assigned a number of Credits as per the Course requirement.
- (b) The maximum number of Credits per Semester shall be twenty-five.
- (c) One Credit shall be equivalent to one hour theory lecture or three hours of Laboratory/Field Work per week.
- (d) Each instructional period shall be of one hour duration.

#### Programme Structure

##### **Semester I**

- (i) There shall be ten compulsory Courses in the area of Agronomy(2 Courses), Animal Science, Extension, Horticulture, Language, Microbiology, Soil Science, Agricultural Heritage, and Human Values and Ethics comprising a total of 19 Credits, of which 12 shall be Theory and 7 shall be Practical.
- (ii) Physical Education and NSS are non-graded compulsory courses of 1 Credit each.

##### **Semester II**

- (i) There shall be nine compulsory Courses in the area of Agronomy, Botany, Economics, Engineering, Entomology, Extension(2 Courses), Genetics, and Pathology comprising a total of 21 Credits, of which 13 shall be Theory and 8 shall be Practical.
- (ii) Forestry and Education Tour are non-graded Compulsory Courses comprising 2 Credits in Forestry and 1 Credit in Education Tour.

##### **Semester III**

There shall be 11 compulsory Courses in the area of Agronomy(2 Courses), Entomology, Genetics, Horticulture, Pathology, Engineering, Biochemistry, Computer, Environmental Sciences, and Statistics comprising a total of 24 Credits, of which 13 shall be Theory and 11 shall be Practical.

##### **Semester IV**

- (i) There shall be 10 Compulsory Courses in the area of Agronomy(3 Courses), Animal Science, Economics, Engineering, Entomology, Genetics, Horticulture, and Soil Science comprising a total of 21 Credits of which 11 shall be Theory and 10 shall be Practical.
- (ii) The student shall select one Elective Course of 3 Credits from a list decided by the Board of Studies and approved by the Academic Council.
- (iii) Education Tour will be a Compulsory non-graded Course of 1 Credit.



### **Semester V**

- (i) There shall be 10 Compulsory Courses in the areas of Agronomy, Animal Science, Botany, Economics, Entomology, Genetics, Horticulture, Pathology, Extension, and Soil Science comprising a total of 21 Credits of which 12 shall be Theory and 9 shall be Practical.
- (ii) The student shall select one Elective Course of 3 Credits from a list decided by the Board of Studies and approved by the Academic Council.

### **Semester VI**

- (i) There shall be 10 Compulsory Courses in the area of Agronomy (2 Courses), Animal Science, Economics, Engineering and Entomology, Food Science, Genetics, Horticulture, and Pathology comprising a total of 20 Credits, of which 11 shall be Theory and 9 shall be Practical.
- (ii) The student shall select one Elective Course of 3 Credits from a list decided by the Board of Studies and approved by the Academic Council.

### **Semester VII**

#### Rural Agricultural Work Experience Programme (RAWEP)

- (i) The students will work in the villages in the area of Agronomical Intervention, Plant Protection Interventions, Extension & Transfer of Technology, Village survey, rural Economics and Agro-based industries comprising of 20 Credits.
- (ii) The duration of RAWEP is 20 weeks including one week of orientation and one week of report-writing. 13 weeks are allotted for compulsory rural village stay and 5 weeks are allotted for Agro-based Industry attachment.
- (iii) The evaluation will comprise of skills learnt, proficiency in project execution, project report and viva-voce.
- (iv) The minimum attendance for RAWEP is 85%.
- (v) Students shall complete the record work based on daily field observation notebooks and weekly diaries maintained by them.
- (vi) The Course Coordinator and/or a designated Evaluation Committee shall evaluate the RAWEP.

### **Semester VIII**

#### Experiential Learning/Hands-on-Training

- (i) Students are required to opt for any two Courses/Module of 10 Credits each, adding up to 20 Credits from a list decided by the Board of Studies and approved by the Academic Council.

- (ii) Students must have adequate hands-on experience on different aspects for which the final year of the Programme is structured to provide for six months of experiential learning or six months of attachment with industry/modern horticulture farm. For this purpose the students shall be required to prepare a work plan in the area selected with an end-to-end approach that is from purchasing the input, to producing a product and marketing. It would also have components of project development, monitoring and accounting. At the end of completion of the project, students shall submit a report for evaluation. There shall be an advisor to guide the student(s), and the Committee appointed by the Dean of the College shall evaluate the project.
- (iii) The evaluation shall comprise skills learnt, proficiency in project execution, project report and viva-voce.

### **OC- 64A.2.2 Attendance**

Students are required to have a minimum attendance of 85% per course to be eligible to appear for the SEA. If a student fails to secure 85% attendance in a particular course but secures 85% attendance overall, s/he will be permitted to appear for the SEA except for that particular course.

Exemptions as per OA-17 shall be applicable.

### **OC-64A.3 SCHEME OF EXAMINATION**

1. (a) There shall be Intra Semester Assessment (ISA) and Semester End Assessment (SEA).
- (b) Each Course shall be evaluated for 100 marks.
- (c) Courses of Semesters I to VI having theory and/or practical component shall be evaluated as indicated below:

(i) Courses with Theory and Practical Components	Maximum Marks
1. Intra Semester Assessment (ISA)	20
2. Semester End Assessment (SEA)	50
3. Practical Examination (SEA)	20
4. Submissions/Report Records (SEA)	10
Total	100

(ii) Courses with only Theory	Maximum Marks
1. Intra Semester Assessment (ISA)	20
2. Semester End Assessment (SEA)	50
3. Submissions/Report Records (SEA)	30
Total	100

(iii) Courses with only Practical Component	Maximum Marks
1. Practical Work	60
2. Record and Assignment (SEA)	10
3. Semester End Assessment (SEA)	30
<b>Total</b>	<b>100</b>

(d)

(iii) Courses with only Practical Component (Semesters VII and VIII)	Maximum Marks
1. Practical Work	60
2. Project Report (SEA)	30
3. Viva Voce Examination (SEA)	10
<b>Total</b>	<b>100</b>

(e) Practical examinations shall be conducted by the Course Instructor(s) and one teacher nominated by the Head of Department (HoD).

2. The ISA component shall carry 20% of maximum marks and the SEA component shall carry 80% of maximum marks allotted for the Course, except for Crop Production, RAWEP and HOT, which are practical based Courses.

(a) The ISA shall be conducted twice in a given Semester for the theory component of a Course, once through a written class test and the other by using alternate modes of evaluation such as assignment, presentation, orals.

(b) ISA shall not be conducted for the Practical component of a Course.

(c) Generally, the ISA for a given Course shall be conducted by the teacher(s) teaching the Course.

(d) The schedule for the ISA component shall be notified at the beginning of the Semester.

(e) The marks of ISA shall be communicated to the students within two weeks.

(f) The test shall preferably be completed by the end of July for odd Semesters and end of January for even Semesters. Students who fail to appear for the test due to a genuine reason shall be given another opportunity by the end of August/February on a date pre-determined by the College. The other component of ISA will be completed as decided by the teacher but before the end of the Semester.

(g) Every College shall appoint a three member committee to monitor the ISA in the College. There shall be no remission in workload or remuneration for carrying out this work.

(h) A student who does not appear for both the ISA components shall not be eligible to answer SEA of that paper.

3. The SEA shall be conducted at the conclusion of a given Semester. SEA shall cover the course of studies prescribed for the respective Semester.

- (a) A Candidate shall be considered to have successfully fulfilled the requirements of a Semester and shall be deemed eligible to appear for the SEA provided he/she fulfils the minimum attendance requirements as per OC-64A2.2
- (b) The duration of the SEA theory paper shall be of two hours.
- (c) A tentative schedule of SEA examination, evaluation, declaration of results shall be prepared by the respective College(s), preferably at the beginning of each academic year and shall be notified to the students with a copy to the University. Setting of the question papers, evaluation of answer-scripts and declaration of results shall be done by the respective College.
- (d) The pattern of question paper(s) to be set for the SEA in a given subject and the scheme of marking shall be decided by the Board of Studies (BoS) in that subject. For this purpose, the BoS shall frame specimen question paper(s) in the concerned subject for each Semester for the information of the students. If two or more colleges desire to have the same question paper in any of the subjects, a common paper may be set by the teachers from the concerned colleges. For this purpose, a Committee of senior teachers shall be constituted by the Principals of the concerned Colleges.
- (e) Assessment of answer-scripts of SEA for Semesters I to VIII shall be done by the teachers of the respective college(s).

#### **4. Revaluation**

- (a) There shall be no revaluation.
- (b) However, in Semesters I to VI, personal verification of marks of answer books of the candidates shall be granted to the candidate.
  - (i) The candidate shall apply for verification along with payment of prescribed fees within one week of the declaration of result.
  - (ii) On a notified day and time, which shall be not later than 10 days after the receipt of application from the candidate, the candidate shall be shown the answer book in the office of the Dean/Vice-Principal in the presence of the Examiner concerned.
- (c) If the candidate is not satisfied with the result on personal verification of answer book, he/she may apply within a week to the College Grievance Committee (CGC) as defined in OC-64.4.3 along with payment of the prescribed fees.
  - (i) The CGC shall take appropriate action as per the relevant Ordinance and inform the candidate of the decision taken accordingly.
- (d) At Semesters VII and VIII examinations, in case the candidate is not satisfied with the result, he/she may apply to the CGC along with payment of the prescribed fees. The CGC shall verify the field records and project report, and, if it deems fit, shall recommend to the Principal that the viva voce examination be reconducted.

## 5. Standard of Passing

- (a) A student is required to score a minimum of 60% of the maximum marks equal to 6.00/10.00 Grade Point in each Course.
- (b) There shall be a combined head of passing for the ISA and SEA components to pass a Course.

## 6. Grading System

- (a) To be eligible for a grade/class, a student is required to complete the Programme in the minimum prescribed period.
- (b) (i) The marks obtained in each course will be converted to grade points in a ten point scale, where the grade point is equal to one-tenth of the percent of marks obtained by the student.
- (b) (ii) The grade points will be converted to credit points. Credit points will be calculated by multiplying grade points by the respective number of course credits.
- (c) The Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA) will be computed as per the method stated in the General Ordinance OA-16 for 10 point scale as in sub-section (b) above.
- (d) The grade/class shall be awarded on the basis of the total aggregate marks scored in Semesters I to VIII as follows:

Percentage	Grade	Class	Grade Points
90% & Above	A	Distinction	9.0 & above
80% to <90%	B	First Class	8.0 to <9.0
70% to <80%	C	Second Class	7.0 to <8.0
60% to <70%	D	Pass Class	6.0 to <7.0

## 7. Declaration of Results

- (a) The statement of marks or Grade Card on the ten point scale for Semesters I to VIII shall be issued by the respective College signed by the Examination Committee Chairperson and Principal.
- (b) The consolidated Grade Card at the end of Semester VIII, indicating the course-wise Grade points & Credit points of each Semester and the Cumulative Grade Point Average (CGPA), shall be issued by the University.

## 8. Improvement of Grade

- (a) A candidate who has passed the B.Sc. (Hons.) Agriculture Degree examination and desires to improve his/her performance/total score shall be permitted to appear again.
- (b) However, such a candidate shall be allowed to reappear only in the SEA component of all the Courses of Semesters I to VI.
- (c) In such a case, the marks of the ISA component of Courses of Semesters I to VI, as well as the marks scored in Courses of Semesters VII and VIII at

the first appearance shall be carried forward for tabulation of the result under "improvement of performance".

- (d) This facility to reappear under "improvement" shall be available only during the immediate subsequent regular Semester examinations.
- (e) The candidate availing of this provision shall be considered to have passed "under improvement" and this fact shall be recorded on his/her statements of marks and other relevant documents.
- (f) The candidate shall be required to surrender the original statement of marks and other relevant documents at the time of receiving the fresh statement of marks in the event of improvement of performance/total score.
- (g) The performance of a candidate, who appears under this provision and fails to improve, shall be ignored.
- (h) A candidate can appear only once for each Semester under this clause.

### **9. Supplementary Examination**

- (a) An unsuccessful candidate who obtains the minimum percentage of marks prescribed for passing in a Course shall be exempt from reappearing in that Course.
- (b) A supplementary SEA shall be conducted, preferably after 15 days from the declaration of results of Semester examinations, for those Courses in which a candidate is unsuccessful, and the marks secured in ISA shall be carried forward.
- (c) He/she shall be declared to have passed the full examination on passing in the remaining Courses.

## **OC-64A.4 COLLEGE COMMITTEES**

The following Committees shall be constituted by the Principal of the College for a tenure of three years each.

1. College Examination Committee
2. College Unfair Means Inquiry Committee
3. College Grievance Committee

### **1. The College Examination Committee**

The College Examination Committee shall consist of:

- iii) A senior teacher who shall be the Chairperson
  - iv) Two to four regular teachers (in addition to the Chairperson); there shall be no remission in work-load.
- (a) This Committee shall be in charge of all matters pertaining to all the Semester Examinations in the College.

- (b) The Committee shall prepare the examination time-table, arrange to get the question paper sets printed, answer books assessed, results tabulated and announced, and individual statement of marks prepared and issued to the candidates.

## **2. The College Unfair Means Inquiry Committee (CUMIC)**

The CUMIC shall be constituted with the following members:

- iii) Vice-Principal or a senior teacher as Chairperson
  - iv) Two members of the College Examination Committee
- (a) This Committee shall investigate into the cases of unfair means and malpractices reported in a manner prescribed below and shall recommend to the Principal a course of action as prescribed in OA-5.14
  - (b) The following procedure shall be followed for investigating the cases of candidates alleged to have used unfair means at the Semesters I to VIII:
    - vii) The candidate shall be served with a show cause notice and made aware of the charges/allegations reported against him/her so as to enable him/her to prepare his/her defence at the time of appearance before the CUMIC and informing him/her thereby of the proposed action to be taken in his/her case, with a request to bring a written reply at the hearing as to why the action proposed should not be taken against him/her.
    - viii) The reply received by the Committee from the candidate when he appears before it shall be considered by the Committee and the final recommendation in the matter be taken and reported to the Principal for his approval.
    - ix) The punishment finally awarded shall be equal to or less than what is mentioned in the show cause notice, but not more than what is mentioned therein.
    - x) The CUMIC is a recommendatory body. The Principal has to exercise his/her power under Statute SB-13 (iv) of the University and issue a final order.
    - xi) The category of malpractice and the quantum of punishment for each category thereof shall be as given in Ordinance OA-5.14.19.
    - xii) In addition to these guidelines, each case be examined in detail and punishment awarded on the merit of each case.

## **3. College Grievance Committee (CGC)**

The CGC shall be constituted as under:-

- iii) Vice-Principal/Senior member of teaching staff as Chairperson, provided that he is not the Chairperson of CUMIC.
- iv) Two regular teachers, who are not members on CUMIC or the College Examination Committee.

(a) In case the grievance concerns any member of the Committee, the Principal shall reconstitute the Committee, excluding the concerned member.

(b) This Committee shall investigate into written complaints from the students referred to them by the Principal in the conduct of examinations in a manner as prescribed below, and recommend a course of action to the Principal as prescribed in OA-5.14.

- i) The Committee shall consider the written complaint of a student on the conduct of examination provided that:
  - a) The complaint is submitted within 15 days after the declaration of results;
  - b) The complaint is accompanied with the prescribed fee of Rs. 200/- or as notified from time to time, which shall be refundable if the complaint is found genuine; and
  - c) The matter is referred to the Committee by the Principal.
- ii) The Committee shall seek necessary explanation in connection with allegations made by the student, from the concerned party.
- iii) After considering the explanation from the concerned party, the committee shall recommend a course of action in writing to the Principal.
- iv) The Principal shall inform the student about the findings of the Committee and shall take appropriate action including reassessment of the said answer book. However, if the marks are reduced after revaluation of the said answer book, the original marks shall be retained and the student informed that there is no change in his/her results.
- v) A minimum fine of Rs.200/- extending upto Rs.500/-, shall be imposed on the student complainant, if the said allegation(s) is/are found to be a deliberate attempt at casting aspersions on the teacher(s) concerned. If the allegations are found to be genuine and the same is recorded giving reasons, action shall be taken as provided under OA-5.2.6.





**OC – 65 Ordinance relating to the Post–Graduate Programme in Ayurveda – Pre-clinical, Para-clinical and Clinical** (Effective from 20<sup>th</sup> June, 2016).

**OC – 65.1 General**

The Ordinance shall apply to all the examinations leading to Post-Graduate Programme in Ayurveda - Pre-clinical, Para-clinical and Clinical subjects.

(i) **Objectives**

The objectives of the Post-Graduate Programmes shall be to provide orientation of specialties and super-specialties of Ayurveda, and to produce experts and specialists to be competent and efficient teachers, physicians, surgeons, obstetricians and gynaecologists (Stri Roga & Prasuti Tantragraha), pharmaceutical experts, researchers and profound scholars in various fields of specialization of Ayurveda.

(ii) **Post-Graduate Programmes:**

Sr. No.	Name of Specialty	General Terminology	Department
1.	Ayurveda Samhita & Siddhant	Ayurveda Samhita & Basic principles of Ayurveda	Samhita & Basic Principles of Ayurveda
2.	Rachna Sharir	Anatomy	Rachna Sharira
3.	Kriya Sharir	Physiology	Kriya Sharira
4.	Dravyaguna Vigyana	Materia Medica & Pharmacology	Dravyaguna
5.	Rasa Shastra & Bhaishajya Kalpana	Ayurveda Pharmaceuticals	Rasa Shastra & Bhaishajya Kalpana
6.	Prasuti & Stri Roga	Obstetrics & Gynaecology	Stri Roga & Prasuti
7.	Kaumarbhritya — Bala Roga	Pediatrics	Kaumarbhritya —Bala Roga
8.	Swasthavritta & Yoga	Preventive Social Medicine and Yoga	Swasthavritta
9.	Kayachikitsa	Medicine	Kayachikitsa
10.	Rasayan & Vajikaran	Rasayan Vajikaran	Kayachikitsa
11.	Manovigyana avum manas Roga	Psychiatric	Kayachikitsa
12.	Rog Nidan avum Vikriti Vigyan	Pathology & Diagnostic Procedure	Rog Nidan avum Vikriti Vigyan
13.	Chhaya avum Vikiran Vigyan	Imaging and Radio diagnosis	Rog Nidan avum Vikriti Vigyan
14.	Shalya - Samanya	General Surgery	Shalya
15.	Shalya - kshar Karma avum Anushastra Karma	Surgery in kshar Karma and Para surgical measures	Shalya
16.	Sangyahaarana	Anaesthesiology	Shalya
17.	Asthi Sandhi & Marmagat Roga	Orthopedics	Shalya
18.	Netra Roga	Ophthalmology	Shalakya
19.	Karna, Nasa, Kantha & Shiro Roga	ENT & Head	Shalakya
20.	Danta avum Mukha Roga	Dentistry and Oral Disease	Shalakya
21.	Panchakarma	Panchakarma	Panchakarma
22.	Agad Tantra avum Vidhi Vaidyaka	Toxicology & Forensic Medicine	Agad Tantra

**OC – 65.2 Duration of Programme:**

The duration of the Post-Graduate Programmes including examination period shall be three Academic Years comprising six academic terms. The academic term is a six month training period. The candidate shall be required to be a full time Resident/ Post-Graduate student in the Subject. In the case of a student having a recognized two year Post-Graduate Diploma in the same Subject, the duration of the Programme shall be two Academic Years.

**OC – 65.3 Degrees / Diplomas to be awarded:**

The nomenclatures of Post-Graduate Degree in respective specialties shall be as follows:-

<b>Sr. No.</b>	<b>Name of Specialty</b>	<b>Abbreviation</b>
1.	Ayurveda Vachaspati — Ayurveda Samhita & Sidhanta	M.D. Ayurveda Samhita & Basic Principles of Ayurveda
2.	Ayurveda Vachaspati — Rachna Sharir	M.D. Ayurveda (Anatomy)
3.	Ayurveda Vachaspati — Kriya Sharir	M.D. Ayurveda (Physiology)
4.	Ayurveda Vachaspati — Dravya Guna Vigyana	M.D. Ayurveda Materia Medica & Pharmacology
5.	Ayurveda Vachaspati — Ras Shastra & Bhaishajya Kalpana	M.D. Ayurveda Pharmaceuticals
6.	Ayurveda Dhanvantri — Prasuti avum Stri Roga	M.S. Ayurveda Gynaecology & Obstetrics
7.	Ayurveda Vachaspati — Kaumarbhritya — Bala Roga	M.D. Ayurveda Paediatrics.
8.	Ayurveda Vachaspati — Kayachikitsa	M.D. Ayurveda Medicine
9.	Ayurveda Vachaspati- Swastha Vritta & yoga	M.D. Ayurveda Preventive, Social Medicine & Yoga
10.	Ayurveda Vachaspati — Rog Nidan avum Vikriti Vigyana	M.D. Ayurveda Pathology & Diagnostic procedure
11.	Ayurveda Dhanvantri — Shalya — Samanya,	M.S. Ayurveda General Surgery
12.	Ayurveda Dhanvantri — Kshar karma avum Anushastra karma	M.S. Ayurveda Surgery in Kshar Karma & Para Surgical Measures
13.	Ayurveda Dhanvantri — Shalakya — Netra Roga	M.S. Ayurveda Ophthalmology
14.	Ayurveda Dhanvantri—Shalakya: Shiro —Nasa Karna avum Kantha Roga	M.S. Ayurveda ENT & Head
15.	Ayurveda Dhanvantri — Shalakya Danta avum Mukha Roga	M.S. Ayurveda Dentistry and Oral Disease
16.	Ayurveda Vachaspati — Mano Vigyan avum Manas Roga	M.D. Ayurveda (Psychiatry)
17.	Ayurveda Vachaspati — Panchkarma	M.D. Ayurveda Panchkarma
18.	Ayurveda Vachaspati — Agad Tantra avum Vidhivaidyaka,	M.D. Ayurveda Toxicology & Forensic Medicine
19.	Ayurveda Vachaspati — Sangyahanana	M.D. Ayurveda Anaesthesiology
20.	Ayurveda Vachaspati — Chhaya avum Vikiran Vigyan,	M.D. Ayurveda Imaging and Radio diagnose
21.	Ayurveda Dhanvantri —Asthi Sandhi & Marmagat Roga	M.S. Ayurveda Orthopedics and Marma
22.	Ayurveda Vachaspati — Rasayan & Vajikaran	M.D. Ayurveda Rasayan & Vajikaran
Any other as notified in the Gazette of India from time to time.		

**OC – 65.4 Eligibility for admission for Post-Graduate Programmes:**

1. A person possessing the Degree in Ayurveda of a University or Board or Medical Institution specified in the Second Schedule to the Indian Medicine Central Council Act, 1970 shall be eligible for admission.
2. A Committee constituted by the College shall conduct the admission process.
3. Selection of candidates shall be made strictly on the basis of final Merit Index calculated out of a total of 100 Marks based on a written Entrance Test.
4. The mode of the Entrance Test shall be as notified by the College from time to time.
5. The minimum eligibility marks of the Entrance Test for admission in the case of general candidates shall be 50% of the total marks, and in the case of candidates belonging to the Schedule Castes, Scheduled Tribes and those employed in regular Government service shall be 40%, or as notified by the State Government from time to time.
6. Sponsored candidates shall also be required to possess the percentage of marks as specified above, except in the case of foreign nationals, for whom the criteria shall be as notified by the Central Council of Indian Medicine (CCIM) from time to time.
7. Reservation for all categories shall be applicable as per the State Government policy.
8. Change of subject shall be permissible within a period of two months from the date of admission, subject to availability of vacancy and guide in the concerned Subject.

**OC-65.5 Course structure for Post-Graduate Programmes:**

The syllabi of the Courses for the Post-Graduate Programme shall be in accordance with recommendations of CCIM, and as adopted by the concerned Board of Studies and duly approved by the Academic Council.

**OC– 65.5.1 Scheme of Instructions:**

1. The medium of instruction shall be English with use of Devnagari script wherever required.
2. The students shall have to undergo two preliminary Courses in the first year of the Programme as follows :-
  - (a) Course- I
    - Part A - Research Methodology.
    - Part B- Bio/ Medical Statistics.
  - (b) Course- II
    - Part A- Applied aspects of fundamentals regarding the concerned subject.
    - Part B- Concerned subject in which a student has been admitted this shall include:-
      - i. Study of literature related to Specialty.
      - ii. Regular clinical training in the hospital for students of the clinical subject.
      - iii. Practical training of research work carried out in the department for students of non-clinical subjects.
      - iv. Active participation in various seminars, symposia and discussions.
      - v. Finalization of topic of dissertation and synopsis.

- (c) The assessment of the work done during the first year on the above points shall be done at the time of Preliminary Examination.
3. The students shall have to undergo training in the concerned department and shall maintain month-wise record of the work done during the second and third year of study in the Specialty opted by him/ her.
4. The students shall be governed by the provisions as specified under Ordinance OA-17.3 to become eligible for appearing in the examination.
5. The students shall have to attend the clinics and other duties as may be assigned to them during the course of study.
6. The students of clinical subjects shall have to do resident duties in their respective departments and students of non-clinical subjects shall have duties in their respective departments like Pharmacy, Herbal Garden, Laboratory during entire period.
7. The students shall have to attend special lectures, demonstrations, seminars, study tour and such other activities as may be arranged by the teaching departments.
8. There shall be a dissertation which shall start at the commencement of the second year, for a period of 1½ year. The student shall be required to submit a synopsis of the dissertation within six months of the commencement of the 1<sup>st</sup> Year.

**OC –65.5.2 Method of training :**

1. Intensive training shall be provided in classical knowledge along with comparative and critical study in the respective Specialty.
2. The emphasis shall be given on intensive, applied and hands-on training.
3. The students shall have to acquire knowledge about the latest methods and techniques of research in the respective fields.
4. In clinical subjects the students shall undertake responsibility in management and treatment of patients independently and deal with emergencies.
5. The students shall have to undertake training in teaching technology and research methods and shall have to participate in the teaching and training programmes of Under-Graduate students or Interns in the respective subjects during the course of study.
6. In the first year of the Course, the students shall have to acquire knowledge in the applied aspects of the fundamentals of Ayurveda.
7. In the clinical training the student shall have to acquire knowledge to work independently as a Specialist.
8. In the specialties of Shalya, Shalakyia, and Prasuti & Stri Roga, the students shall have to undergo training of investigative procedures, techniques, surgical performance of procedures and management in the respective Specialty.

**OC-65.6 Scheme of Examination:**

1. There shall be two University examinations in the month of June - July:
  - (a) The Preliminary Examination shall be conducted at the end of 1<sup>st</sup> Academic Year.
  - (b) The Final Examination shall be conducted on completion of three Academic Years after the admission to PG Course.
  - (c) There shall also be a Supplementary Examination in November – December.
  - (d) There shall be an interval of not less than four and not more than six months between the two examinations.

2. All the Post-Graduate Examiners shall be recognized Post-Graduate Teachers holding recognized Post-Graduate qualifications in the Subject concerned. The examiners shall have a minimum qualification of Associate Professor, or shall be an Assistant Professor with a minimum of 8 years of PG teaching experience. Appointment of internal as well as external examiners shall be as per the guidelines laid down by CCIM from time to time.
3. The Preliminary Examination shall be conducted by a team of 2 Examiners (Retired or Serving) out of which one should be external.
- (i) The preliminary examination at the end of First Academic Year after admission shall be conducted as shown in Tables 1 and 2 below.

(a) **Distribution of Marks for Post - Graduate Course in Ayurveda**  
**Preliminary Examination**

Paper -I : RESEARCH METHODOLOGY AND BIOSTATISTICS

Part A - Research Methodology

Part B – Biostatistics

Paper -II. CONCERNED SUBJECTS

Part A- Applied aspects of fundamentals regarding concerned Subjects.

Part B- Concerned Subject

**A Table 1**

**Paper - I**

**I. Details of Research Methodology and Biostatistics**

Sr. No.	Paper - I	Teaching Hours (Theory)	Teaching Hours (Practical)	Marks (Theory) Total 100 marks	Marks (Practical) Total – 100 marks
1.	Part A - Research Methodology	120	100	60	1. Instrumental spotting test - 20 Marks
2.	Part B -Biostatistics	80	20	40	2. Clinical protocol writing exercise on a given problem - 20 Marks 3. Records : Research Methodology - 10 Marks 4. Records : Medical statistics - 10 Marks 5. Records : <i>Viva voce</i> - 40 Marks Total - 100 Marks

**B Table 2**

**Paper – II : Details of Concerned Subjects.**

Part A- Applied aspects of fundamentals regarding concerned subjects.

Part B- Concerned subject

Sr. No.	Concerned Subjects	Teaching Hours (Theory)	Teaching Hours (Practical)	Distribution of Marks (Theory)	Distribution of Marks (Practical)
1.	AYURVED SAMHITA & SIDDHANTA	100	100	Part- A : 50 Part- B : 50	100
2.	RACHANA SHARIR	100	100	Part- A : 50 Part- B : 50	1. Spotting - 20 Marks 2. Surface Anatomy -20 Marks 3. Dissection -30 Marks 4. Imaging Anatomy– Basic Principles and Application -10 Marks 5. <i>Viva voce</i> -20 Marks Total -100 Marks

3.	KRIYA SHARIR	100	100	Part- A : 50 Part- B : 50	1. Laboratory Practical - 20 Marks 2. Human Experiment - 15 Marks 3. Spotting - 15 Marks 4. Prakriti Saradi Pariksha - 20 Marks 5. Practical Record - 10 Marks 6. <i>Viva voce</i> - 20 Marks <b>Total -100 Marks</b>
4.	DRAVYAGUNA VIGYAN	100	100	Part- A : 50 Part- B : 50	1. Herbarium sheets - 10 Marks 2. Practical of macroscopic and microscopic identification of prajyanga (one part of the plant) - 30 Marks 3. Practical record books of pharmacopoeial standards and animal experimentations - 10 Marks 4. Spotting - 30 Marks 5. <i>Viva voce</i> - 20 Marks <b>Total -100 Marks</b>
5.	RASA SHASTRA & BHAISHAJYA KALPANA	100	100	Part- A : 50 Part- B : 50	1. Practical Record Book - 10 Marks 2. Practicals related to preparation of Drugs Major practical- one - 20 Marks 3. Minor practical- one - 10 Marks 4. Drug analysis Major practical- one - 20 Marks 5. Minor Practical- one - 10 Marks 6. Spotting - 10 Marks 5. <i>Viva voce</i> - 20 Marks <b>Total -100 Marks</b>
6.	PRASUTI EVUM STRI ROGA	100	100	Part- A : 50 Part- B : 50	1. Case records of Patients in Detail (25 Cases) - 20 Marks 2. Bedside clinical case taking Long case - 20 Marks 3. Bedside clinical case taking Short case - 10 Marks 4. Procedures - 15 Marks 5. Identification of Instruments, X-ray Etc & Spotting - 15 Marks 6. <i>Viva voce</i> - 20 Marks <b>Total - 100 Marks</b>
7.	KAUMARBHRITYA-BALA ROGA	100	100	Part- A : 50 Part- B : 50	1. a) Case History Record – (25 Patient) - 10 Marks b) Child Health record-(50 Case) - 10 Marks 2. Bed side clinical

					case taking Long Case - 20 Marks 3. Bed side clinical case taking Short Case - 10 Marks 4. Procedures/Kriya Kalpa - 15 Marks 5. Identification of instruments & Spotting - 15 Marks 6. <i>Viva voce</i> - 20 Marks <b>Total - 100 Marks</b>
8.	SWASTHAVRITTA	100	100	Part- A : 50 Part- B : 50	1. Records - 20 Marks 2. Long Procedures - 20 Marks 3. Short Procedures - 10 Marks 4. Spotting - Aahar dravyas, Family Planning Devices, Vaccine/Serum and Models/Specimens, Naturopathic and Yogic specimens etc. - 10 Marks 5. Yogasana - 20 Marks 6. <i>Viva voce</i> - 20 Marks <b>Total - 100 Marks</b>
9.	KAYACHIKITSA	100	100	Part- A : 50 Part- B : 50	1. Case records of 25 Patients in detail - 20 Marks 2. Bedside clinical case taking- Long case - 20 Marks 3. Bedside clinical case taking- Short case - 10 Marks 4. Medical procedures /laboratory work - 15 Marks 5. Instruments and spotting - 15 Marks 6. <i>Viva voce</i> - 20 Marks <b>Total - 100 Marks</b>
10.	RASAYAN & VAJIKARAN	100	100	Part- A : 50 Part- B : 50	1. Case records of patients-(15 case of Rasayana; 10 cases of Vajikarana) -20 Marks 2. Bedside clinical case taking- Long case -20 Marks 3. Bedside clinical case taking-Short case -10 Marks 4. Semen analysis and lab investigations -20 Marks 5. Instruments and spotting -10 Marks 6. <i>Viva voce</i> -20 Marks <b>Total -100 Marks</b>
11.	MANOVIGYAN EVUM MANASROGA	100	100	Part- A : 50 Part- B : 50	1. Case records of Patients in Detail (25 Cases) - 20 Marks 2. Bedside clinical case taking Long case -20 Marks 3. Bedside clinical



					case taking Short case -10 Marks 4. Procedure -15 Marks 5. Instruments & Spotting -15 Marks 6. <i>Viva voce</i> -20 Marks <b>Total -100 Marks</b>
12.	ROGANIDAN EVUM VIKRITI VIGYAN	100	100	Part- A : 50 Part- B : 50	1. Case record (25 Cases) - 10 Marks 2. Bed side clinical case taking Long case - 20 Marks 3. Bed side clinical case taking Short case - 10 Marks 4. Laboratory Practicals - 20 Marks 5. Interpretation of ECG, EEG, X-ray, CT-Scan, MRI and USG - 10 Marks 6. laboratory experiment record-10 Marks 7. <i>Viva voce</i> -20 Marks <b>Total -100 Marks</b>
13.	CHHAYA EVUM VIKIRAN VIGYAN	100	100	Part- A : 50 Part- B : 50	1. Case Records of 25 Patients -20 Marks 2. Chhaya avum Vikiran Vigyan procedures - Long procedure -20 Marks 3. Chhaya avum Vikiran Vigyan procedures - Short procedure -10 Marks 4. Identification and functioning of instruments and equipments -15 Marks 5. Interpretation of Radiograph and images -15 Marks 6. <i>Viva voce</i> -20 Marks <b>Total -100 Marks</b>
14.	SHALYA -SAMANYA	100	100	Part- A : 50 Part- B : 50	1. Case records of 25 Patients in detail -20 Marks 2. Bedside clinical case taking- Long case -20 Marks 3. Bedside clinical case taking- Short case -10 Marks 4. Identification of instruments, X-ray etc . -15 Marks 5. Medical procedures -15 Marks 6. <i>Viva voce</i> -20 Marks <b>Total -100 Marks</b>
15.	SHALYA - KSHAR EVUM ANUSHASTRA KARMA	100	100	Part- A : 50 Part- B : 50	1. Case records of 25 Patients in detail-20 Marks 2. Bedside clinical case taking- Long

					<p>case -20 Marks</p> <p>3. Bedside clinical case taking- Short case -10 Marks</p> <p>4. Identification of instruments, X-ray etc. -15 Marks</p> <p>5. Medical procedures -15 Marks</p> <p>6. <i>Viva voce</i> -20 Marks</p> <p><b>Total -100 Marks</b></p>
16.	SANGYAHARAN	100	100	Part- A : 50 Part- B : 50	<p>1. Anaesthesia documentation &amp; record keeping -20 Marks</p> <p>2. Bedside clinical case taking Long Case -20 Marks</p> <p>3. Bedside clinical case taking Short Case -10 Marks</p> <p>4. Procedure -5 Marks</p> <p>5. Identification of instruments &amp; Spotting -15 Marks</p> <p>6. <i>Viva voce</i> -20 Marks</p> <p><b>Total -100 Marks</b></p>
17.	ASTHI SANDHI AND MARMAGAT ROGA	100	100	Part- A : 50 Part- B : 50	<p>1. Case Records (25 cases) -20 Marks</p> <p>2. Bed Side examination- Patient History (Long case) -20 Marks</p> <p>3. Bed Side examination-Patient History (Short case) -10 Marks</p> <p>4. Instruments / equipments / models identification -15 Marks</p> <p>5. Medical procedures -15 Marks</p> <p>6. <i>Viva voce</i> -20 Marks</p> <p><b>Total -100 Marks</b></p>
18.	SHALAKYA - NETRA ROGA	100	100	Part- A : 50 Part- B : 50	<p>1. Case Record -20 Marks</p> <p>2. Bed side Examination Long Case -20 Marks</p> <p>3. Bed side examination Short case -10 Marks</p> <p>4. Kriyakalpa Procedure -15 Marks</p> <p>5. Identification of specimens and Instruments -15 Marks</p> <p>6. <i>Viva voce</i> -20 Marks</p> <p><b>Total -100 Marks</b></p>
19.	SHALAKYA- SHIRO-NASA-KARNA EVUM KANTHA ROGA	100	100	Part- A : 50 Part- B : 50	<p>1. Case Record -20 Marks</p> <p>2. Bed side Examination Long case -20 Marks</p> <p>3. Bed side examination Short case -10 Marks</p> <p>4. Kriyakalpa procedure -15 Marks</p>

					5. Identification of specimens and Instruments -15 Marks 6. <i>Viva voce</i> -20 Marks <b>Total -100 Marks</b>
20.	SHALAKYA – DANTA EVUM MUKHA ROGA	100	100	Part- A : 50 Part- B : 50	1. Case Record -20 Marks 2. Bed side Examination Long case -20 Marks 3. Bed side examination Short case -10 Marks 4. Kriyakalpa procedure -15 Marks 5. Identification of specimens, radiograph and instruments -15 Marks 6. <i>Viva voce</i> -20 Marks <b>Total -100 Marks</b>
21.	PANCHKARMA	100	100	Part- A : 50 Part- B : 50	1. Case records of 25 patients in detail -20 Marks 2. Performance of long Karma -20 Marks 3. Performance of short Karma -10 Marks 4. Panchakarmal procedures -15 Marks 5. Instruments and spotting -15 Marks 6. <i>Viva voce</i> -20 Marks <b>Total -100 Marks</b>
22.	AGADA TANTRA EVUM VIDHI VAIDYAKA	100	100	Part- A : 50 Part- B : 50	1. Case records (20 Cases) -20 Marks 2. Bedside clinical case taking Long Case -20 Marks 3. Bedside clinical case taking Short Case -10 Marks 4. Identification of specimens, models and equipments of jurisprudence importance -05 Marks <b>Total -100 Marks</b>

4. The Final Examination shall be conducted by a team of 4 Examiners, out of which two shall be external, appointed by the University, as specified under Ordinance OB-4.
- (i) The Final Examination shall be held at the end of the Final Year of the Programme, and shall comprise (a) dissertation, (b) written examinations and (c) clinical/ practical and oral examination in the respective Subjects, as the case may be, as shown in the Table 3 below.
- (a) There shall be four theory papers in each Subject Specialty, and one practical or clinical and *viva voce* examination in the concerned Specialty or group of sub-specialties selected by the student for special study.
- (b) The examination shall be designed so as to assess the clinical acumen, ability and working knowledge of the student in the practical aspect of the Specialty and his/ her fitness to work independently as a Specialist.
- (c) The *viva voce* of the practical examination shall involve extensive discussion on any aspect of Subject Specialty.

- (d) The dissertation thesis shall be submitted six months before the commencement of the Final Examination.

5. **Distribution of Marks for Post - Graduate Course in Ayurveda**  
**Final Examination**

A. **Table 3**

Sr. No.	Subjects	Distribution of Marks (Theory)	Distribution of Marks (Practical)
1.	AYURVED SAMHITA & SIDDHANTA	Paper I -100 Marks Paper II -100 Marks Paper III -100 Marks Paper IV -100 Marks Total -400 Marks	1. Dissertation Presentation -30 Marks 2. Case Records Long -20 Marks 3. Case Records Short -10 Marks 4. Teaching & Communication Skills -10 Marks 5. Log Book -10 Marks 6. <i>Viva Voce</i> -20 Marks <b>Total -100 Marks</b>
2.	RACHANA SHARIR	Paper I -100 Marks Paper II -100 Marks Paper III -100 Marks Paper IV -100 Marks Total -400 Marks	1. Practical record book and log book -20 Marks 2. Spotting (Dissected organs and Bones- Joints-Muscles) -20 Marks 3. Dissection -40 Marks 4. Surface & Radiological Anatomy -40 Marks 5. Dissertation Presentation -10 Marks 6. Teaching Skills -20 Marks 7. <i>Viva voce</i> -50 Marks <b>Total -200 Marks</b>
3.	KRIYA SHARIR	Paper I -100 Marks Paper II -100 Marks Paper III -100 Marks Paper IV -100 Marks Total -400 Marks	1. Laboratory Practical -40 Marks 2. Clinical Experiment -40 Marks 3. Dissertation Presentation -30 Marks 4. Teaching & Communications Skills -10 Marks 5. Log Book -10 Marks 6. Practical -30 Marks 7. <i>Viva-voce</i> -40 Marks <b>Total -200 Marks</b>
4.	DRAVYAGUNA VIGYAN	Paper I -100 Marks Paper II -100 Marks Paper III -100 Marks Paper IV -100 Marks Total -400 Marks	1. Herbarium -10 Marks 2. Pharmacognosy practical record -10 Marks 3. Pharmacology practical record -10 Marks 4. Clinical records -10 Marks 5. Practical examination (Identification of green and raw drugs, microscopic examination, Ekalaashadha pariksha -60 Marks 6. Dissertation Presentation -20 Marks 7. <i>Viva voce</i> -80 Marks <b>Total -200 Marks</b>
5.	RASA SHASTRA & BHAISHAJYA KALPANA	Paper I -100 Marks Paper II -100 Marks Paper III -100 Marks Paper IV -100 Marks Total -400 Marks	1. Identification of the specimen -10 Marks 2. Drug Processing (10+10+5+5) i) Major Practicals: 2 (1 Rasashastra and 1 Bhaishajya Kalpana) ii) Minor Practicals: 2 (1 Rasashastra and 1 Bhaishajya Kalpana) 3. Drug testing and Analysis (5+5) -10 Marks

			i) Rasaushadhi – 1 ii) Kashthaushadhi – 1 4. Dissertation Presentation 15 Min. - 10 Marks 5. A Demo Lecture on any subject topic: 10 Minutes - 10 Marks 6. Documentation -15 Marks i. Practical record book (25 each from Rasa Shastra, Bhaishajya Kalpana and Analytical part). -75 Marks ii. Reports of the Visits iii. Case Records 7. <i>Viva voce</i> examination - 15 Marks <b>Total -100 Marks</b>
6.	PRASUTI EVUM STRI ROGA	Paper I -100 Marks Paper II -100 Marks Paper III -100 Marks Paper IV -100 Marks Total -400 Marks	1. Practical Record Book - 20 Marks 2. Bed side examination Short Case - 20 Marks 3. Bed side examination Long Case - 40 Marks 4. Identification of the Instruments/ x-ray/USG plate - 20 Marks 5. Dissertation Presentation - 50 Marks 6. <i>Viva Voce</i> - 50 Marks <b>Total - 200 Marks</b>
7.	KAUMARBHRITYA-BALA ROGA	Paper I - 100 Marks Paper II - 100 Marks Paper III - 100 Marks Paper IV - 100 Marks Total - 400 Marks	1. Case record -15 Marks 2. Bed side examination a) Short Case -15 Marks b) Long Case -25 Marks 3. Identification of instruments/ spotting -10 Marks 4. Dissertation Presentation -10 Marks 5. <i>Viva voce</i> -25 Marks <b>Total -100 Marks</b>
8.	SWASTHAVRITTA	Paper I - 100 Marks Paper II - 100 Marks Paper III - 100 Marks Paper IV -100 Marks Total - 400 Marks	1. Log book -10 Marks 2. Case Record Sheets -20 Marks 3 One Long Case (Pathya-Apathya advice) -20 Marks 4 Two Short Cases(10X2) (Yoga and naturopathy advice each) -20 Marks 5 Spotting on Instrument/ Equipment/Medicine/Solve a Problem- (10 Spots x2) -20 Marks 6 Dissertation Presentation -50 Marks 7 <i>Viva voce</i> -60 Marks <b>Total -200 Marks</b>
9.	KAYACHIKITSA	Paper I - 100 Marks Paper II - 100 Marks Paper III - 100 Marks Paper IV - 100 Marks Total - 400 Marks	1. Case records of 40 IPD Patients in Detail -10 Marks 2. Long case History-1: -20 Marks 3. Short Case History-1 : -10 Marks 4. Medical procedures demonstration/ Panchakarma procedure -20 Marks 5. Academic Competence evaluation -40 Marks <b>based on:</b> 1. <i>Viva voce</i> -30 Marks 2. Teaching and communication skills: -10 Marks <b>Total -100 Marks</b>
10.	RASAYAN & VAJIKARAN	Paper I -100 Marks	1. Case records of 40 IPD Patients in Detail -10 Marks 2. Long case History-1: -20 Marks

		Paper II -100 Marks Paper III -100 Marks Paper IV -100 Marks Total -400 Marks	3. Short Case History-1 : -10 Marks 4. Medical procedures demonstration/ Panchakarma procedure -20 Marks 5. Academic Competence evaluation -40 Marks <b>based on:</b> 1. <i>Viva voce</i> -30 Marks 2. Teaching and communication skills: -10 Marks <b>Total -100 Marks</b>
11.	MANOVIGYAN EVUM MANASROGA	Paper I -100 Marks Paper II -100 Marks Paper III -100 Marks Paper IV -100 Marks Total -400 Marks	1. Practical Record Book -10 Marks 2. Bed side examination a. Short Case -10 Marks b. Long Case -25 Marks 3. Assessment of Scales and inventories (Ayurveda and Conventional) -10 Marks 4. Thesis Presentation(PPT) -25 Marks 5. <i>Viva voce</i> -20 Marks <b>Total -100 Marks</b>
12.	ROGANIDAN EVUM VIKRITI VIGYAN	Paper I -100 Marks Paper II -100 Marks Paper III -100 Marks Paper IV -100 Marks Total -400 Marks	1. Observation Diary -10 Marks Laboratory record -10 Marks 2. - Short Case (including Case Record) -20 Marks - Long Case (including Case Record) -30 Marks 3. Laboratory Work -40 Marks 4. Thesis Presentation -40 Marks 5. <i>Viva voce</i> -50 Marks <b>Total -200 Marks</b>
13.	CHHAYA EVUM VIKIRAN VIGYAN	Paper I -100 Marks Paper II -100 Marks Paper III -100 Marks Paper IV -100 Marks Total -400 Marks	1. Observation Diary and Laboratory record -10 Marks 2. - Short Case (including Case Record) -10 Marks - Long Case (including Case Record) -10 Marks 3. Laboratory Work -20 Marks 4. Thesis Presentation -30 Marks 5. <i>Viva voce</i> -20 Marks <b>Total -100 marks</b>
14.	SHALYA -SAMANYA	Paper I -100 Marks Paper II -100 Marks Paper III -100 Marks Paper IV -100 Marks Total -400 Marks	1. Case record (25) -10 Marks 2. Short case -10 Marks 3. Long case -20 Marks 4. Identification of specimen / Radiograph and Instruments -20 Marks 5. Thesis Presentation -20 Marks 6. <i>Viva voce</i> -20 Marks <b>Total -100 Marks</b>
15.	SHALYA - KSHAR EVUM ANUSHASTRA KARMA	Paper I -100 Marks Paper II -100 Marks Paper III -100 Marks Paper IV -100 Marks Total -400 Marks	1. Case record (25) -10 Marks 2. Short case -10 Marks 3. Long case -20 Marks 4. Identification of specimen / Radiograph and Instruments -20 Marks 5. Thesis Presentation -20 Marks 6. <i>Viva voce</i> -20 Marks <b>Total -100 Marks</b>
16.	SANGYAHARAN	Paper I -100 Marks Paper II -100 Marks Paper III -100 Marks Paper IV -100 Marks Total -400 Marks	1. Case Record(25) -50 Marks 2. Presentation of different types of Anaesthesia -50 Marks 3. Thesis Presentation -50 Marks 4. <i>Viva Voce</i> -50 Marks <b>Total -200 Marks</b>
17.	ASTHI SANDHI AND MARMAGAT ROGA	Paper I -100 Marks	1. Discipline and regularity -10 Marks 2. Bed side examination Short case-10 Marks

		Paper II -100 Marks Paper III -100 Marks Paper IV -100 Marks Total -400 Marks	3. Long case - 20 Marks 4. Identification of specimen / instruments/Radiographs - 10 Marks 5. Dissertation Presentation - 25 Marks 6. <i>Viva Voce</i> - 25 Marks <b>Total -100 Marks</b>
18.	SHALAKYA - NETRA ROGA	Paper I -100 Marks Paper II -100 Marks Paper III -100 Marks Paper IV -100 Marks Total -400 Marks	1. Bed side examination Short Case 2 of 10 marks each -20 Marks 2. Bed side examination Long Case -20 Marks 3. Identification of specimen / Instrument / Radiograph -10 Marks 4. Dissertation Presentation -10 Marks 5. Teaching skill -10 Marks 6. <i>Viva voce</i> -30 Marks <b>Total -100 Marks</b>
19.	SHALAKYA- SHIRO-NASA-KARNA EVUM KANTHA ROGA	Paper I -100 Marks Paper II -100 Marks Paper III -100 Marks Paper IV -100 Marks Total -400 Marks	1. Case Record(25) -10 Marks 2. Bed side examination i) Long Case -20 Marks ii) Short Case -10 Marks 3. Identification of specimen / Instrument / Radiograph -10 Marks 4. Dissertation Presentation -25 Marks 5. <i>Viva voce</i> -25 Marks <b>Total -100 Marks</b>
20.	SHALAKYA – DANTA EVUM MUKHA ROGA	Paper I -100 Marks Paper II -100 Marks Paper III -100 Marks Paper IV -100 Marks Total -400 Marks	1. Bed side examination i) Short Case 2 of 10 marks each -20 Marks ii) Long Case -20 Marks 2. Identification of specimen / Instrument/ Radiograph -10 Marks 3. Dissertation Presentation -10 Marks 4. Teaching skill -10 Marks 5. <i>Viva voce</i> -30 Marks <b>Total -100 Marks</b>
21.	PANCHKARMA	Paper I -100 Marks Paper II -100 Marks Paper III -100 Marks Paper IV -100 Marks Total -400 Marks	1. Case records of 40 IPD Patients in Detail -10 Marks 2. Long case History-1: -20 Marks 3. Short Case History-1 : -10 Marks 4. Medical procedures demonstration/ Panchakarma procedure -20 Marks 5. Academic Competence evaluation -40 Marks <b>based on:</b> 1. <i>Viva voce</i> -30 Marks 2. Teaching and communication skills: -10 Marks <b>Total -100 Marks</b>
22.	AGADA TANTRA EVUM VIDHI VAIDYAKA	Paper I -100 Marks Paper II -100 Marks Paper III -100 Marks Paper IV -100 Marks Total -400 Marks	1. Post mortem / Medico-legal case record and clinical record -10 Marks 2. Identification of specimens models and equipments of jurisprudence importance -20 Marks 3. Spotting related to Visha, Upavisha and others poisonous drugs -20 Marks 4. Dissertation presentation -25 Marks 5. <i>Viva voce</i> -25 Marks <b>Total -100 Marks</b>

**OC-65.7 Standard of Passing:**

1. To be declared successful in the Preliminary and Final Examinations, a student shall be required to pass both Subjects, with a minimum of 50% marks in Practical and Theory Subjects separately.
2. A student shall be required to pass the Preliminary Examination to be eligible to appear at the Final Examination.

3. A candidate whose dissertation has been approved, but who has not passed the other components of the same examination, shall be eligible for admission to that part and subsequent examination, on re-payment of full fee (with no exemptions); however he/she shall be exempted from re-submission of dissertation.
4. The Post-Graduate Degree shall be conferred after the dissertation is accepted and the student passes the Final Examination.
5. A successful candidate shall be awarded a Post-Graduate Degree in the concerned Specialty/ Subject.
6. There shall be no improvement of class.

**OC-65.8 Dissertation:**

1. The title of the dissertation along with the synopsis, with approval of the Ethics Committee constituted by the College, shall be submitted to the University within a period of six months from the date of admission to the Programme. The synopsis of the proposed scheme of work shall indicate the familiarity of the student with the proposed theme of work, the name of the Department and the name and designation of the Guide and Co-Guide, if any.
2. The title and the synopsis of the dissertation shall be communicated to the University, which shall approve the same not later than three months after submission of the synopsis.
3. Once the title for dissertation is approved, the student shall not be allowed to change the title of the proposed theme of work without permission of the University.
4. If the student fails to submit the title of dissertation and synopsis within the period specified, his/her terms for final PG course shall be extended by six months or more, in accordance with the period of delay in submission of the synopsis to the University, subject to the completion of the entire Degree Programme within the maximum period available as per Ordinance OA-16.11.
5. The subject of every dissertation shall be research, practical oriented, innovative and helpful in the development of Ayurveda; the subject of the dissertation shall have relation with the subject matter of the specialty.
6. The College shall display the approved synopsis of dissertation on their website.
7. The Guide shall be a recognized teacher of the University, as Professor/ Associate Professor/ Assistant Professor with five years teaching experience in the Subject, or with three years as Co-Guide.
8. The maximum number of students per year, per specialty shall not exceed six. The Guide to student ratio shall be 1:3 in case of Professor, 1:2 in case of Associate Professor and 1:1 in case of Assistant Professor with minimum of five years experience.
9. The dissertation thesis shall be submitted not less than six months before commencement of the Final Examination. However, the student shall continue his/her regular study in the Institution after submission of dissertation to complete three years.
10. The students shall have to publish/ have acceptance of at least one Research paper in a Journal of Medical Sciences and one paper presentation at a Regional/ National level Seminar based on his/ her dissertation.
11. The dissertation shall contain critical review of literature, the methodology, data of the research carried out, discussion on the research findings of the study, conclusion, summary and references cited.



12. The dissertation shall consist of not less than forty thousand words, of which the summary shall be of not more than one thousand five hundred words and the conclusion not exceeding one thousand words.
13. Five hard-bound copies of the dissertation along with a certificate from the Guide along with a soft copy, should reach the office of the Registrar of the University four months before the Final Examination.
14. The dissertation shall be assessed by the two external examiners appointed by the University.
15. The dissertation shall be accepted only after the approval of examiners appointed; in case of disapproval by one external examiner, the dissertation shall be referred to a third examiner.
16. If the dissertation is not accepted by two external examiners, the same shall be returned to the student with the remarks of the examiners and the student shall be permitted to resubmit the dissertation to the University, after making necessary improvement in the light of examiners' report, within a further period of six months.
17. The student shall be permitted to appear in the final examination of Post-Graduate Programme only after the examiners have approved the dissertation.
18. The students shall have to make a presentation of the dissertation work before the examiners for the final evaluation.

**Ordinance OC-66 relating to the three year Choice Based Credit System Programmes of Bachelor of Arts, Bachelor of Arts (Honours), Bachelor of Commerce, Bachelor of Commerce (Honours), Bachelor of Science and Bachelor of Science (Honours) Degrees** (under section 24(1) of Goa University Act, 1984) (effective from the academic year 2017 - 18).

### **OC-66.1 GENERAL**

Choice Based Credit System (CBCS) provides choice for students to select from the prescribed courses. Under the CBCS, the requirement for awarding a Degree is prescribed in terms of number of Credits to be completed by the students.

#### **1.1 OBJECTIVES**

- (a) To bring the undergraduate curriculum on par with the model curriculum recommended by the University Grants Commission
- (b) To impart quality education on par with international standards.
- (c) To offer new, relevant and need-based Courses.
- (d) To inculcate in students, responsibility and self-discipline in the learning process.
- (e) To enable students to acquire specific skills in keeping with their area of study.
- (f) To make the evaluation system continuous and more objective.
- (g) To provide a choice to the students in choosing their courses.

#### **1.2 DEGREE TO BE AWARDED**

Bachelor of Arts/ Bachelor of Commerce/ Bachelor of Science/ Bachelor of Arts (Honours)/ Bachelor of Commerce (Honours)/ Bachelor of Science (Honours).

#### **1.3 DURATION OF COURSE**

The afore-mentioned Degree Courses shall each have duration of three academic years. Every academic year shall consist of two semesters.

## **OC-66.2 ELIGIBILITY FOR ADMISSION**

Eligibility for admission leading to the Degree of Bachelor of Arts/ Bachelor of Commerce/ Bachelor of Science/ Bachelor of Arts (Honours)/ Bachelor of Commerce (Honours)/ Bachelor of Science (Honours) shall be as follows.

### **2.1 Eligibility for admission to Semester I & II (in the first year) B. A./B.Com/B.Sc./ B. A. (Hon.)/ B.Com. (Hon.)/B.Sc. (Hon.) Programme:**

**(A)** To be eligible for admission to the Semester I of the Three Years Programme leading to the Degree of Bachelor of Arts/ Commerce/ Bachelor of Arts (Hon.)/ Commerce (Hon.) the candidate should have passed:

**(i)** The Higher Secondary School Certificate (Std. XII) examination conducted by the Goa Board of Secondary and Higher Secondary Education in any stream, including Vocational stream in the subjects notified by the University from time to time.

OR

**(ii)** Std XII Arts/Science/Commerce or similar examination of another body, equivalent to Goa Board of Secondary and Higher Secondary Education, Goa, and recognized as such by Goa University.

**(B)** To be eligible for admission to the Semester I of the Three Year Programme leading to the Degree of Bachelor of Science/ Bachelor of Science (Hon.) the candidate shall have passed:

**(i)** The Higher Secondary School Certificate (Std. XII) examination conducted by the Goa Board of Secondary and Higher Secondary Education in the Science stream or Vocational stream in the subjects notified by the University from time to time.

OR

**(ii)** Std XII Science or a similar examination of another body, equivalent to Goa Board of Secondary and Higher Secondary Education, Goa, and recognized as such by Goa University.

**(C)** A candidate not covered under any of the above categories but desirous of seeking admission to the said course may apply to the College. However, the Registrar along with Dean of concerned Faculty and Chairperson(s) of Board(s) of Studies of concerned subjects shall decide the eligibility.

**(D)** A candidate admitted for Semester-I shall be deemed eligible for admission to Semester-II.

**(E)** A candidate migrating from another recognized University and desirous of direct admission to Semester-II may be considered for admission provided he/she has cleared/passed First Term/ Semester-I examination of that University with those

subjects for which admission is sought and undertakes to successfully complete the other compulsory Courses of Semester-I.

**2.2 Eligibility for admission to Semester-III & IV (in the second year) B.A./B.Com./ B.Sc./ B. A. (Hon.)/B.Com. (Hon.) /B.Sc. (Hon.) Programme:**

- (A) A candidate who has requisite attendance for Semester-I and Semester-II shall be eligible for admission to Semester-III.
- (B) A candidate migrating from any other recognized University may be considered for admission to Semester-III of the B. A./ B. Com. / B. Sc./ B. A. (Hon.)/B.Com. (Hon.) /B.Sc. (Hon.) provided:
  - (a) He/She has passed the First Year B. A./ B. Com./ B. Sc./ B. A. (Hon.)/B.Com. (Hon.) /B.Sc. (Hon.) examination in all subjects from that University.
  - (b) He/She had offered at the First Year the same subjects as prescribed under Major category available under the scheme of this University.
  - (c) He/She undertakes to successfully complete the required courses and credits prescribed by this University for Semesters-I & II, if he/she has not already done so in the previous University. Result of Semester IV examination shall be withheld if the candidate fails to fulfil this undertaking.
- (C) A candidate admitted for Semester-III shall be deemed eligible for admission to Semester-IV.
- (D) A candidate from another recognized University may be considered for direct admission to Semester IV provided he/she fulfils the conditions in (a), (b) and (c) at (B) above and, in addition, has passed/cleared Semester-III/First Term examination of the Second Year B. A. /B. Com. /B. Sc. of that University. However, the result of Semester IV shall be withheld if the candidate does not fulfil these conditions.

**2.3(i) Eligibility for admission to Semester-V (in the third year) B. A./ B. Com./B. Sc./ B. A. (Hon.)/B.Com. (Hon.)/B.Sc. (Hon.) Programme:**

- (A) A candidate who has been declared passed in Semester-I to Semester-IV examinations shall be eligible for admission to Semester-V.
- (B) A candidate admitted for Semester-V shall be deemed eligible for admission to Semester-VI.
- (C) A candidate migrating from any other recognized University may be considered for admission to Semester-V of the B. A. / B.Com. /B. Sc. Course provided:
  - (a) He/She has passed the Second Year B. A. / B. Com. /B. Sc. / B. A. (Hon.)/B.Com. (Hon.) /B.Sc. (Hon.) Examination in all subjects from that University, and
  - (b) He/She had offered at the Second Year the required courses and credits under the scheme of this University. A candidate fulfilling these conditions shall be eligible for admission to Semester-V only.

**(ii) Eligibility for admission to Semester-VI (in the third year) B.A./ B.Com./B.Sc./ B. A. (Hon.)/B.Com. (Hon.)/B.Sc. (Hon.) Programme:**

- (A) A candidate already admitted for Semester-V shall be deemed eligible for admission to Semester-VI. Direct admission to Semester-VI shall not be permitted.

**2.4 Class strength:**

Number of students in a class/division shall not ordinarily exceed sixty.

**OC-66.3 PROGRAMME STRUCTURE:**

- 1 The Programme shall be based on a system of time-integrated Units called Credits, under the CBCS.
- 2 The Programme shall comprise Courses such as Core, Elective and Ability Enhancement Courses.
- 3 A Credit shall consist of 15 clock hours of theory of 1 hour duration each or 15 practical classes of 2 hours duration each, per semester or its equivalent; field work and such other as recommended by the Board of Studies (BoS) shall be considered under practical category for calculating credits and workload.
- 4 One Credit shall carry a maximum of 25 marks.
- 5 A student shall be eligible for the award of Bachelor's Degree on successful completion of minimum of 132 Credits, to be completed over a minimum of six Semesters. A student shall be eligible for the award of Bachelor's Degree (Honours) on successful completion of minimum of 148 Credits, to be completed over a minimum of six Semesters.

#### **OC-66.4 COURSE STRUCTURE**

- 1 Each Course can carry different weightage in terms of number of Credits. Each Course should define learning objectives and outcome. A course may be designed so as to comprise any or combination of lectures/ tutorials/ laboratory work/ field work/ outreach activities/ project work/ vocational training/ viva/ seminars/ term papers/ assignments/ presentations/ self-study/ such other.
- 2 **Core Course**  
A Core Course (CC) shall be of 4 or 6 Credits and may consist of only theory component, or theory and practical components, in which case the theory component shall be of 3 Credits and the practical component shall be 1 Credit for 4 credit courses and the theory component shall be of 4 Credits and the practical component shall be 2 Credits for 6 credit courses, or as prescribed by BoS and approved by the Academic Council.
- 3 **Elective Course**  
An Elective Course can be chosen from a pool of Courses, which may be specific/ specialized/ advanced/ supportive to the discipline or subject, or which provides an extended scope, or which enables an exposure to some other discipline/ subject/ domain or which nurtures the candidate's proficiency/ skill. An Elective Course may be Discipline Specific Elective Course or Generic Elective Course.
  - 3.1 **(Notified on 29<sup>th</sup> May, 2017) Discipline Specific Elective (DSE) Course**  
Discipline Specific Elective (DSE) Courses shall be offered in the main discipline/ subject. Each DSE shall be of 4 Credits and may consist of only Theory component, or Theory and Practical component, in which case the theory component shall be of 3 Credits and the practical component shall be 1 Credit or as prescribed by BoS and approved by the Academic Council. Any number of DSE's as approved by BoS and AC, can be offered depending upon the specialization available in the college.
  - 3.2 **(Notified on 29<sup>th</sup> May, 2017) Project**  
A compulsory Project work of 4 Credits shall be offered in lieu of a DSE Course in Semester VI and shall be designed to acquire special/ advanced knowledge; it shall be specialised course involving application of knowledge in solving / analyzing /exploring a real life situation / difficult problem. Students shall undertake such a project under the guidance of a teacher/ faculty member. The topic for the Project Work shall be given in Semester V. Students shall be required to carry out work for the Project during Semesters V & VI. The assessment of the Project will be carried at the end of Semester VI.

### 3.3 Generic Elective Course

A Generic Elective (GE) course shall be of 4 Credits, and may be chosen from an unrelated discipline/subject, with an intention to seek exposure. A Core Course offered in a discipline/subject may be treated as GE Course for another discipline/ subject, and may consist of only Theory component, or Theory and Practical component, in which case the Theory component shall be of 3 credits and the Practical component shall be of 1 Credit, or as prescribed by BoS and approved by the Academic Council.

### 4 Ability Enhancement Courses (AEC)

The Ability Enhancement (AE) Courses may be of two kinds: Ability Enhancement Compulsory Courses (AECC) and Skill Enhancement (SE) Courses.

- 4.1** AEC Courses are based upon the content that leads to Knowledge enhancement. Environmental Studies as AEC Course is mandatory for all disciplines. Each Course shall have only Theory component of four credits or two separate Courses of 2 credits each.
- 4.2** SE Courses are value-based and/or skill-based and are aimed at providing hands-on-training, competencies, skills. These courses may be chosen from a pool of courses designed to provide value-based and/or skill-based knowledge. Each course will be of four credits.
- 5** The Course Structure for the Three Year Degree Programme in B.A./B.Com/B.Sc./ B.A. (Hon.)/B.Com. (Hon.) /B.Sc. (Hon.) shall be as specified below:

#### 5.1 (Notified on 29<sup>th</sup> May, 2017) Programme Structure for Bachelor of Arts

Semester	Core Course (CC)	Ability Enhancement Compulsory Course (AECC)	Skill Enhancement Course (SEC)	Elective: Discipline Specific (DSE)	Elective: Generic (GE)
I	English 1 DSC 1A DSC 2A DSC 3A	English/MIL Communication OR Environmental Studies*			GE 1
II	English 2 DSC 1B DSC 2B DSC 3B	English/MIL Communication OR Environmental Studies*			GE 2
III	English 3/ MIL/Hindi DSC 1C DSC 2C DSC 3C		SEC 1		GE 3
IV	English 4/ MIL/Hindi DSC 1D DSC 2D DSC 3D		SEC 2		GE 4

V	Any two subjects: DSC 1E DSC 2E DSC 3E			Any two as in core DSE 1A DSE 2A DSE 3A	
VI	Any combination taken in Sem. V DSC 1F DSC 2F DSC 3F			Any two as in V sem. combination DSE 1B <sup>§</sup> DSE 2B <sup>§</sup> DSE 3B <sup>§</sup>	

\*A student shall offer Language in one semester and Environmental Studies in the other semester. However, Colleges may offer Language and Environmental Studies in both the semesters for different batches of students.

DSC – Discipline Specific Core (1- subject 1; 2- subject 2; 3 – subject 3)

DSE - Discipline Specific Elective (1- subject 1; 2 - subject 2; ; 3 – subject 3)

Alphabets A, B, C, D, E & F refer to courses of subjects 1, 2 & 3 in various semesters

GE – Generic Elective; SEC – Skill Enhancement Course

<sup>§</sup>DSP – In lieu of one of the DSEs, a compulsory Discipline Specific Project (DSP) shall be taken up.

### Credits for B. A. Programme

Semester	Subjects	Credits	Total
I	English 1	6 x 1	6
	DSC 1A	4 x 1	4
	DSC 2A	4 x 1	4
	DSC 3A	4 x 1	4
	English/ MIL Communication/	4 x 1	4
	GE 1	4 x 1	4
	Total		26
II	English 2	6 x 1	6
	DSC 1B	4 x 1	4
	DSC 2B	4 x 1	4
	DSC 3B	4 x 1	4
	English/ MIL Communication /Environmental Studies	4 x 1	4
	GE 2	4 x 1	4
	Total		26
III	English 3/MIL/Hindi	4 x 1	4
	DSC 1C	4 x 1	4
	DSC 2C	4 x 1	4
	DSC 3C	4 x 1	4

	GE 3	4 x 1	4
	SEC 1	4 x 1	4
	Total		24
IV	English 4/MIL/Hindi	4 x 1	4
	DSC 1DD	4 x 1	4
	DSC 2D	4 x 1	4
	DSC 3D	4 x 1	4
	GE 4	4 x 1	4
	SEC 2	4 x 1	4
	Total		24
V (Any two subject combinations)	DSC 1E	4 x 1	4
	DSC 2E	4 x 1	4
	DSC 3E	4 x 1	4
	DSE 1A	4 x 1	4
	DSE 2A	4 x 1	4
	DSE 3A	4 x 1	4
	Total		16
VI (subject combinations as in Sem. V)	DSC 1F	4 x 1	4
	DSC 2F	4 x 1	4
	DSC 3F	4 x 1	4
	DSE 1B <sup>§</sup>	4 x 1	4
	DSE 2B <sup>§</sup>	4 x 1	4
	DSE 3B <sup>§</sup>	4 x 1	4
		4 x 1	4
	Total		16
<b>TOTAL</b>			<b>132</b>

<sup>§</sup>DSP – In lieu of one of the DSEs, a Compulsory Discipline Specific Project (DSP) shall be taken up.

## 5.2 Programme Structure for Bachelor of Commerce

Semester	Core Course (CC)	Ability Enhancement Compulsory Course (AECC)	Skill Enhancement Course (SEC)	Elective: Discipline Specific (DSE)	Elective: Generic (GE)*
I	CC 1 Commerce CC 2 Commerce CC 3 Economics CC 4 Commercial Arithmetic	AECC 1 Spoken English AECC 2 Environmental Studies			GE 1: Computer Applications/ Geography/ Commerce/ Any other
II	CC 5 Commerce CC 6 Commerce CC 7 Economics CC 8 Commercial Arithmetic	AECC 3 Business Communication AECC 4 Environmental Studies			GE 2: Computer Applications/ Geography/ Commerce/ Any other
III	CC 9 Commerce CC 10 Commerce CC 11 Commerce		SEC 1 Business Law/Any other		GE 3: Business Statistics/ Commerce/ Any other GE4: Economics/ Any Other
IV	CC 12 Commerce CC 13 Accounts CC 14 Commerce		SEC 2 Business Law/Any other		GE 5: Business Statistics/ Commerce/Any other GE 6: Economics/ Any Other
V	CC 15 Commerce CC 16 Economics			DSE 1 Commerce DSE 2 Commerce	
VI	CC 17 Commerce CC 18 Economics			DSE 3 Commerce DSE 4 Commerce <sup>§</sup>	

CC – Discipline Specific Core; DSE - Discipline Specific Elective

GE – Generic Elective; SEC – Skill Enhancement Course; AECC - Ability Enhancement Compulsory Course

<sup>§</sup>DSP – In lieu of one of DSE, a compulsory Discipline Specific Project (DSP) has to be taken up.



### Credits for B. Com.

Semester	Subjects	Credit	Total
I	CC 1 Commerce	4x1	4
	CC 2 Commerce	4x1	4
	CC 3 Economics	4x1	4
	CC 4 Commercial Arithmetic	4x1	4
	AECC 1 English	4x1	4
	AECC 2 Environmental Studies	2x1	2
	GE 1 Computer Applications/Geography/ Any other	4x1	4
	Total		26
II	CC 5 Commerce	4x1	4
	CC 6 Commerce	4x1	4
	CC 7 Economics	4x1	4
	CC 8 Commercial Arithmetic	4x1	4
	AECC 3 English	4x1	4
	AECC 4 Environmental Studies	2x1	2
	GE 2 Computer Applications/Geography/ Any other	4x1	4
	Total		26
III	CC 9 Commerce	4x1	4
	CC 10 Commerce	4x1	4
	CC 11 Commerce	4x1	4
	SEC 1 Business Law/Any other	4x1	4
	GE 3 Business Statistics/Commerce/ Any Other	4x1	4
	GE 4 Economics /Any Other	4x1	4
	Total		24
IV	CC 12 Commerce	4x1	4
	CC 13 Commerce	4x1	4
	CC 14 Commerce	4x1	4
	SEC 2 Business Law/Any other	4x1	4
	GE 5 Business Statistics/Commerce/ Any Other	4x1	4
	GE 6 Economics /Any Other	4x1	4
	Total		24
V	CC 15 Commerce	4x1	4
	CC 16 Economics	4x1	4
	DSE 1 Commerce	4x1	4
	DSE 2 Commerce	4x1	4
	Total		16
VI	CC 17 Commerce	4x1	4
	CC 18 Economics	4x1	4
	DSE 3 Commerce	4x1	4
	DSE 4 Commerce <sup>§</sup>	4x1	4
	Total		16
<b>TOTAL</b>			<b>132</b>

1. Business Law in Semester III & IV and Accountancy papers in Semester V and VI will have 3 credits of Theory and 1 credit of Practical.
2. Computer Application paper in Semester I and II will have 3 credits of Theory and 1 credit of Practical.  
<sup>§</sup>DSP – In lieu of one of the DSE, a compulsory Discipline Specific Project (DSP) has to be taken up.

### 5.3 (Notified on 29<sup>th</sup> May, 2017) Programme Structure for Bachelor of Science

Semester	Core Course (CC)	Ability Enhancement Compulsory Course (AECC)	Skill Enhancement Course (SEC)	Elective: Discipline Specific (DSE)	Elective: Generic (GE)
I	DSC 1A DSC 2A DSC 3A	English/MIL Communication/ Environmental Studies*			GE 1
II	DSC 1B DSC 2B DSC 3B	English/MIL Communication/ Environmental Studies*			GE 2
III	DSC 1C DSC 2C DSC 3C		SEC 1		
IV	DSC 1D DSC 2D DSC 3D		SEC 2		
V			SEC 3 SEC 4	DSE 1A DSE 2A DSE 3A	
VI			SEC 5	DSE 1B <sup>§</sup> DSE 2B <sup>§</sup> DSE 3B <sup>§</sup>	

DSC – Discipline Specific Core (1- subject 1; 2- subject 2; 3 -subject 3)

DSE - Discipline Specific Elective (1- subject 1; 2 - subject 2; 3- subject 3)

Alphabets A, B, C, & D refer to courses of subjects 1, 2 & 3 in various semesters

GE – Generic Elective; SEC – Skill Enhancement Course

<sup>§</sup>DSP – In lieu of one of the DSEs, a compulsory Discipline Specific Project (DSP) shall be taken up.

\*A student shall offer Language in one semester and Environmental Studies in the other semester.

However colleges may offer Language and Environmental Studies in both the semesters for different batches of students.

**Credits for B.Sc.**

<b>Semester</b>	<b>Subjects</b>	<b>Credits</b>	<b>Total</b>
I	DSC 1A	6 X 1	6
	DSC 2A	6 X 1	6
	DSC 3A	6 X 1	6
	AECC*	4 X 1	4
	GE 1	4 X 1	4
	Total		<b>26</b>
II	DSC 1B	6 X 1	6
	DSC 2B	6 X 1	6
	DSC 3B	6 X 1	6
	AECC*	4 X 1	4
	GE 2	4 X 1	4
	Total		<b>26</b>
III	DSC 1C	6 X 1	6
	DSC 2C	6 X 1	6
	DSC 3C	6 X 1	6
	SEC 1	4 X 1	4
	Total		<b>22</b>
IV	DSC 1D	6 X 1	6
	DSC 2D	6 X 1	6
	DSC 3D	6 X 1	6
	SEC 2	4 X 1	4
	Total		<b>22</b>
V	DSE 1A	4 X 1	4
	DSE2A	4 X 1	4
	DSE 3A	4 X 1	4
	SEC 3	4 X 1	4
	SEC 4	4 X 1	4
	Total		<b>20</b>
VI	DSE 1B <sup>§</sup>	4 X 1	4
	DSE 2B <sup>§</sup>	4 X 1	4
	DSE 3B <sup>§</sup>	4 X 1	4
	SEC 2	4 X 1	4
	Total		<b>16</b>
<b>TOTAL</b>			<b>132</b>

\*A student shall offer Language in one semester and Environmental Studies in the other semester. However colleges may offer language and Environmental Studies in both the semesters for different students.

<sup>§</sup>DSP – In lieu of one of the DSEs, a compulsory Discipline Specific Project (DSP) shall be taken up.

**5.4 (I) (Notified on 29<sup>th</sup> May, 2017) Programme Structure for Bachelor of Arts (Honours)**

Semester	Core Course (CC)	Ability Enhancement Compulsory Course (AECC)	Skill Enhancement Course (SEC)	Elective: Discipline Specific (DSE)	Elective: Generic (GE)
I	English 1 DSC 1A DSC 2A DSC 3A	English / MIL Communication OR Environmental Studies*			GE 1
II	English 2 DSC 1B DSC 2B DSC 3B	English/MIL Communication OR Environmental Studies*			GE 2
III	English 3/ MIL/Hindi DSC 1C DSC 2C DSC 3C		SEC 1		GE 3
IV	English 4/ MIL/Hindi DSC 1D DSC 2D DSC 3D		SEC 2		GE 4
V**	DSC 5 DSC6 DSC7			DSE1 DSE2 DSE3	
VI**	DSC8 DSC9 DSC10			DSE4 DSE5 DSE6 <sup>§</sup>	

\*A student shall offer Language in one semester and Environmental Studies in the other semester. However Colleges may offer Language and Environmental Studies in both the semesters for different batches of students.

\*\*A student who desires to acquire Honours degree shall offer DSCs and DSEs in a single subject of his/her choice in Semesters V and VI.

The core courses shall be common for B.A. and B.A. (Hons.) programmes.

DSC – Discipline Specific Core; DSE - Discipline Specific Elective

GE – Generic Elective; SEC – Skill Enhancement Course

<sup>§</sup>DSP – In lieu of one of the DSEs, a compulsory Discipline Specific Project (DSP) shall be taken up.

### Credits for B. A. (Honours)

Semester	Subjects	Credits	Total
I	English 1	6 x 1	6
	DSC 1A	4 x 1	4
	DSC 2A	4 x 1	4
	DSC 3A	4 x 1	4
	English/MIL Communication /Environmental Studies	4 x 1	4
	GE 1	4 x 1	4
	Total		26
II	English 2	6 x 1	6
	DSC 1B	4 x 1	4
	DSC 2B	4 x 1	4
	DSC 3B	4 x 1	4
	English/ MIL Communication /Environmental Studies	4 x 1	4
	GE 2	4 x 1	4
	Total		26
III	English 3/MIL/Hindi	4 x 1	4
	DSC 1C	4 x 1	4
	DSC 2C	4 x 1	4
	DSC 3C	4 x 1	4
	GE 3	4 x 1	4
	SEC 1	4 x 1	4
	Total		24
IV	English 4/MIL/Hindi	4 x 1	4
	DSC 1D	4 x 1	4
	DSC 2D	4 x 1	4
	DSC 3D	4 x 1	4
	GE 4	4 x 1	4
	SEC 2	4 x 1	4
	Total		24
V**	DSC 5	4 x 1	4
	DSC 6	4 x 1	4
	DSC 7	4 x 1	4
	DSE 1	4 x 1	4
	DSE 2	4 x 1	4
	DSE 3	4 x 1	4

	Total		24
VI**	DSC 8	4 x 1	4
	DSC 9	4 x 1	4
	DSC 10	4 x 1	4
	DSE 4	4 x 1	4
	DSE 5	4 x 1	4
	DSE 6 <sup>§</sup>	4 x 1	4
		4 x 1	4
	Total		24
<b>TOTAL</b>			<b>148</b>

\*A student shall offer Language in one semester and Environmental Studies in the other semester. However Colleges may offer Language and Environmental Studies in both the semesters for different batches of students.

\*\*A student who desires to acquire Honours degree shall offer DSCs and DSEs in a single subject of his/her choice in Semesters V and VI.

The core courses shall be common for B.A. and B.A. (Hons.) programmes.

DSC – Discipline Specific Core; DSE - Discipline Specific Elective

GE – Generic Elective; SEC – Skill Enhancement Course

<sup>§</sup>DSP – In lieu of one of the DSEs, a compulsory Discipline Specific Project (DSP) shall be taken up.

**(II) (Notified on 29<sup>th</sup> May, 2017) Programme Structure for Bachelor of Arts (Honours) for Self -Financing Programmes such as Mass Communication/ Journalism/ etc.**

Semester	Core Course (CC)	Ability Enhancement Compulsory Course (AECC)	Skill Enhancement Course (SEC)	Elective: Discipline Specific (DSE)	Elective: Generic (GE)
I	English 1 DSC 1A DSC 2A DSC 3A (1A/2A)**	English/ MIL Communication /Environmental Studies*			GE 1
II	English 1 DSC 1B DSC 2B DSC 3B (1B/2B)**	English/ MIL Communication /Environmental Studies*			GE 2
III	English 2/ MIL/Hindi DSC 1C DSC 2C DSC 3C (1C/2C)**		SEC 1		GE 3
IV	English 2/ MIL/Hindi DSC 1D DSC 2D DSC 3D (1D/2D)**		SEC 2		GE 4
V	DSC 9 DSC 10 DSC 11			DSE 1 DSE 2 DSE 3	
VI	DSC 12 DSC 13 DSC 14			DSE 4 DSE 5 DSE 6 <sup>§</sup>	

\*A student has to offer Language in one semester and Environmental Studies in the other semester. However Colleges may offer Language and Environmental Studies in both the semesters for different students.

\*\*A student who desires to acquire Honours degree in a particular subject should offer an additional core course in semesters I, II, III and IV in that particular subject.

The core courses shall be common for B.A. (Hons.) and B.A. programmes.

DSC – Discipline Specific Core; DSE - Discipline Specific Elective

GE – Generic Elective; SEC – Skill Enhancement Course

<sup>§</sup>DSP – In lieu of one of the DSEs, a compulsory Discipline Specific Project (DSP) shall be taken up.

**Credits for B. A. (Honours)**

<b>Semester</b>	<b>Subjects</b>	<b>Credits</b>	<b>Total</b>
I	English 1	6x1	6
	DSC 1A	4x1	4
	DSC 2A	4x1	4
	DSC 3A (1A/2A)	4x1	4
	English/ MIL Communication/ Environmental Studies*	4x1	4
	GE 1	4x1	4
	Total		26
II	English 1	6x1	6
	DSC 1B	4x1	4
	DSC 2B	4x1	4
	DSC 3B (1B/2B)	4x1	4
	English/ MIL Communication /Environmental Studies*	4x1	4
	GE 2	4x1	4
	Total		26
III	English 2/ MIL/Hindi	4x1	4
	DSC 1C	4x1	4
	DSC 2C	4x1	4
	DSC 3C (1C/2C)	4x1	4
	GE 3	4x1	4
	SEC 1	4x1	4
	Total		24
IV	English 2/ MIL/Hindi	4x1	4
	DSC 1D	4x1	4
	DSC 2D	4x1	4
	DSC 3D (1D/2D)	4x1	4



	GE 4	4x1	4
	SEC 2	4x1	4
	Total		24
V	DSC 9	4x1	4
	DSC 10	4x1	4
	DSC 11	4x1	4
	DSE 1	4x1	4
	DSE 2	4x1	4
	DSE 3	4x1	4
	Total		24
VI	DSC 12	4x1	4
	DSC 13	4x1	4
	DSC 14	4x1	4
	DSE 1	4x1	4
	DSE 2	4x1	4
	DSE 3 <sup>§</sup>	4x1	4
	Total		24
<b>TOTAL</b>			<b>148</b>

<sup>§</sup>DSP – In lieu of one of the DSEs, a compulsory Discipline Specific Project (DSP) shall be taken up.

\*A student has to offer Language in one semester and Environmental Studies in the other semester. However Colleges may offer Language and Environmental Studies in both the semesters for different batches of students.

### 5.5 Programme Structure for Bachelor of Commerce (Honours)

Semester	Core Course (CC)	Ability Enhancement Compulsory Course (AECC)	Skill Enhancement Course (SEC)	Discipline Specific (DSE)	Elective: Generic (GE)
I	CC 1 Commerce CC 2 Commerce CC 3 Economics CC 4 Commercial Arithmetic	AECC 1 Spoken English AECC 2 Environmental Studies			GE 1: Computer Applications/ Geography/ Commerce/ Any other
II	CC 5 Commerce CC 6 Commerce CC 7 Economics CC 8 Commercial Arithmetic	AECC 3 Business Communication AECC 4 Environmental Studies			GE 2: Computer Applications/ Geography/ Commerce/ Any other
III	CC 9 Commerce CC 10 Commerce CC 11 Commerce		SEC 1 Business Law (with practical component)/ Any other		GE 3: Business Statistics/ Commerce/ Any other GE 4: Economics/ Any Other
IV	CC 12 Commerce CC 13 Commerce CC 14 Commerce		SEC 2 Business Law (with practical component)/ any other		GE 5: Business Statistics/ Commerce/ Any other GE 6: Economics/ Any Other
V	CC 15 Commerce CC 16 Economics			DSE 1 Commerce DSE 2 Commerce DSE 3 Commerce DSE 4 Commerce	
VI	CC 17 Commerce CC 18 Economics			DSE 5 Commerce DSE 6 Commerce DSE 7 Commerce DSE 8 Commerce <sup>\$</sup>	

CC – Discipline Specific Core; DSE - Discipline Specific Elective

GE – Generic Elective; SEC – Skill Enhancement Course; AECC - Ability Enhancement Compulsory Course

<sup>\$</sup>DSP – In lieu of one of the DSEs, a compulsory Discipline Specific Project (DSP) has to be taken up.

## Credits for B. Com (Honours)

Semester	Subjects	Credits	Total
I	CC 1 Commerce	4x1	4
	CC 2 Commerce	4x1	4
	CC 3 Economics	4x1	4
	CC 4 Commercial Arithmetic	4x1	4
	AECC 1 Spoken English	4x1	4
	AECC 2 Environmental Studies	2x1	2
	GE 1 Computer Applications /Geography/ Any other	4x1	4
	Total		26
II	CC 5 Commerce	4x1	4
	CC 6 Commerce	4x1	4
	CC 7 Economics	4x1	4
	CC 8 Mathematics	4x1	4
	AECC 3 Business Communication	4x1	4
	AECC 4 Environmental Studies	2x1	2
	GE 2 Computer Applications /Geography/ Any other	4x1	4
	Total		26
III	CC 9 Commerce	4x1	4
	CC 10 Commerce	4x1	4
	CC 11 Commerce	4x1	4
	SEC 1 Business Law/Any other	4x1	4
	GE 3 Business Statistics/Commerce/ Any Other	4x1	4
	GE 4 Economics /Any Other	4x1	4
	Total		24
IV	CC 12 Commerce	4x1	4
	CC 13 Commerce	4x1	4
	CC 14 Commerce	4x1	4
	SEC 2 Business Law/Any other	4x1	4
	GE 5 Business Statistics/Commerce/ Any Other	4x1	4
	GE 6 Economics /Any Other	4x1	4
	Total		24
V	CC 15 Commerce	4x1	4
	CC 16 Economics	4x1	4
	DSE 1 Commerce	4x1	4
	DSE 2 Commerce	4x1	4
	DSE 3 Commerce	4x1	4
	DSE 4 Commerce	4x1	4
	Total		24
VI	CC 17 Commerce	4x1	4
	CC 18 Economics	4x1	4
	DSE 5 Commerce	4x1	4
	DSE 6 Commerce	4x1	4
	DSE 7 Commerce	4x1	4
	DSE 8 Commerce <sup>§</sup>	4x1	4
	Total		24
<b>TOTAL</b>			<b>148</b>

1. Business Law in Semester III & IV and Accountancy papers in Semester V and VI will have 3 credits of Theory and 1 credit of Practical.

2. Computer Application paper in Semester I and II will have 3 credits of Theory and 1 credit of Practical.

<sup>§</sup>DSP – In lieu of one of the DSEs, a compulsory Discipline Specific Project (DSP) has to be taken up.

## 5.6 (Notified on 29<sup>th</sup> May, 2017) Programme Structure for Bachelor of Science (Honours)

Semester	Core Course (CC)	Ability Enhancement Compulsory Course (AECC)	Skill Enhancement Course (SEC)	Elective: Discipline Specific (DSE)	Elective: Generic (GE)
I	DSC 1A DSC 2A DSC 3A	English/MIL Communication/ Environmental Studies*			GE 1
II	DSC 1B DSC 2B DSC 3B	English/ MIL Communication/ Environmental Studies*			GE 2
III	DSC 1C DSC 2C DSC 3C		SEC 1		
IV	DSC 1D DSC 2D DSC 3D		SEC 2		
V	DSC 5 DSC 6 DSC 7			DSE 1 DSE 2	
VI	DSC 8 DSC 9 DSC 10			DSE 3 DSE 4 <sup>§</sup>	

\*A student shall offer Language in one semester and Environmental Studies in the other semester. However Colleges may offer Language and Environmental Studies in both the semesters for different batches of students.

The core courses shall be common for B.Sc. (Hons.) and B.Sc. programmes.

DSC – Discipline Specific Core (1- subject 1; 2- subject 2; 3 -subject 3)

DSE - Discipline Specific Elective (1- subject 1; 2 - subject 2; 3- subject 3)

Alphabets A, B, C, & D refer to courses of subjects 1, 2 & 3 in various semesters

GE – Generic Elective; SEC – Skill Enhancement Course

<sup>§</sup>DSP – In lieu of one of the DSEs, a compulsory Discipline Specific Project (DSP) shall be taken up.

**Credits for B.Sc. (Honours)**

<b>Semester</b>	<b>Subjects</b>	<b>Credits</b>	<b>Total</b>
I	DSC 1A	6 X 1	6
	DSC 2A	6 X 1	6
	DSC 3A	6 X 1	6
	AECC*	4 X 1	4
	GE 1	4 X 1	4
	<b>Total</b>		<b>26</b>
II	DSC 1B	6 X 1	6
	DSC 2B	6 X 1	6
	DSC 3B	6 X 1	6
	AECC*	4 X 1	4
	GE 2	4 X 1	4
	<b>Total</b>		<b>26</b>
III	DSC 1C	6 X 1	6
	DSC 2C	6 X 1	6
	DSC 3C	6 X 1	6
	SEC 1	4 X 1	4
	<b>Total</b>		<b>22</b>
IV	DSC 1D	6 X 1	6
	DSC 2D	6 X 1	6
	DSC 3D	6 X 1	6
	SEC 2	4 X 1	4
	<b>Total</b>		<b>22</b>
V	DSC 5	6 X 1	6
	DSC 6	6 X 1	6
	DSC 7	6 X 1	6
	DSE 1	4 X 1	4
	DSE 2	4 X 1	4
	<b>Total</b>		<b>26</b>
VI	DSC 8	6 X 1	6
	DSC 9	6 X 1	6
	DSC 10	6 X 1	6
	DSE 3	4 X 1	4
	DSE 4	4 X 1	4
	<b>Total</b>		<b>26</b>
<b>TOTAL</b>			<b>148</b>

DSC – Discipline Specific Core (1- subject 1; 2- subject 2; 3 -subject 3)

DSE - Discipline Specific Elective (1- subject 1; 2 - subject 2; 3- subject 3)

Alphabets A, B, C, & D refer to courses of subjects 1, 2 & 3 in various semesters

GE – Generic Elective; SEC – Skill Enhancement Course

§DSP – In lieu of one of the DSEs, a compulsory Discipline Specific Project (DSP) shall be taken up.

\*A student shall offer Language in one semester and Environmental Studies in the other semester. However colleges may offer Language and Environmental Studies in both the semesters for different batches of students.

**OC-66.5 Scheme of Examination (B. A./ B. Com./ B. Sc.)**

- 1. (a)** The evaluation for the Courses, shall comprise Intra-Semester Assessment (ISA) and the Semester End Examination (SEE).
- (b)** The ISA tests shall carry 20% of maximum marks allotted for the Course, and SEE shall carry 80% marks. There shall not be an ISA for the Practical component of the Course.
- (c)** A Course of 4 Credits for total of 100 marks, having only Theory, shall have ISA for 20 marks and SEE for 80 marks.
- (d)** A Course of 4 Credits for total of 100 marks having Theory and Practical components shall have ISA's only for Theory component for total of 15 marks, and SEE Theory component for 60 marks and Practical component for 25 marks. A Course of 6 Credits for total of 150 marks having Theory and Practical components shall have ISA's only for Theory component for total of 20 marks, and SEE Theory component for 80 marks and Practical component for 50 marks.
- (e)** Courses of any other number of Credits shall have proportionate marking system.
- 2.(a)** The ISA for the theory component of a Course shall be conducted twice in a given Semester, once through a written test, and the other by using alternate modes of evaluation including assignment/ presentation/ orals/ such other. There shall not be any averaging of ISA marks.
- (b)** Generally, the ISA for a given Course shall be conducted by the teacher/s teaching that Course.
- (c)** The schedule for the ISAs shall be notified to all at the beginning of the Semester.
- (d)** The marks of ISA shall be communicated to the students within two weeks.
- (e)** ISA I shall preferably be completed by the end of July for odd Semesters and end of January for even Semesters. Students who fail to appear for the test due to a genuine reason shall be given another opportunity by the end of August/ February respectively, on a date pre-determined by the College. ISA II will be completed as decided by the teacher but before the end of the semester.
- (f)** Every College shall appoint a three member Committee to monitor the ISA in the College. There would be no remission in workload or remuneration for carrying out this work.
- (g)** A student who does not appear for two ISAs of a Course shall not be eligible to answer SEE of that Course.
- 3.(a)** The SEE shall be conducted at the conclusion of a given Semester, and shall cover the entire syllabus prescribed for the respective Course.
- (b)** A candidate shall be considered to have successfully fulfilled the requirements of a Semester to be eligible to appear for the SEE provided he/she has appeared for two ISAs of the Course, and fulfills the minimum attendance requirements as per the relevant rules of the University. A candidate failing to fulfill these conditions shall have to repeat the Semester.
- (c)** A tentative schedule of SEE examination of Semesters I – IV, evaluation, declaration of results shall be prepared by the respective College(s), preferably at the beginning of each academic year and shall be notified to their students with a copy to the University. Setting of the question papers, evaluation of answer-scripts and declaration of results shall be done by respective Colleges.

- (d)** Assessment of answer-scripts of SEE of Semesters I - IV shall be organized by the Colleges. The assessment of the SEE answer scripts at the Semesters I - IV shall be done by the teachers of respective Colleges. If two or more Colleges desire to have the same question paper in any of the subjects, a common paper may be set by the teachers from the concerned colleges. For this purpose, a Committee of senior teachers may be constituted by the Principals of concerned Colleges.
  - (e)** The pattern of question paper(s) to be set for the SEE in a given Subject and the scheme of marking shall be decided by the BoS in that subject. For this purpose, the BoS shall frame specimen question paper(s) in the concerned Subject for each Semester for the information of the students. Similarly, for practical examinations, the number of laboratory exercises, marks distribution for each exercise and other relevant details shall be decided by the BoS in that subject.
  - (f)** The Schedule of the Examination and the setting of question paper(s) for SEE for Semester- V and Semester-VI shall be done centrally by the University.
  - (i)** A Board of Paper-Setters and Examiners for the SEE of Semester V and VI shall be appointed by the University.
  - (ii)** The Paper-Setters shall finalise the question paper(s); there shall be no objective type of questions at SEE; however short answer questions may be set.
  - (iii)** The paper setters shall also prepare a key for answers to all question/sub-questions and the scheme of marking of the paper set at the examination. In case of descriptive type of answers, only important points to be expected may be highlighted in the key.
  - (iv)** The Chairperson shall personally hand over the sealed set of question papers and answer keys to the Controller of Examinations in the prescribed manner.
  - (v)** Photocopies of this key and the marking scheme for each of the paper of the concerned Semester V and VI shall be given to the examiners assessing the papers.
  - (g)** The duration of SEE theory paper carrying 40 marks shall be of 1 hour duration, and those above 40 marks shall be of 2 hours duration.
- 4.(a)(i)** Examination(s) in Laboratory exercises shall be conducted for Courses having practical component. Marks shall be allotted for journal/lab record book, field work, experiment assigned to the candidate and oral, and shall be broadly as follows: Experiment 60%, Journal 20%, Orals 20%. The final break-up of marks shall be as recommended by the Board of Studies in the respective subject, approved by the Academic Council and notified by the University to all the Colleges.
- (ii)** For assessing the candidate's performance in the assigned experiment, the examiner shall take into account the planning, the procedure and the technique followed by the candidate along with the readings/observations, the results and the presentation.
  - (iii)** Candidates shall be required to submit the journal/record book while entering the laboratory to appear for the practical examination. Examiner(s) shall take into account the regularity of the candidate in attending the Laboratory Course, completeness of the exercises, presentation and style of writing the journal. For subjects having field work component, the candidate shall be required to submit the report of such field excursion(s) along with the journal(s) for assessment. The examiner(s) shall consider the report along with journal(s) while allotting the marks.
  - (iv)** In oral examination, the examiner(s) shall assess the knowledge of the candidate in the Course as well as the experiment(s) performed by the candidate.

- (b)** Record of the breakup of marks thus obtained by the candidate for Semesters I to IV, shall be maintained by the respective College in a sealed envelope for a minimum period of 4 years.
  - (c)** A candidate may be permitted, strictly on medical or other genuine grounds, to appear for practical examination out of turn, irrespective of the timetable and the batch allotted to him/her, in the examination programme for Semester-V and Semester-VI issued by the University. This out of turn appearance may be in the same college in a different batch or in a different College. Such permission may be granted by the University if so recommended by the Principal of the College. The candidate shall be required to remit the requisite fee for his/her being examined out of turn.
- 5.(a)(i)** The project shall be compulsory for all students in lieu of a DSE. Discipline Specific Project (DSP) shall be assigned during the V semester and assessed and credits assigned in the VI semester. The project shall be group project with a maximum of 5 students per group. A teacher shall not be ordinarily assigned more than 2 projects. The project workload will be 2 hours per week for a group of 5 students and for a group of 3 or less students the workload will be 1 hour per week.
- (ii)** Project work and the Report shall be based on field work/library work /laboratory work/ on-the-job training or similar work assigned by the teacher.
  - (b)** The assessment of the Project Course shall be done equally by Internal Examiner (Project Supervisor for 50 marks) and External Examiner (for 50 marks) as per the guidelines defined in the Project Manual.
- 6.(a)(i)** Revaluation of answer books of the candidates at Semesters V and VI shall be permitted as per the existing provisions of OA-5.15 for revaluation/ verification.
- (ii)** However, revaluation at Semesters I to IV examinations shall not be permitted. Personal verification of marks shall be granted to the candidate in the presence of Principal/ Vice-Principal and the concerned Examiner, provided he/she has applied for the same along with payment of prescribed fees, within one week of the declaration of result.
  - (b)** The following shall be the procedure for the verification of marks:
    - (i)** On a notified day and time, which should be not later than 10 days after the receipt of application from the candidate, the candidate shall be shown the answer book in the chamber of the Principal/ Vice-Principal in the presence of the Examiner concerned.
    - (ii)** If the candidate is not satisfied with the result on personal verification of answer book, he may apply to the College Grievance Committee within a week.
    - (iii)** The College Grievance Committee shall take appropriate action as per the relevant Ordinance and inform the candidate of the decision taken accordingly.
- 7.** A supplementary examination shall be conducted, preferably after 15 days from the declaration of results of Semester II and IV examinations. Students who have a backlog of any or all the papers (theory / practical) of Semesters I, II, III and IV are eligible to appear for this examination.
- 8.(a)(i)** Improvement of performance/ total score shall be permitted to a candidate who has passed the B.A./B.Com/B.Sc./ degree examination, in which case he/she shall be required to appear again only in the SEE component of the papers of Semester V and /or Semester VI examinations, excluding the Project Course. For this purpose, the marks scored at the first appearance in the Project Course, as also in ISA component of the other papers, shall be carried forward for tabulation of the result under "improvement of performance".



- (ii) A candidate shall not be permitted to reappear for improvement of performance at Semesters- I, II, III and IV.
- (iii) This facility to reappear under improvement shall be available during the immediately subsequent regular Semester-V and Semester-VI examinations, but within double the duration period.
- (iv) The performance of a candidate, who appears under this provision and fails to improve, shall be ignored.
- (b)(i) The candidate availing of this provision shall be considered to have passed Semesters-V and/or VI "under improvement" and this fact shall be recorded on his/her statements of marks and other relevant documents.
- (ii) The candidate shall be required to surrender the original statement of marks and other relevant documents at the time of receiving the fresh statement of marks in the event of improvement of performance/ total score.
- (iii) A candidate can appear only once under this clause.

**9 Award of Grades**

A Grade Certificate shall be issued to all the registered students after every Semester based on the grades earned. The Grade Certificate will display the Course details (code, title, number of credits, grade secured). Marks awarded in each Course shall be represented in the form of Grades in the grade sheet issued at the end of each semester. Letter Grade shall be the index of the performance of students in a said Course, denoted by letters O, A+,A, B+, B, C, P and F, and calculated based on Grade Point and marks obtained for each Course, as shown in the table below.

<b>Letter Grade</b>	<b>Grade Point</b>	<b>Marks %</b>
O (Outstanding)	10	85 – 100
A+(Excellent)	9	75 – <85
A (Very Good)	8	65 – <75
B+(Good)	7	55 – <65
B (Above Average)	6	50 – <55
C (Average)	5	45 – <50
P (Pass)	4	40 – <45
F (Fail)	0	0 – <40
Ab (Absent)	0	---

- 10** A student shall be required to score a minimum of 'P' grade in ISA, SEE and practical components taken together to pass in a Course in Semesters I to VI.

## **OC-66.6 Grade Point Average (GPA)**

The grade sheet in every semester shall reflect Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA). The Final result shall be declared as Final Grade Point Average (FGPA), earned at the end of the Programme, which shall be a measure of overall cumulative performance of a student over Semesters I– VI.

The SGPA/CGPA/FGPA shall be converted to a Letter Grade, as shown in the table below:

<b>CGPA</b>	<b>Grades</b>
10.0	O(Outstanding)
9.0 – <10	A+ (Excellent)
8.0 – <9.0	A (Very Good)
7.0 – <8.0	B+ (Good)
6.0 – <7.0	B (Above Average)
5.0 – <6.0	C (Average)
4.0 – <5.0	P (Pass)
Less than required credits or CGPA <4.0	F (Fail)

## **OC-66.7 College Examination Committee, College Unfair Means Inquiry Committee and College Grievance Committee.**

**OC-66.7.1** The following committee shall be constituted by the Principal of the college for the terms mentioned against each of them and shall work subject to control and supervision of the Principal.

- (a)** College Examination Committee - 3 years
- (b)** College Unfair Means Inquiry Committee (CUMIC) - 3 years
- (c)** College Grievance Committee - 3 years
- (A)** The College Examination Committee shall consist of :
  - (i)** A senior teacher who shall be the Chairperson
  - (ii)** Two or four regular teachers (In addition to the Chairperson).
- (a)** There shall be no remission in work-load but adequate remuneration shall be paid to the members.
- (b)** This Committee shall be generally in charge of all matters pertaining to B.A., B.Com., and B.Sc. Examinations in the College.
- (c)** The Committee shall prepare the examination time-table, arrange to get the question paper sets printed and answer books assessed.
- (d)** The Committee shall arrange to get the results prepared, settled, announced and individual statement of marks prepared and issued to the candidates.
- (B)** The CUMIC shall be constituted with the following members

- (i) Vice-Principal or a senior teacher as Chairman.
- (ii) Two member of the College Examination Committee.
- (2) The Committee shall inquire into the cases of unfair means and malpractices reported in a manner prescribed by OC-66.7.2 and shall recommend to the Principal a course of action as prescribed in OA-5.14.
- (C) The College Grievance Committee shall be constituted as under :-
  - (i) Vice-Principal/Senior member of teaching staff as Chairman, provided that he is not the Chairman of CUMIC.
  - (ii) Two regular teachers, preferably not members of CUMIC and the College Examination Committee.
  - (iii) In case the Grievance concerns any member of the committee, the Principal shall reconstitute the Committee for the concerned grievance, excluding the concerned member.
  - (a) This committee shall investigate into written complaints from the students, referred to Committee by the Principal, in the conduct of examinations and recommend a course of action to the Principal as prescribed in OC-66.7.3 and OA- 5.14.

#### **OC-66.7.2 Inquiry into cases of unfair means**

The following procedure shall be followed for inquiring into the cases of candidates alleged to have used unfair means at the F. Y. and/or S. Y. B.A./B.Com./ B.Sc., examinations.

- 1** The candidates be served with a show cause notice and made aware of the charges/allegations reported against him/her so as to enable him/her to prepare his defence at the time of this appearance before the CUMIC and inform him/her thereby of the proposed action to be taken in his/her case, directing him/her to reply to the show cause notice as to why the action proposed should not be taken against him/her.
- (a) The reply received by the Committee from the candidate when he/she appears before it be considered by the Committee and the final recommendation in the matter be taken and reported to the Principal for approval.
- (b) The punishment finally awarded can be equal to, or less than, what is mentioned in the show cause notice, but not more than what is mentioned therein.
- (c) The CUMIC is a recommendatory body. The Principal has to exercise his/her power under Statute SB-13(iv) of the University and issue final order.
- (d) The broad category of malpractice and the quantum of punishment for each category thereof shall be as given in Ordinance on malpractices i.e. OA-5.14.19. Besides these guidelines, each case may be examined in detail and punishment awarded on the merit of each case.

### **OC-66.7.3 Investigation of Grievance by the College Grievance Committee**

- 1** The Committee shall consider the written complaint by a student on the conduct of examination provided that
  - (i)** the complaint is submitted within 15 days after the declaration of results;
  - (ii)** the complaint is accompanied with a fee of Rs.200/- (refundable if the complaint is found genuine); and
- 2** The matter is referred to the Committee by the Principal. The Committee shall invite a reply to the allegations, if any, made by the student from the concerned party.
- 3** After considering the reply of the concerned party, the Committee shall recommend a course of action in writing to the Principal.
- 4** The Principal may inform the student the findings of the Committee and shall take appropriate action including reassessment of the said answer book. However, if the marks are reduced after revaluation of the said answer book the original marks shall be retained and the student to be communicated that there is no change in his/her result.
- 5** A minimum fine of Rs.200/- which shall not exceed Rs.500/-, shall be imposed on the student complainant, if the said allegation(s) is (are) found to be a deliberate attempt at casting aspersions on the teacher(s) concerned. If the allegations are found to be genuine and the same is recorded giving reasons, the action shall be taken as provided under OA-5.2.6.

### **OC-67 Ordinance relating to the Three Year Choice Based Credit System(CBCS) Programme of Bachelor of Computer Applications (BCA) (effective from academic year 2019-2020 onwards)**

#### **OC-67.1 GENERAL**

Choice Based Credit System (CBCS) provides choice for students to select from the prescribed courses. Under the CBCS, the requirement for awarding a Degree is prescribed in terms of number of Credits to be completed by the students.

#### **OC-67.1.1 OBJECTIVES**

- a) To bring the BCA curriculum on par with the model curriculum recommended by the University Grants Commission
- b) To impart quality education on par with international standards.
- c) To offer new, relevant and need-based courses.
- d) To inculcate in students, responsibility and self-discipline in the learning process.

- e) To enable students to acquire specific skills in keeping with their area of study.
- f) To make the evaluation system continuous and more objective.
- g) To provide a choice to the students in choosing their courses.

**OC-67.1.2 DEGREE TO BE AWARDED**

Bachelor of Computer Applications (BCA).

**OC-67.1.3 DURATION OF COURSE**

The afore-mentioned Degree Course shall have duration of three academic years. Every academic year shall consist of two semesters.

**OC-67.2 ELIGIBILITY FOR ADMISSION**

Eligibility for admission leading to the Degree of Bachelor of Computer Applications (BCA) shall be as follows :-

**OC-67.2.1 Eligibility for Admission to Semester I and Semester II:**

- (A) To be eligible for admission to Semester-I of the Three Years course leading to the Degree of Bachelor of Computer Applications (BCA), the candidate should have passed:
  - (i) the Higher Secondary School Certificate (Std. XII) examination conducted by the Goa Board of Secondary and Higher Secondary Education in any stream, including the vocational stream in the subjects notified by the University from time to time.

**OR**

- (ii) the Std XII or similar examination of another body equivalent to Goa Board of Secondary and Higher Secondary Education, Goa and recognised as such by Goa University.
- (B) A candidate not covered under any of the above categories but desirous of seeking admission to the said course may apply to the College. However, the Registrar along with the Dean of the Faculty and the Chairperson of the Board of Studies shall decide the eligibility.
- (C) A candidate admitted to Semester-I shall be deemed eligible for admission to Semester-II.
- (D) A candidate migrating from another recognized University and desirous of direct admission to Semester-II may be considered for admission provided he/she has cleared/ passed Semester-I examination of that University with those subjects, under CBCS, for which admission is sought.
- (E) A candidate shall be selected based on an entrance test. The entrance test shall assess the general aptitude, logical reasoning and analytical abilities and basic arithmetical skills of the candidate.

**OC-67.2.2 Eligibility for admission to Semester-III and Semester-IV:**

- (A) A candidate who has requisite attendance for Semester-I and Semester-II and has attended minimum required ISAs of all the courses in Semesters I & II shall be eligible for admission to Semester-III.

- (B) A candidate migrating from any other recognized University may be considered for admission to Semester III provided:
  - (i) He/she has passed in all courses of the Semester I and Semester II (First Year BCA) examination from that University.
  - (ii) He/she undertakes to successfully complete the required courses and credits prescribed for First Year BCA by this University, if he/she has not already done so in the previous University. Result of Semester IV examination shall be withheld if the candidate fails to fulfil this undertaking.
- (C) A candidate admitted for Semester-III examination shall be deemed eligible for admission to Semester- IV.
- (D) A candidate from another recognized University may be considered for direct admission to Semester IV provided he/she fulfils the conditions specified at (B) (i) and (ii) above and, in addition has passed/ cleared Semester III/ First Term examination of the Second Year BCA of that University. However, the result of Semester IV shall be withheld if the candidate does not fulfil these conditions.

**OC-67.2.3 Eligibility for admission to Semester-V:**

- (A) A candidate who has been declared Passed in Semester I to Semester IV examinations shall be eligible for admission to Semester V.
- (B) A candidate admitted for Semester-V shall be deemed eligible for admission to Semester- VI.
- (C) A candidate migrating from any other recognized University may be considered for admission to Semester-V of the BCA Course provided:
  - (i) He/she has been declared Passed in Semester I to Semester IV examinations from that University, and
  - (ii) He/she had taken at the Second Year the required courses and credits under the scheme of this University. A candidate fulfilling these conditions shall be eligible for admission to Semester-V only.

**OC-67.2.4 Eligibility for admission to Semester-VI:**

- (A) A candidate already admitted for Semester-V shall be deemed eligible for admission to Semester-VI.
- (B) Direct admission to Semester-VI shall not be permitted.

**OC-67.2.5 Class strength:**

Maximum number of students in a class/ division shall not exceed forty. For practicals the batch size shall be upto a maximum of 20 per batch.

**OC-67.3 PROGRAMME STRUCTURE:**

1. The Programme shall be based on a system of time-integrated Units called Credits, under the CBCS.
2. The Programme shall comprise Courses such as Core, Elective and Ability Enhancement Courses.

3. A Credit shall consist of 15 clock hours of theory of 1 hour duration each or 15 practical classes of 2 hours duration each, per semester or its equivalent; Field work and such other as recommended by the Board of Studies (BoS) shall be considered under practical category for calculating credits and workload.
4. A student shall be eligible for the award of BCA Degree on successful completion of minimum of 132 Credits, to be completed over a minimum of six Semesters.

**OC-67.4: COURSE STRUCTURE:**

1. Each Course can carry different weightage in terms of number of Credits. Each Course should define learning objectives and outcome. A course may be designed so as to comprise any or combination of lectures/ tutorials/ laboratory work/ field work/ outreach activities/ project work/ vocational training/ viva/ seminars/ term papers/ assignments/ presentations/ self-study/ such other.
2. **Core Course (CC):** A course, which should compulsorily be studied by a candidate as a core requirement is termed as a Core Course. Each Core Course is of 4 credits or 2 credits and may consist of theory and practical component or only theory component or only practical component. If the course has a theory and practical component, the theory component will be of 3 credits theory and 1 credit practical for 4 credit course. If the course has only practical component, this component will be of 2 credits. The candidates are required to compulsorily pass all the Core Courses of the Programme.
3. **Elective Course:** An Elective Course can be chosen from a pool of Courses, which may be specific or specialized or advanced or supportive to the discipline/ subject of study or which provides an extended scope or which enables an exposure to some other discipline/ subject/ domain or which nurtures the candidate's proficiency/ skill. An Elective Course may be Discipline Specific Elective Course or Generic Elective Course.
  - 3.1 **Discipline Specific Elective (DSE) Course:** Discipline Specific Elective (DSE) Course shall be offered in the main discipline/subject of study. Each DSE shall be of 4 credits and may consist of theory and practical component or only theory component. If the course has a theory and practical component, the theory component will be of 3 credits theory and 1 credit practical or as prescribed by BoS and approved by the Academic Council. Any number of DSE's as approved by BoS and AC, can be offered depending upon the specialization available in the college.
  - 3.2 **Project:** A compulsory Project work of total 4 credits shall be offered in lieu of a DSE Course in Semester VI and shall be designed to acquire special/ advanced knowledge; it shall be specialised course involving application of knowledge in solving / analysing / exploring a real life situation / difficult problem. Students shall undertake such a project under the guidance of a teacher / faculty member. The topic for the Project Work shall be given in Semester V. Students shall be required to carry out work for the Project during Semesters V & VI. The assessment of the Project will be carried at the end of Semester VI.
  - 3.3 **Generic Elective Course:** A Generic Elective(GE) course shall be of 4 Credits, and may be chosen from an unrelated discipline/subject, with an

intention to seek exposure. A Core Course offered in a discipline/subject may be treated as GE Course for another discipline/ subject and vice versa. If the course has a practical component, the theory component will be of 3 credits theory and 1 credit practical or as prescribed by BoS and approved by the Academic Council.

4. **Ability Enhancement Courses (AEC):** The Ability Enhancement (AE) Courses may be of two kinds:
  - 4.1 **Ability Enhancement Compulsory Courses (AECC):** AECC are based upon the content that leads to knowledge enhancement. Courses on Environmental Studies, Communication Presentation Skills and Technical Writing Skills are mandatory. Communication Presentation Skills and Technical Writing Skills will have 4 credits each and course on Environmental Studies will have two separate courses of 2 credits each.
  - 4.2 **Skill Enhancement Courses (SEC):** SEC courses are value-based and/or skill-based and are aimed at providing hands-on-training, competencies and skills. These courses may be chosen from a pool of courses designed to provide value-based and/or skill-based knowledge. Each course will be of two credits or as prescribed by BoS and approved by the Academic Council.
5. The Course Structure for the Three Year BCA Degree Programme shall be as specified below:
  - 5.1 **Bachelor of Computer Applications(BCA) Course Structure Details**

<b>SEMESTER- I</b>		
Course Code	Subjects	Course Credit
CC-101	Computer Science	4
CC-102	Computer Science	4
CC-103	Mathematics	4
CC-104	Computer Science Laboratory	2
GE -101	To be selected by College from approved list	4
AECC-101	Environmental Studies	2
SEC-101	To be selected by College from approved list	2
	Total	22

<b>SEMESTER – II</b>		
Course Code	Subjects	Credits
CC-201	Computer Science	4
CC-202	Computer Science	4
CC-203	Mathematics	4
CC-204	Computer Science Laboratory	2
GE -201	To be selected by College from approved list	4
AECC-201	Environmental Studies	2
SEC-201	To be selected by College from approved list	2
	Total	22



<b>SEMESTER – III</b>		
Course Code	Subjects	Credits
CC-301	Computer Science	4
CC-302	Computer Science	4
CC-303	Computer Science Laboratory	2
CC-304	Computer Science Laboratory	2
GE-301	To be selected by College from approved list	4
GE-302	To be selected by College from approved list	4
AECC-301	Communication and Presentation Skills	4
	Total	24

<b>SEMESTER –IV</b>		
Course Code	Subjects	Credits
CC-401	Computer Science	4
CC-402	Computer Science	4
CC-403	Computer Science Laboratory	2
CC-404	Computer Science Laboratory	2
GE-401	To be selected by College from approved list	4
GE-402	To be selected by College from approved list	4
AECC-401	Technical Writing Skills	4
	Total	24

<b>SEMESTER –V</b>		
Course Code	Subjects	Credits
CC-501	Computer Science	4
CC-502	Computer Science	4
CC-503	Computer Science Lab	2
DSE-501	Computer Science To be selected by College from approved list	4
DSE-502	Computer Science To be selected by College from approved list	4
DSE-603	Project	*
	Total	18

<b>SEMESTER –VI</b>		
Course Code	Subjects	Credits
CC-601	Computer Science	4
CC-602	Computer Science	4
CC-603	Computer Science Lab	2
DSE-601	Computer Science To be selected by College from approved list	4
DSE-602	Computer Science To be selected by College from approved list	4
DSE-603	Project	4
	Total	22
	TOTAL	132

**Note:** \*Project Work in place of a DSE starts in Semester V, but evaluated at the end of Semester VI hence no credits assigned in Semester V. Same Course Code DSE-603 assigned in Semester V for project Work.

## 5.2 **Instructional Scheme:**

- (i) **Instructor-in-Charge:** Each course may have one or more instructors teaching the course. One of them is to be appointed as Instructor-in-charge.
- (ii) **Course Coordinator:** In case of courses taught by Visiting Faculty, one faculty member from the College shall be associated with the course as course coordinator.
- (iii) **Course plan:** Every Instructor has to submit a course plan at the beginning of the course. The format for the course plan shall be as prescribed by the BOS from time to time.
- (iv) **Feedback:** Individual course feedback is to be taken after the first internal class test as well as overall feedback has to be collected from every student at the end of every Semester to improve the overall quality of the course.
- (v) **Course File:** For each course taught, a file shall be compulsorily maintained by the Instructor-in-charge or the Course-Coordinator comprising of course plan, reading/teaching material used in class, assignments, question papers, student feedback, student attendance record along with final evaluation and grading.
- (vi) Learning Management System (LMS) is to be used for (iv) and (v) above.

## **OC-67.5 Scheme of Examination**

- OC-67.5.1.**
- (a) The Evaluation of the courses shall comprise of the Intra-Semester Assessment (ISA) and the Semester End Examination (SEE). A student shall be required to appear for ISA as well as SEE. There shall be an ISA for the practical component also.
  - (b) The ISA tests shall carry 40% of the maximum marks allotted for the course and SEE shall carry 60% of the maximum marks.
  - (c) The marks for each credit shall be 25. Accordingly, a 2 credit course will have 50 marks and a 4 credit course will have 100 marks.
  - (d) A Course of 4 credits having only theory shall have ISA for 40 marks and SEE for 60 marks.
  - (e) A Course of 2 credits having only practical shall have ISA for 20 marks and SEE for 30 marks.
  - (f) A Course of 4 credits having theory and practical component shall also have ISA for total 40 marks and SEE for 60 marks. The ISA for theory component shall be 15 marks and ISA for practical component shall be 25 marks. There will be no separate SEE for practical component.
  - (g) Courses of any other number of credits shall have proportionate markings.

## **OC-67.5.2. Conduct of ISA**

- (a) The ISA for the theory component of a 4 credit course shall be conducted twice in a given Semester, ISA-1 through a written test of 20 marks and the

ISA-2 by using alternate modes of evaluation including assignments/presentations/orals/such other, totalling 20 marks. Courses of any other number of credits shall have proportionate markings.

- (b) The ISA for the practical component of a course shall also be conducted twice in a given Semester, ISA-1 through a lab test and the ISA-2 by using alternate modes of evaluation including assignments/presentations/ orals/such other. A record of all the assignments carried out as part of the practical component shall be maintained by every student in the form of a journal. It is not compulsory to have a hard copy of the journal. It could be a soft copy of the laboratory work that is maintained over any LMS.
- (c) Generally, the ISAs for a given Course shall be conducted by the teacher/s teaching that Course.
- (d) The Schedule for the ISAs shall be notified to all at the beginning of the Semester
- (e) The Marks of the ISA shall be communicated to the students within two weeks after the conduct of the ISA.
- (f) ISA-1 shall preferably be conducted by the end of July for odd Semesters and by end of January for even Semesters. Students who fail to appear for the ISA-1 due to a genuine reason shall be given another opportunity by end of August/February respectively on a date pre-determined by the College. ISA-2 will be completed as decided by the Instructor/teacher but before the end of the Semester.
- (g) Every College shall appoint a three member Committee to monitor the ISA in the College. There would be no remission in workload or remuneration for carrying out this work.
- (h) A Student who does not appear for the two ISAs of a Course shall not be eligible to answer the SEE of that Course.

**OC-67.5.3. Conduct of SEE for theory component**

- (a) The SEE shall be conducted at the conclusion of a given Semester, and shall cover the entire syllabus prescribed for the respective Course.
- (b) A candidate shall be considered to have successfully fulfilled the requirements of a Semester to be eligible to appear for the SEE provided he/she has appeared for two ISAs of the Course, and fulfils the minimum attendance requirements as per the relevant rules of the University. A candidate failing to fulfil these conditions shall have to repeat the Semester.
- (c) A tentative schedule of SEE examination of Semesters I – IV, evaluation, declaration of results shall be prepared by the respective College(s), preferably at the beginning of each academic year and shall be notified to their students with a copy to the University. Setting of the question papers, evaluation of answer-scripts and declaration of results shall be done by respective Colleges.
- (d) Assessment of answer-scripts of SEE of Semesters I - IV shall be organized by the Colleges. The assessment of the SEE answer scripts at the Semesters I - IV shall be done by the teachers of respective Colleges. If two or more Colleges desire to have the same question paper in any of the subjects, a common paper may be set by the teachers from the concerned colleges. For

this purpose, a Committee of senior teachers may be constituted by the Principals of concerned Colleges.

- (e) The pattern of question paper(s) to be set for the SEE in a given Subject and the scheme of marking shall be decided by the BoS. For this purpose, the BoS shall frame specimen question paper(s) in the concerned Subject for each Semester for the information of the students. Similarly, for practical examinations, the number of laboratory exercises, marks distribution for each exercise and other relevant details shall be decided by the BoS.
- (f) The Schedule of the Examination and the setting of question paper(s) for SEE for Semester- V and Semester-VI shall be done centrally by the University.
  - (i) A Board of Paper-Setters and Examiners for the SEE of Semester V and VI shall be appointed by the University.
  - (ii) The Paper-Setters shall finalise the question paper(s); there shall be no objective type of questions at SEE; however short answer questions may be set.
  - (iii) The paper setters shall also prepare a key for answers to all question/sub-questions and the scheme of marking of the paper set at the examination. In case of descriptive type of answers, only important points to be expected may be highlighted in the key.
  - (iv) The Chairperson shall personally hand over the sealed set of question papers and answer keys to the Controller of Examinations in the prescribed manner.
  - (v) Photocopies of the key and the marking scheme for each of the paper of the concerned Semester V and VI shall be given to the examiners assessing the papers.
- (g) The duration of SEE theory paper carrying 40 marks shall be of 1 hour duration, and those above 40 marks shall be of 2 hours duration.

#### **OC-67.5.4 Conduct of SEE for practical component**

- (a) Examination(s) shall be conducted for Courses having practical component. Marks shall be allotted for Journal, laboratory work assigned to the candidate and oral, and shall be broadly as follows: Laboratory work 15%, Journal 5% and Orals 10%. In Oral examination, the examiner(s) shall assess the knowledge of the candidate in the Course as well as the experiment(s) performed by the candidate.
- (b) The Course instructor/teacher shall be the Internal examiner.
- (c) External Examiners shall be appointed for the Laboratory Course examination at Semester – V and Semester – VI in accordance with the University Ordinance OB – 4 from the panel of examiners approved by the Academic Council. However, assessment and grading shall be done jointly by the external examiner and internal examiner for these two semesters.
- (d) Lab Paper setting and assessment of Laboratory courses at Semester – I to Semester – IV shall be done internally by the instructor/teacher, teaching the paper/course.

- (e) Record of the breakup of marks thus obtained by the candidate for Semesters I to IV, shall be maintained by the respective College in a sealed envelope for a minimum period of 4 years.
- (f) A candidate may be permitted, strictly on medical or other genuine grounds, to appear for practical examination out of turn, irrespective of the timetable and the batch allotted to him/her, in the examination programme for Semester-V and Semester-VI issued by the University. This out of turn appearance may be in the same college in a different batch or in a different College. Such permission may be granted by the University if so recommended by the Principal of the College. The candidate shall be required to remit the requisite fee for his/her being examined out of turn.

#### **OC-67.5.5 Conduct of Project**

- (a) (i) The project shall be compulsory for all students in lieu of a DSE. Discipline Specific Project (DSP) shall be assigned during the V semester and assessed and credits assigned in the VI semester. The project shall be group project with a maximum of 5 students per group. A teacher shall not be ordinarily assigned more than 2 projects. The project workload will be 2 hours per week for a group of 5 students and for a group of 3 or less students the workload will be 1 hour per week.  
(ii) Project work and the Report shall be based on field work/library work /laboratory work/ on-the-job training or similar work assigned by the teacher.
- (b) The assessment of the Project Course shall be done equally by Internal Examiner (Project Supervisor for 50 marks) and External Examiner (for 50 marks) as per the guidelines defined in the Project Manual.

#### **OC-67.5.6 Re-evaluation**

Ordinance OC-66.5.6 applicable for B.A., B.Com., B.Sc. for Re-evaluation shall be made applicable for BCA as amended from time to time.

#### **OC-67.5.7 Supplementary Examination**

Ordinances OC-66.5.7 applicable for B.A., B.Com., B.Sc. for Supplementary Examination shall be made applicable for BCA as amended from time to time.

#### **OC-67.5.8 Improvement of Performance**

Ordinances OC-66.5.8 applicable for B.A., B.Com., B.Sc. for Improvement of Performance shall be made applicable for BCA as amended from time to time.

#### **OC-67.5.9 Award of Grades**

Ordinances OC-66.5.9 applicable for B.A., B.Com., B.Sc. for Award of Class shall be made applicable for BCA as amended from time to time.

#### **OC-67.5.10 Criteria for Passing in a Course**

Ordinances OC-66.5.10 applicable for B.A., B.Com., B.Sc. for passing in a Course shall be made applicable for BCA as amended from time to time.

#### **OC-67.6 Grade Point Average**

Ordinances OC-66.6 applicable for B.A., B.Com., B.Sc. for Grade Point Average shall be made applicable for BCA as amended from time to time.

#### **OC-67.7**

Ordinances OC-66.7 applicable for B.A., B.Com., B.Sc. shall be made applicable for BCA as amended from time to time.

***(Effective from 5<sup>th</sup> December, 2019)***

**OC-67.8 Entitlement Marks**

The Provision of Ordinance OA-26, as amended from time to time, shall be applicable for the BCA programme.

**Ordinance OC-68 relating to the Programmes of Post Basic Diploma in Nursing offered at the affiliated colleges of Goa University (under section 24(1) of Goa University Act, 1984) (effective from 27th June 2018).**

**OC-68.1 GENERAL**

**(i) General Objective**

On completion of the programme, the student will be able to provide comprehensive, skilled nursing care to critically ill neonates needing specialist services, clients experiencing cardiothoracic health problems, and clients experiencing psychiatric and behavioural problems.

**(ii) Nomenclature:**

The nomenclature shall be:

Post Basic Diploma in Cardio-Thoracic Nursing,

Post Basic Diploma in Neonatal Nursing,

Post Basic Diploma in Psychiatric/Mental Health Nursing

**(iii) Duration:**

The duration of the Programme shall be one year, which shall include forty two weeks of theory and practical, four weeks of internship and two weeks of examination.

**OC-68.2 ELIGIBILITY FOR ADMISSION**

(i) To be eligible for admission to the Programme in Post Basic Diploma in Nursing a candidate must:

- a) have passed the General Nursing Midwifery (G.N.M.) or equivalent in lieu of Midwifery from a Nursing Council recognized by the Indian Nursing Council (I.N.C.)/Bachelor of Science in Nursing [B.Sc.(N)]/Post Basic Bachelor of Science in Nursing [P.B.Sc.(N)] Programme from an Institution recognized by the Indian Nursing Council (I.N.C.)
- b) be a Registered Nurse and Registered Midwife (R.N.R.M.) or equivalent in lieu of Midwifery from a Nursing Council recognized by the Indian Nursing Council (I.N.C.)
- c) have a minimum of one year clinical experience after G.N.M./B.Sc.(N) or a minimum of one year clinical experience prior to or after P.B.Sc.(N).

**OC-68.3 ELIGIBILITY FOR AWARD OF THE POST BASIC DIPLOMA IN NURSING**

To be eligible for the award of the Post Basic Diploma in Nursing a candidate shall have to pass all the prescribed courses and successfully complete the assigned project work and prescribed clinical experience.

**OC-68.4 PROGRAMME STRUCTURE**

- (i) The number of Courses and total number of Theory and Practical Hours for each of the specializations shall be as follows:

**(a) Post Basic Diploma in Cardio-Thoracic Nursing**

No.	Course	Theory hours	Practical hours
1	Clinical Nursing-I (including Foundation Course-Cardio-Thoracic Nursing)	155	1280
2	Clinical Nursing-II (Cardio-Thoracic Nursing)	155	
3	Supervision & Management, Clinical Teaching, Elementary Research & Statistics (Cardio-Thoracic Nursing)		
	i) Supervision & Management	30	
	ii) Clinical Teaching	30	
	iii) Elementary Research & Statistics	30	
4	Internship		160
	TOTAL	400	1440

**(b) Post Basic Diploma in Neonatal Nursing**

No	Course	Theory hours	Practical hours
1	Clinical Nursing-I (including Foundation Course in Neonatal Nursing)	155	1280
2	Clinical Nursing-II (Neonatal Nursing)	155	
3	Supervision & Management, Clinical Teaching, Elementary Research & Statistics (Neonatal Nursing)		
	i) Supervision & Management	30	
	ii) Clinical Teaching	30	
	iii) Elementary Research & Statistics	30	
4	Internship		160
	TOTAL	400	1440

**(c) Post Basic Diploma in Psychiatric/Mental Health Nursing**

No	Course	Theory hours	Practical hours
1	Clinical Nursing-I (including Foundation Course in Psychiatric/Mental Health Nursing)	155	1280
2	Clinical Nursing-II (Psychiatric/Mental Health Nursing)	155	
3	Supervision & Management, Clinical Teaching, Elementary Research & Statistics (Psychiatric/Mental Health Nursing)		
	i) Supervision & Management	30	

	ii) Clinical Teaching	30	
	iii) Elementary Research & Statistics	30	
4	Internship		160
	TOTAL	400	1440

(ii) The total marks assigned for each course and details of evaluation for each of the specializations shall be as follows:

**(a) Post Basic Diploma in Cardio-Thoracic Nursing**

No	Course	Internal	External	Total	Duration
	<b>Theory</b>				
1	Clinical Nursing-I (including Foundation Course in Cardio-Thoracic Nursing)	50	150	200	3 hours
2	Clinical Nursing-II (Cardio-Thoracic Nursing)	50	150	200	3 hours
3	Supervision & Management, Clinical Teaching, Elementary Research & Statistics (Cardio-Thoracic Nursing)	50	150	200	3 hours
	<b>Practical</b>				
1	Clinical Nursing (including Teaching & Supervision in Cardio-Thoracic Nursing)	100	100	200	
	TOTAL	250	550	800	

**(b) Post Basic Diploma in Neonatal Nursing**

No	Course	Internal	External	Total	Duration
	<b>Theory</b>				
1	Clinical Nursing-I (including Foundation Course in Neonatal Nursing)	50	150	200	3 hours
2	Clinical Nursing-II (Neonatal Nursing)	50	150	200	3 hours
3	Supervision & Management, Clinical Teaching, Elementary Research & Statistics (Neonatal Nursing)	50	150	200	3 hours
	<b>Practical</b>				
1	Clinical Nursing (including Teaching & Supervision in Neonatal Nursing)	100	100	200	
	TOTAL	250	550	800	

**(c) Post Basic Diploma in Psychiatric/Mental Health Nursing**

No	Course	Internal	External	Total	Duration
	<b>Theory</b>				
1	Clinical Nursing-I (including Foundation Course in Psychiatric/Mental Health Nursing)	50	150	200	3 hours



2	Clinical Nursing-II (Psychiatric/Mental Health Nursing)	50	150	200	3 hours
3	Supervision & Management, Clinical Teaching, Elementary Research & Statistics (Psychiatric/Mental Health Nursing)	50	150	200	3 hours
<b>Practical</b>					
1	Clinical Nursing (including Teaching & Supervision in Psychiatric/Mental Health Nursing)	100	100	200	

## **OC-68.5 SCHEME OF EXAMINATION**

### **(i) Eligibility to appear for the examinations:**

- (a)** A candidate should have attended 80% of theoretical instruction hours and clinical practice hours in each course, to be eligible to appear for the examination. However a candidate shall be required to have 100% attendance in integrated practice experience and internship in terms of hours and activities before the declaration of the result.
- (b)** A candidate shall be required to secure a minimum of 50% in the internal assessment in theory and practical course separately.
- (c)** In case a candidate fails to secure 50% marks in the internal assessment in any course, s/he shall not be permitted to appear for the external examination in that course. However s/he can appear for the external examination in other courses.

### **(ii) Internal Assessment:**

- (a)** Internal assessment for each course shall be based on tests and practicals. There shall be a minimum of three tests in theory in each course in the academic year. The internal score shall be computed as the average score of all the tests.
- (b)** The practical internal assessment will be based on the average score obtained in each clinical area, along with two practical examinations.

**(iii) External Examination:** The external examination shall be conducted by the Goa University for all theory and practical courses.

### **(iv) Supplementary Examination:**

- (a)** A candidate who has not appeared for, or who has failed the annual examination shall be permitted to appear for a supplementary examination, which shall be held in the month of November.

- (b) A candidate shall not be allowed to appear for the supplementary examination for the purpose of improvement of her/his scores.
- (c) Only one supplementary examination shall be held each year.

**(v) Number of Attempts:**

- (a) A candidate shall be permitted a maximum of four attempts to pass the examination for each course which includes the supplementary examination.
- (b) A candidate shall not be permitted to continue the Programme if s/he does not complete the Programme in two years.

**(vi) Appointment of Examiners**

- (a) To be appointed as an Examiner for the Programme in Post Basic Diploma in Cardio-Thoracic Nursing, the Examiner should have a Master of Science Degree in Medical-Surgical Nursing with specialization in Cardio-Thoracic Nursing or any other specialization in Medical-Surgical Nursing.
- (b) To be appointed as an Examiner for the Programme in Post Basic Diploma in Neonatal Nursing, the Examiner should have a Master of Science Degree in Child Health/Pediatric Nursing.
- (c) To be appointed as an Examiner for the Programme in Post Basic Diploma in Psychiatric/Mental Health Nursing, the Examiner should have a Master of Science Degree in Psychiatric/Mental Health Nursing.

**OC-68.6 CONDUCT OF EXAMINATION**

- (i) There shall be one Internal and one External Examiner for the conduct of the final examination. The Internal Examiner shall be the Convener. The Examiners shall be responsible for setting the paper and evaluation.
- (ii) Theory papers shall be evaluated by two Examiners as a double evaluation procedure. The average score shall be considered as the final mark. There shall be no provision for re-evaluation.
- (iii) The practical examination shall be conducted jointly by one Internal and one External Examiner and the combined score shall be submitted to the University.

**OC-68.7 STANDARD OF PASSING**

The minimum marks for passing shall be 50% in theory and 50% in practical courses, separately for both the internal assessment and the external examination.

**OC-68.8 AWARD OF CLASS**

- (i) Class shall be awarded on the basis of the aggregate marks obtained at the final examination taken together only if the candidate passes the examination in a single attempt.

- (ii)
- (iii) A candidate who passes any of the examinations in compartments will not be eligible for any Class. The remarks against her/his result shall be "Passes".
- (iv) The award of Class shall be as indicated below:
  - Distinction: 75% and above
  - First Class: 60% and above but below 75%
  - Second Class: Less than 60%

**Ordinance OC-69 relating to the Degree of Master of Philosophy (M.Phil.) Programme under the Faculty of Medicine offered at affiliated colleges (under section 24(1) of Goa University Act, 1984) (effective from 27th June 2018).**

**OC-69.1 General**

The degree of Master of Philosophy (M.Phil.) shall be awarded in the Faculty of Medicine. The medium of instruction and examination for the M.Phil. Degree Programme shall be English.

**OC-69.2 Eligibility**

To be eligible for admission to the M.Phil. Degree Programme, a candidate must have passed the Master's Degree examination in the subject concerned or an examination equivalent thereto of this University or any other recognized University. The candidate must have a minimum of 55% marks with 5% relaxation as per reservation norms.

**OC-69.3 Fee Structure**

The fee structure for the M. Phil. Programme shall be as stipulated by the University/ State Government from time to time.

**OC-69.4 Admission:**

The admission to the M.Phil. Programme shall be done at the beginning of Programme through an Entrance Test. The Entrance Test shall be based on the syllabus of the qualifying Master's Degree Programme. A candidate should obtain a minimum of 50% in the Entrance Test for being eligible for admission to the M.Phil Programme.

**OC-69.5 Duration:**

- (i) The duration of the M. Phil Programme shall be of **two** years- Part I (1<sup>st</sup> year) and Part II (2<sup>nd</sup> year).
- (ii) The total duration to complete the M.Phil Programme shall not exceed double the duration of the Programme.
- (iii) In case of extraordinary circumstances, duly documented and approved by the Vice- Chancellor, a candidate may be allowed an additional one time attempt beyond the double the duration of the Programme.

**OC-69.6 Programme Structure:**

- (i) The detailed programme structure, syllabus and the scheme of examination for the M.Phil. Programme shall be as defined by the respective Board of Studies and approved by the University.

- (ii) M.Phil Programmes which are regulated by Statutory Regulatory Bodies such as RCI (Rehabilitation Council of India) shall maintain the laid down minimum standards.

**OC-69.7 Dissertation:**

The submission of Dissertation shall be mandatory for the candidates of the M.Phil Programme.

- (i) Every student shall undertake dissertation work under the guidance of a recognized Post Graduate Teacher in a concerned specialty. If the research work is of interdisciplinary nature requiring supervision from another specialist, co-guide(s) from the related discipline may be appointed if necessary.
- (ii) Every candidate shall be required to submit to the University the subject and the plan of the dissertation duly approved by her/his Guide within six months from the date of her/his registration.
- (iii) Three months prior to Part - II examination the candidates are required to submit the final dissertation duly certified by the Guide, forwarded through the Head of the Institution, as hardbound copies in triplicate and a soft copy.
- (iv) The dissertation shall be examined by at least two Examiners, one Internal and one External.

**OC- 69.8 Eligibility for appearance at the University examinations:**

To be eligible to appear for the examination a candidate must:

- (i) have a minimum attendance of 80% in each academic year.
- (ii) obtain a minimum of 35% marks at the Internal Assessment in theory and practicals separately.

**OC- 69.9 Scheme of Examination:**

There shall be a University Examination at the end of each year. A candidate shall appear for all the Groups of Part – I and Part – II Examination when appearing for the first time.

**OC- 69.10 Appointment of Examiners:**

- (i) The appointment of Examiners shall be as per the provisions of OB-4.
- (ii) To be appointed as an Examiner in any of the subjects of the M.Phil Programmes, s/he should have a minimum of two years of M.Phil full time teaching experience in the concerned subject.

**OC- 69.11 Board of Examiners:**

The Board of Examiners shall consist of four members out of which at least two shall be External members. The Chairperson of the Board of Examiners shall be the Head of the Department or the senior most among the Internal Examiners of the concerned specialty.

**OC-69.12 Scheme of Evaluation:**

- (i) The evaluation of answer books of written examinations in any of the course(s) shall be done by double evaluation method.
- (ii) The final marks awarded in the paper shall be the average of the two assessments. In case the difference between the assessments is more than

- 20% in the paper a third evaluation shall be conducted. The average of the best two out of the three scores shall be considered as the final marks to be allotted to the candidate.
- (iii) There shall be no reevaluation of answer books of written examinations in any of the course(s). However, candidates may apply for verification of the assessed answer books, as per the existing provisions OA-5.15(B).

**OC-69.13 Standard of Passing**

- (i) A candidate shall be declared to have passed the Part I and/or Part II Examination if s/he obtains not less than 50% of the marks in:
- (a) Each of the Theory Paper
  - (b) Each of the Practical including Viva-Voce examinations
  - (c) Each of the Submissions
  - (d) The Dissertation
- (ii) No candidate shall be permitted to appear either for Part – I or II examination more than three times.

**OC-69.14 Award of Class**

- (i) A candidate who passes both Part I and Part II in first attempt and obtains 75% and above marks in the aggregate of both the parts shall be declared to have passed with Distinction.
- (ii) A candidate who passes both Part I and Part II in first attempt and obtains 60% and above but below 75% of marks in the aggregate of both the parts shall be declared to have passed in First Class.
- (iii) A candidate who passes both Part I and Part II in first attempt and obtains 50% and above but below 60% shall be declared to have passed in Second Class.
- (iv) No Class shall be awarded if a candidate fails to pursue the Programme on a continuous basis, or fails or absent herself/himself from appearing in any of the University Theory and Practical Examinations of Part – I and II. The remarks against her/his result shall be "Passes".

**OC-70 Ordinance related to four year Credit Based Degree Programme in Pharmacy [Degree of Bachelor of Pharmacy (B.Pharm) Programme] in Affiliated Colleges of Goa University** (Applicable for candidates seeking admission for B.Pharm Programme from the academic year 2018-19 onwards):

**OC-70.1 Objectives:**

The growth of the pharmaceutical industry sector is tremendous over the last few decades due to the technological and intellectual advancements. The need for pharmacy graduates is ever growing in the health sector as pharmacists are part of the vision of various organizations to provide health for all.

Pharmacy graduates are required to acquire knowledge and be equipped with necessary skills to work competently in pharmaceutical industry and to practice the profession of pharmacy. The graduate should have knowledge of drug design and synthesis, drug analysis, mechanism of action of drugs, drug interactions, herbal

medicines, designing of pharmaceutical dosage forms, quality control, quality assurance and storage. The graduates should also comprehend the concept of community pharmacy and be able to participate in health care programmes and act as a vital link between the Physician and Patients for achieving better health of community. The graduates should be able to brief the physicians in detail and market the dosage forms for therapeutic, prophylactic and diagnostic purposes.

**OC-70.2 Duration of the program**

The course of study for B.Pharm shall extend over a period of eight semesters (four academic years) and for lateral entry students six semesters (three academic years). The curricula and syllabi for the program shall be prescribed from time to time by the Pharmacy Council of India, New Delhi.

**OC-70.3 Working days in each semester**

Each semester shall consist of not less than 100 working days. The odd semesters shall be conducted from the month of July to December and the even semesters shall be conducted from December/January to May/June in every calendar year.

**OC-70.4 Degree to be awarded: Bachelor of Pharmacy (B. Pharm.)**

**OC-70.5 Medium of instruction and examinations**

Medium of instruction and examination shall be in English.

**OC-70.6 Eligibility for Admission:**

1. Entry levels into the course shall be at the beginning of the Semester I or at the beginning of the Semester III (for lateral entry candidates who have passed the Diploma in Pharmacy Examination).

2. Eligibility criteria for admission to first year of degree course in pharmacy:

- a. Candidate should have passed the HSSC (Std XII) Examination of Goa State Board of Secondary and Higher Secondary Education or its equivalent examination with English, Physics & Chemistry as compulsory subjects along with Mathematics &/or Biology and secured minimum **45%** marks (Minimum **40%** marks in case of candidates belonging to reserved category) in the subjects of Physics, Chemistry and Biology/ Mathematics added together (For the purpose of preparing the merit list, the highest marks obtained in any one of the subjects of Mathematics/ Biology, shall be considered) and obtained a positive score at Common Entrance Test Conducted by Directorate of Technical Education, Government of Goa, for the year of admission.
- b. As per the Regulations of Pharmacy Council of India, candidates passing Senior Secondary School Examination conducted by the Association of Indian Universities (AIU) are only eligible for admission.

c. A student should complete the age of 17 years on or before 31st December of the year  
of admission to the Programme.

3. Students from other Universities/Boards shall be admitted only on production of a provisional statement of eligibility issued by the Goa University.

4. Eligibility Criteria for Direct Admission at the lateral entry level of Semester III (Second Year B. Pharm.) of the Programme:

The candidate who has passed the Diploma in Pharmacy conducted by the Board of Technical Education, Goa State, or equivalent examination from the Institute approved by the Pharmacy Council of India and with at least 45% marks (40% in case of candidates belonging to reserved category) in appropriate Programme.

Eligibility criteria for candidate for entry into semester I (First Year B.Pharm) after two years Diploma in Pharmacy:

Passed Diploma examination with at least 45% marks (40% in case of candidates belonging to reserved category), subject to vacancies in the First Year, in case the vacancies at lateral entry are exhausted.

**OC-70.7 Attendance and eligibility to appear for End Semester Examinations of B. Pharm.**

**Attendance and progress**

A candidate shall be required to put in at least 75% attendance in individual courses considering theory and practical separately. The candidate shall complete the prescribed courses satisfactorily to be eligible to appear for the respective examinations.

A candidate, having less than 75% attendance in individual courses considering theory and practical separately shall not be eligible to appear for that End Semester Examination. Such candidates shall have to seek re-admission to the Programme during the subsequent Academic Semester by paying requisite fees. However such candidate shall not be treated as fresh applicant for the admission if the readmission is in the same institution. Re-admission to the Programme shall be as per the admission rules. These candidates shall not be required to answer the GCET/Any entrance examination.

Attendance shall be counted from the date of admission in the college or start of academic session, whichever is later.

**OC-70.8 Academic work**

A regular record of attendance both in Theory and Practical shall be maintained by the teaching staff of the respective courses.

**OC-70.9 Program Credit Structure**

As per the philosophy of Credit Based Semester System, certain quantum of academic work viz. theory classes, tutorial hours, practical classes, etc. are measured in terms of credits. On satisfactory completion of the courses, a candidate earns credits. The amount of credit associated with a course is dependent upon the number of hours of instruction per week in that course. Similarly, the credit associated with any of the other academic, co/extra-curricular activities is dependent upon the quantum of work expected to be put in for each of these activities per week.

**Credit assignment**

**Theory and Laboratory courses**

Courses are broadly classified as Theory and Practical. Theory courses consist of lecture (L) and /or tutorial (T) hours, and Practical (P) courses consist of hours spent in the laboratory. Credits (C) for a course is dependent on the number of hours of instruction per week in that course, and is obtained by using a multiplier of one (1) for lecture and tutorial hours, and a multiplier of half (1/2) for practical (laboratory) hours. Thus, for example, a theory course having three lectures and one tutorial per week throughout the semester carries a credit of 4. Similarly, a practical having four laboratory hours per week throughout semester carries a credit of 2.

**Minimum credit requirements**

The minimum credit points required for the award of the B. Pharm. degree is 210 Credits. These credits are divided into Theory, Tutorials, Practical, Practice School and Project over the duration of eight semesters. The credits are distributed semester-wise as shown in Table IX.

Table IX. Semester wise credits distribution:

Semester	Credit Points
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I	27/29 <sup>\$</sup> /30 <sup>#</sup>
II	29
III	24
IV	28
V	26
VI	30
VII	24
VIII	22
Extracurricular/ Co curricular activities	1 <sup>*</sup>
<b>Total credit points for the program</b>	<b>211/213<sup>\$</sup>/214<sup>#</sup></b>

\* The credit points assigned for extracurricular and or co-curricular activities shall be given by the Principals of the colleges and the same shall be submitted to the University. The criteria to acquire this credit point shall be defined by the colleges from time to time.

\$ Applicable ONLY for the students who have studied Physics / Chemistry / Botany / Zoology at HSC and appearing for Remedial Mathematics course.

# Applicable ONLY for the students who have studied Mathematics / Physics / Chemistry at HSC and appearing for Remedial Biology course.

Courses generally progress in sequences, building competencies and their positioning indicates certain academic maturity on the part of the learners. Learners are expected to follow the semester-wise schedule of courses given in the syllabus. The lateral entry students shall get 43 credit points transferred from their D. Pharm program. Such students shall take up additional courses prescribed in table No.III (L).

#### OC-70.10 Course of study

The course of study for B. Pharm shall include Semester Wise Theory & Practical as given in Table – I to VIII.

The number of hours to be devoted to each theory, tutorial and practical course in any semester shall not be less than that shown in Table – I to VIII.

**Table-I: Course of study for Semester I**

Course code	Name of the course	No. of hours	Tutorial	Credit points
BP101T	Human Anatomy and Physiology I– Theory	3	1	4
BP102T	Pharmaceutical Analysis – Theory	3	1	4
BP103T	Pharmaceutics – Theory	3	1	4
BP104T	Pharmaceutical Inorganic Chemistry – Theory	3	1	4
BP105	Communication skills –	2	-	2



T	Theory *			
BP106 RBT	Remedial Biology/	2	-	2
BP106 RMT	Remedial Mathematics – Theory*			
BP107 P	Human Anatomy and Physiology – I Practical	4	-	2
BP108 P	Pharmaceutical Analysis – Practical	4	-	2
BP109 P	Pharmaceutics – Practical	4	-	2
BP110 P	Pharmaceutical Inorganic Chemistry – Practical	4	-	2
BP111 P	Communication skills – Practical*	2	-	1
BP112 RBP	Remedial Biology – Practical*	2	-	1
<b>Total</b>		<b>32/34<sup>§</sup>/36<sup>#</sup></b>	<b>4</b>	<b>27/29<sup>§</sup>/30<sup>#</sup></b>

# Applicable ONLY for the students who have studied Mathematics / Physics / Chemistry at HSC and appearing for Remedial Biology (RB) course.

§ Applicable ONLY for the students who have studied Physics / Chemistry / Botany / Zoology at HSC and appearing for Remedial Mathematics (RM) course.

<b>Table-II: Course of study for Semester II</b>				
<b>Course Code</b>	<b>Name of the course</b>	<b>No. of hours</b>	<b>Tutorial</b>	<b>Credit points</b>
BP201T	Human Anatomy and Physiology II – Theory	3	1	4
BP202T	Pharmaceutical Organic Chemistry I – Theory	3	1	4
BP203T	Biochemistry – Theory	3	1	4
BP204T	Pathophysiology – Theory	3	1	4
BP205T	Computer Applications in Pharmacy – Theory *	3	-	3
BP206T	Environmental Sciences – Theory *	3	-	3
BP207P	Human Anatomy and Physiology II – Practical	4	-	2
BP208P	Pharmaceutical Organic Chemistry I – Practical	4	-	2

BP209P	Biochemistry – Practical	4	-	2
BP210P	Computer Applications in Pharmacy – Practical*	2	-	1
<b>Total</b>		<b>32</b>	<b>4</b>	<b>29</b>

\* Non University Examination (NUE)

<b>Table-III: Course of study for Semester III</b>				
<b>Course code</b>	<b>Name of the Course</b>	<b>No. of hours</b>	<b>Tutorial</b>	<b>Credit points</b>
BP301T	Pharmaceutical Organic Chemistry II – Theory	3	1	4
BP302T	Physical Pharmaceutics I – Theory	3	1	4
BP303T	Pharmaceutical Microbiology – Theory	3	1	4
BP304T	Pharmaceutical Engineering – Theory	3	1	4
BP305P	Pharmaceutical Organic Chemistry II – Practical	4	-	2
BP306P	Physical Pharmaceutics I – Practical	4	-	2
BP307P	Pharmaceutical Microbiology – Practical	4	-	2
BP 308P	Pharmaceutical Engineering –Practical	4	-	2
<b>Total</b>		<b>28</b>	<b>4</b>	<b>24</b>

<b>Table-IV: Course of study for Semester IV</b>				
<b>Course code</b>	<b>Name of the Course</b>	<b>No. of hours</b>	<b>Tutorial</b>	<b>Credit points</b>
BP401T	Pharmaceutical Organic Chemistry III– Theory	3	1	4
BP402T	Medicinal Chemistry I – Theory	3	1	4
BP403T	Physical Pharmaceutics II – Theory	3	1	4
BP404T	Pharmacology I – Theory	3	1	4
BP405T	Pharmacognosy and Phytochemistry I– Theory	3	1	4
BP406P	Medicinal Chemistry I – Practical	4	-	2
BP407P	Physical Pharmaceutics II – Practical	4		2
BP408P	Pharmacology I – Practical	4	-	2
BP409P	Pharmacognosy and Phytochemistry I – Practical	4	-	2
<b>Total</b>		<b>31</b>	<b>5</b>	<b>28</b>

<b>Table-V: Course of study for Semester V</b>				
<b>Course Code</b>	<b>Name of the Course</b>	<b>No. of Hours</b>	<b>Tutorial</b>	<b>Credit Points</b>
BP501T	Medicinal Chemistry II – Theory	3	1	4
BP502T	Industrial PharmacyI– Theory	3	1	4
BP503T	Pharmacology II – Theory	3	1	4
BP504T	Pharmacognosy and Phytochemistry II– Theory	3	1	4
BP505T	Pharmaceutical Jurisprudence – Theory	3	1	4
BP506P	Industrial PharmacyI – Practical	4	-	2
BP507P	Pharmacology II – Practical	4	-	2
BP508P	Pharmacognosy and Phytochemistry II – Practical	4	-	2
<b>Total</b>		<b>27</b>	<b>5</b>	<b>26</b>

<b>Table-VI: Course of study for Semester VI</b>				
<b>Course Code</b>	<b>Name of the Course</b>	<b>No. of Hours</b>	<b>Tutorial</b>	<b>Credit Points</b>
BP601 T	Medicinal Chemistry III – Theory	3	1	4
BP602 T	Pharmacology III – Theory	3	1	4
BP603 T	Herbal Drug Technology – Theory	3	1	4
BP604 T	Biopharmaceutics and Pharmacokinetics – Theory	3	1	4
BP605 T	Pharmaceutical Biotechnology – Theory	3	1	4
BP606 T	Pharmaceutical Quality Assurance –Theory	3	1	4
BP607 P	Medicinal chemistry III – Practical	4	-	2
BP608 P	Pharmacology III – Practical	4	-	2
BP609 P	Herbal Drug Technology – Practical	4	-	2
<b>Total</b>		<b>30</b>	<b>6</b>	<b>30</b>

<b>Table-VII: Course of study for Semester VII</b>				
<b>Course</b>	<b>Name of the Course</b>	<b>No. of</b>	<b>Tutori</b>	<b>Credit</b>

Code		Hours	al	Points
BP701T	Instrumental Methods of Analysis – Theory	3	1	4
BP702T	Industrial Pharmacy II – Theory	3	1	4
BP703T	Pharmacy Practice – Theory	3	1	4
BP704T	Novel Drug Delivery Systems – Theory	3	1	4
BP705P	Instrumental Methods of Analysis – Practical	4	-	2
BP706PS	Practice School*	12	-	6
<b>Total</b>		<b>28</b>	<b>5</b>	<b>24</b>

\* Non University Examination (NUE)

<b>Table-VIII: Course of study for Semester VIII</b>				
Course Code	Name of the Course	No. of hours	Tutorial	Credit Points
BP801T	Biostatistics and Research Methodology-Theory	3	1	4
BP802T	Social and Preventive Pharmacy	3	1	4
BP803ET	Pharmaceutical Marketing Management			
BP804ET	Pharmaceutical Regulatory Science			
BP805ET	Pharmacovigilance			
BP806ET	Quality Control and Standardization of Herbals	$3 + 3 = 6$	$1 + 1 = 2$	$4 + 4 = 8$
BP807ET	Computer Aided Drug Design			
BP808ET	Cell and Molecular Biology			
BP809ET	Cosmetic Science			
BP810ET	Pharmacological Screening methods			
BP811ET	Advanced Instrumentation Techniques			
BP812ET	Dietary Supplements and Nutraceuticals			
BP813ET	Pharmaceutical Product Development			
BP814P W	Project Work	12	-	6
<b>Total</b>		<b>24</b>	<b>4</b>	<b>22</b>

**Table No III (L). Additional Courses for Lateral Entry students admitted to directly to Semester – III.**

Course code	Name of the Course	No. of Hours	Tutorial	Credit points	Shall be study as a part of
BP102T	Pharmaceutical Analysis I – Theory	3	1	4	Semester III
BP108P	Pharmaceutical Analysis I –	4	-	2	

	Practical				
BP105T	Communication skills – Theory *	2	-	2	
BP111P	Communication skills – Practical *	2	-	1	
BP106RB T/ BP106RM T	Remedial Biology/ Remedial Mathematics – Theory*	2	-	2	
BP112RBP	Remedial Biology – Practical*	2	-	1	
BP204T	Pathophysiology – Theory	3	1	4	Semester IV
	Total	<b>14/16<sup>\$</sup> /18<sup>#</sup></b>	<b>2</b>	<b>13/15<sup>\$</sup> 16<sup>#</sup></b>	

\*Non University Examination (NUE)

<sup>\$</sup>Applicable ONLY for the students who have studied Physics / Chemistry / Botany / Zoology at HSC and appearing for Remedial Mathematics course.

<sup>#</sup>Applicable ONLY for the students who have studied Mathematics / Physics / Chemistry at

HSC and appearing for Remedial Biology course.

### **Project Work**

All the students shall undertake a project under the supervision of a teacher and submit a report. The area of the project shall directly relate any one of the elective subjects opted by the student in Semester VIII. The project shall be carried out in groups not exceeding 5 students in a group. The Project Report shall be submitted in triplicate (typed & bound copy not less than 25 pages).

The internal and external examiner appointed by the University shall evaluate the Project at the time of the Practical examinations of other semester(s). Students shall be evaluated in groups for four hours (i.e. about half an hour for a group of five students). The projects shall be evaluated as per the criteria given below.

#### ***Evaluation of Project Report:***

Objective(s) of the work done	15 Marks
Methodology adopted	20 Marks
Results and Discussions	20 Marks
Conclusions and Outcomes	20 Marks
<b>Total</b>	<b>75 Marks</b>

#### ***Evaluation of Presentation:***

Presentation of work	25 Marks
Communication skills	20 Marks
Question and answer skills	30 Marks
<b>Total</b>	<b>75 Marks</b>

*Explanation:* The 75 marks assigned to the Project Report shall be the same for all the students in a group. However, the 75 marks assigned for presentation shall be awarded based on the performance of individual students in the given criteria.

### **Practice School**

In Semester - VII, every student shall undergo Practice School for a period of 150 hours evenly distributed throughout the semester. The student shall opt any one of the domains for Practice School declared by the program Committee from time to time. At the end of the Practice School, every student shall submit a printed report (in triplicate) on the practice school he/she attended (not more than 25 pages). Along with the examination of Semester VII, the Report submitted by the student, knowledge and skills acquired by the student through Practice School shall be evaluated by the subject experts at college level and a Grade Point shall be awarded.

**OC-70.11 Industrial Training (Compulsory)**

Every student shall be required to work for a minimum of 150 hours spread over four weeks in a Pharmaceutical Industry in their Production unit, Quality Control department, Quality Assurance department, Analytical laboratory, Chemical manufacturing unit, Pharmaceutical R&D, or Hospital (Clinical Pharmacy), Clinical Research Organization, Community Pharmacy, etc. After second year, the student shall submit satisfactory report of such work and certificate duly signed by the authority of training organization to the Head of the Institute.

**OC-70.12 Examinations/Assessments:**

The Scheme for Internal Assessment and End Semester Examinations is given in Table – X.

Tables -X: Schemes for internal assessments and end semester examinations semester wise

Semester I								
Course code	Name of the course	Internal Assessment				End Semester Exams		Total Marks
		Continuous Mode	Sessional Exams		Total	Marks	Duration	
			Marks	Duration				
BP101T	Human Anatomy and Physiology I – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP102T	Pharmaceutical Analysis – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP103T	Pharmaceutics – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP104T	Pharmaceutical Inorganic Chemistry – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP105T	Communication skills – Theory *	5	10	1 Hr	15	35	1.5 Hrs	50
BP106RBT BP106RMT	Remedial Biology/ Mathematics – Theory*	5	10	1 Hr	15	35	1.5 Hrs	50
BP107P	Human Anatomy and Physiology – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP108P	Pharmaceutical Analysis – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP109P	Pharmaceutics – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP110P	Pharmaceutical Inorganic Chemistry – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP111P	Communication skills – Practical*	5	5	2 Hrs	10	15	2 Hrs	25
BP112RBP	Remedial Biology – Practical*	5	5	2 Hrs	10	15	2 Hrs	25
<b>Total</b>		<b>70/75/80<sup>a</sup></b>	<b>115/125/130<sup>b</sup></b>	<b>23/24/20<sup>c</sup> Hrs</b>	<b>185/200/210<sup>d</sup></b>	<b>490/525/ 540<sup>e</sup></b>	<b>31.5/33/ 35<sup>f</sup> Hrs</b>	<b>675/725/ 750<sup>g</sup></b>

<sup>a</sup> Applicable ONLY for the students studied Mathematics / Physics / Chemistry at HSC and appearing for Remedial Biology (RB) course. <sup>b</sup> Applicable ONLY for the students studied Physics / Chemistry / Botany / Zoology at HSC and appearing for Remedial Mathematics (RM) course.

\* Non University Examination (NUE)

## Semester II

Course code	Name of the course	Internal Assessment				End Semester Exams		Total Marks
		Continuous Mode	Sessional Exams		Total	Marks	Duration	
			Marks	Duration				
BP201T	Human Anatomy and Physiology II – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP202T	Pharmaceutical Organic Chemistry I – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP203T	Biochemistry – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP204T	Pathophysiology – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP205T	Computer Applications in Pharmacy – Theory*	10	15	1 Hr	25	50	2 Hrs	75
BP206T	Environmental sciences – Theory*	10	15	1 Hr	25	50	2 Hrs	75
BP207P	Human Anatomy and Physiology II –Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP208P	Pharmaceutical Organic Chemistry I– Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP209P	Biochemistry – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP210P	Computer Applications in Pharmacy – Practical*	5	5	2 Hrs	10	15	2 Hrs	25
<b>Total</b>		<b>80</b>	<b>125</b>	<b>20 Hrs</b>	<b>205</b>	<b>520</b>	<b>30 Hrs</b>	<b>725</b>

\* The subject experts at college level shall conduct examinations

## Semester III

Course code	Name of the course	Internal Assessment				End Semester Exams		Total Marks
		Continuous Mode	Sessional Exams		Total	Marks	Duration	
			Marks	Duration				
BP301T	Pharmaceutical Organic Chemistry II – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP302T	PhysicalPharmaceuticsI –Theory	10	15	1 Hr	25	75	3 Hrs	100
BP303T	Pharmaceutical Microbiology – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP304T	Pharmaceutical Engineering – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP305P	Pharmaceutical Organic Chemistry II – Practical	5	10	4 Hr	15	35	4 Hrs	50
BP306P	Physical Pharmaceutics I – Practical	5	10	4 Hr	15	35	4 Hrs	50
BP307P	Pharmaceutical Microbiology – Practical	5	10	4 Hr	15	35	4 Hrs	50
BP308P	Pharmaceutical Engineering – Practical	5	10	4 Hr	15	35	4 Hrs	50
<b>Total</b>		<b>60</b>	<b>100</b>	<b>20</b>	<b>160</b>	<b>440</b>	<b>28Hrs</b>	<b>600</b>

## Semester IV

Course code	Name of the course	Internal Assessment				End Semester Exams		Total Marks
		Continuous Mode	Sessional Exams		Total	Marks	Duration	
			Marks	Duration				
BP401T	Pharmaceutical Organic Chemistry III- Theory	10	15	1 Hr	25	75	3 Hrs	100
BP402T	Medicinal Chemistry I – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP403T	Physical Pharmaceutics II – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP404T	Pharmacology I – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP405T	Pharmacognosy and Phytochemistry I – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP406P	Medicinal Chemistry I – Practical	5	10	4 Hr	15	35	4 Hrs	50
BP407P	Physical Pharmaceutics II – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP408P	Pharmacology I – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP409P	Pharmacognosy I – Practical	5	10	4 Hrs	15	35	4 Hrs	50
<b>Total</b>		<b>70</b>	<b>115</b>	<b>21 Hrs</b>	<b>185</b>	<b>515</b>	<b>31 Hrs</b>	<b>700</b>

## Semester V

Course code	Name of the course	Internal Assessment				End Semester Exams		Total Marks
		Continuous Mode	Sessional Exams		Total	Marks	Duration	
			Marks	Duration				
BP501T	Medicinal Chemistry II – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP502T	Industrial PharmacyI- Theory	10	15	1 Hr	25	75	3 Hrs	100
BP503T	Pharmacology II – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP504T	Pharmacognosy and Phytochemistry II – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP505T	Pharmaceutical Jurisprudence – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP506P	Industrial PharmacyI- Practical	5	10	4 Hr	15	35	4 Hrs	50
BP507P	Pharmacology II – Practical	5	10	4 Hr	15	35	4 Hrs	50
BP508P	Pharmacognosy II – Practical	5	10	4 Hr	15	35	4 Hrs	50
<b>Total</b>		<b>65</b>	<b>105</b>	<b>17 Hr</b>	<b>170</b>	<b>480</b>	<b>27 Hrs</b>	<b>650</b>

## Semester VI

Course code	Name of the course	Internal Assessment				End Semester Exams		Total Marks
		Continuous Mode	Sessional Exams		Total	Marks	Duration	
			Marks	Duration				
BP601T	Medicinal Chemistry III – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP602T	Pharmacology III – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP603T	Herbal Drug Technology – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP604T	Biopharmaceutics and Pharmacokinetics – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP605T	Pharmaceutical Biotechnology– Theory	10	15	1 Hr	25	75	3 Hrs	100
BP606T	Pharmaceutical Quality Assurance– Theory	10	15	1 Hr	25	75	3 Hrs	100
		10	15	1 Hr	25	75	3 Hrs	100
BP607P	Medicinal chemistry III – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP608P	Pharmacology III – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP609P	Herbal Drug Technology – Practical	5	10	4 Hrs	15	35	4 Hrs	50
<b>Total</b>		<b>75</b>	<b>120</b>	<b>18 Hrs</b>	<b>195</b>	<b>555</b>	<b>30 Hrs</b>	<b>750</b>

## Semester VII

Course code	Name of the course	Internal Assessment				End Semester Exams		Total Marks
		Continuous Mode	Sessional Exams		Total	Marks	Duration	
			Marks	Duration				
BP701T	Instrumental Methods of Analysis – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP702T	Industrial Pharmacy II – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP703T	Pharmacy Practice – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP704T	Novel Drug Delivery System – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP705 P	Instrumental Methods of Analysis – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP706 PS	Practice School*	25	-	-	25	125	5 Hrs	150
<b>Total</b>		<b>70</b>	<b>70</b>	<b>8Hrs</b>	<b>140</b>	<b>460</b>	<b>21 Hrs</b>	<b>600</b>

\* The subject experts at college level shall conduct examinations



**Semester VIII**

Course code	Name of the course	Internal Assessment				End Semester Exams		Total Marks							
		Continuous Mode	Sessional Exams		Total	Marks	Duration								
			Marks	Duration											
BP801T	Biostatistics and Research Methodology – Theory	10	15	1 Hr	25	75	3 Hrs	100							
BP802T	Social and Preventive Pharmacy – Theory	10	15	1 Hr	25	75	3 Hrs	100							
BP803ET	Pharmaceutical Marketing – Theory	10 + 10 = 20	15 + 15 = 30	1 + 1 = 2 Hrs	25 + 25 = 50	75 + 75 = 150	3 + 3 = 6 Hrs	100 + 100 = 200							
BP804ET	Pharmaceutical Regulatory Science – Theory														
BP805ET	Pharmacovigilance – Theory														
BP806ET	Quality Control and Standardization of Herbs – Theory														
BP807ET	Computer Aided Drug Design – Theory														
BP808ET	Cell and Molecular Biology – Theory														
BP809ET	Cosmetic Science – Theory														
BP810ET	Pharmacological Screening methods														
BP811ET	Advanced Instrumentation Techniques														
BP812ET	Dietary Supplements and Nutraceuticals														
BP813ET	Pharmaceutical Product Development														
BP814PW	Project Work								-	-	-	-	150	4 Hrs	150
<b>Total</b>									<b>40</b>	<b>60</b>	<b>4 Hrs</b>	<b>100</b>	<b>450</b>	<b>16 Hrs</b>	<b>550</b>

**Additional Courses for lateral entry students:**
**Scheme for internal assessments and end semester examinations for additional Courses for lateral entry students**

Course Code	Name of Course	Internal Assessment				End Semester Exams		Total Marks
		Continuous Mode	Sessional Exams Marks	Sessional Exams Duration	Total	Marks	Duration	
BP102T	Pharmaceutical Analysis I – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP108P	Pharmaceutical Analysis I – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP105T	Communication skills – Theory *	5	10	1 Hr	15	35	1.5 Hrs	50
BP111P	Communication skills – Practical *	5	5	2 Hrs	10	15	2 Hrs	25
BP106RBT/ BP106RMT	Remedial Biology/ Remedial Mathematics – Theory*	5	10	1 Hr	15	35	1.5 Hrs	50
BP112RBP	Remedial Biology – Practical*	5	5	2 Hrs	10	15	2 Hrs	25
BP204T	Pathophysiology – Theory	10	15	1 Hr	25	75	3 Hrs	100
<b>Total</b>		<b>35/40<sup>§</sup>/45*</b>	<b>55/60<sup>§</sup>/70*</b>	<b>9/10<sup>§</sup>/12*</b>	<b>90/105<sup>§</sup>/115*</b>	<b>235/270<sup>§</sup>/285*</b>	<b>13.5/15<sup>§</sup>/17*</b>	<b>325/375<sup>§</sup>/400*</b>

\*Non University Examination (NUE)

<sup>§</sup>Applicable ONLY for the students studied Physics / Chemistry / Botany / Zoology at HSC and appearing for Remedial Mathematics course.

\*Applicable ONLY for the students studied Mathematics / Physics / Chemistry at HSC and appearing for Remedial Biology course.

**OC-70.13 End Semester Examinations**

The End Semester Examinations for each theory and practical course through Semesters I to VIII shall be conducted by the University except for the subjects with asterisk symbol (\*)

in Tables I, II and III(L) for which examinations shall be conducted by the subject experts at college level and the marks/grades shall be submitted to the University.

**Question paper pattern for End Semester Theory Examinations**

**For 75 marks paper**

I. Objective Type Questions (10 x 2) = 10 x 02 = 20

(Answer all the questions)

II. Long Answers (Answer 2 out of 3) = 02 x 10 = 20

III. Short Answers (Answer 7 out of 9) = 07 x 05 = 35

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Total = 75 marks

-----  
**For 50 marks paper**

I. Long Answers (Answer 2 out of 3) = 02 x 10 = 20

II. Short Answers (Answer 6 out of 8) = 06 x 05 = 30

-----  
Total = 50 marks

-----  
**For 35 marks paper**

I. Long Answers (Answer 1 out of 2) = 01 x 10 = 10

II. Short Answers (Answer 5 out of 7) = 05 x 05 = 25

-----  
Total = 35 marks

-----  
**Question paper pattern for End Semester Practical Examinations**

I. Synopsis = 05

II. Experiments = 25

III. Viva voce = 5

-----  
Total = 35 marks

**OC-70.14 Internal Assessment: Continuous mode**

The marks allocated for Continuous mode of Internal Assessment shall be awarded as per the scheme given in Table XI.

**Table-XI: Scheme for awarding Internal Assessment: Continuous mode**

<b>Theory</b>		
<b>Criteria</b>	<b>Maximum Marks</b>	
Attendance (Refer Table – XII)	4	2
Academic activities (Average of any 3 activities e.g. quiz, assignment, open book test, field work, group discussion and seminar)	3	1.5
Student – Teacher interaction	3	1.5
<b>Total</b>	<b>10</b>	<b>5</b>

<b>Practical</b>	
Attendance (Refer Table – XII)	2
Based on Practical Records, Regular viva voce, etc.	3
<b>Total</b>	<b>5</b>

**Table- XII: Guidelines for the allotment of marks for Attendance**

Percentage of Attendance	Theory	Practical
95 – 100	4	2
90 – 94	3	1.5
85 – 89	2	1
75 – 84	1	0.5
Less than 75	0	0
In case of condonation	0	0

Note: Students shall be eligible for condonation of attendance by the Principal/ Head of Institution but such student shall not be eligible for the award of any marks for attendance.

**OC-70.15 Sessional Examinations**

Two Sessional Examinations shall be conducted for each theory / practical course as per the schedule fixed by the college(s). The scheme of question paper for theory and practical Sessional Examinations is given below. The average marks of two Sessional Examinations shall be computed for internal assessment as per the requirements given in Table–X. Sessional Examination shall be conducted for 30 marks for theory and shall be computed for 15 marks. Similarly Sessional Examination for practical shall be conducted for 40 marks and shall be computed for 10 marks.

**Question paper pattern for theory Sessional Examinations**

**For courses having University Examinations**

I. Objective Type Questions (5 x 2) = 05 x 02 = 10

(Answer all the questions)

I. Long Answers (Answer 1 out of 2) = 01 x 10 = 10

II. Short Answers (Answer 2 out of 3) = 02 x 05 = 10

-----  
Total = 30 marks

**For courses having Non University Examinations**

I. Long Answers (Answer 1 out of 2) = 01 x 10 = 10

II. Short Answers (Answer 4 out of 6) = 04 x 05 = 20

-----  
Total = 30 marks

### Question paper pattern for Practical Sessional Examinations

- I. Synopsis = 10
- II. Experiments = 25
- III. Viva voce = 05

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Total =40 marks

#### **OC-70.16 Academic Progression:**

No student shall be admitted to any examination unless he/she fulfills the norms given in OC-70.7. Academic progression rules are applicable as follows:

A student shall be eligible to carry forward all the backlog courses of Semester I, II and III till Semester IV Examinations. However, he/she shall not be eligible to attend the courses of Semester V until all the courses of Semesters I and II are successfully completed.

A student shall be eligible to carry forward all the backlog courses of Semester III, IV and V till Semester VI Examinations. However, he/she shall not be eligible to attend the courses of Semester VII until all the courses of Semesters I, II, III and IV are successfully completed.

A student shall be eligible to carry forward all the backlog courses of Semester V, VI and Semester VII till Semester VIII Examinations. However, he/she shall not be eligible to get the course completion certificate until all the courses of I, II, III, IV, V and VI semesters are successfully completed.

A student shall be eligible to get his/her CGPA upon successful completion of the courses of I to VIII semesters within the stipulated time period as per the norms specified under **OC-70.21**.

A lateral entry student shall be eligible to carry forward all the backlog courses of Semesters III, IV and V till the Semester VI Examinations. However, he/she shall not be eligible to attend the courses of Semester VII until all the courses of Semesters III and IV are successfully completed.

A lateral entry student shall be eligible to carry forward all the backlog courses of Semesters V, VI and VII till Semester VIII Examinations. However, he/she shall not be eligible to get the course completion certificate until all the courses of Semesters III, IV, V and VI are successfully completed.

A lateral entry student shall be eligible to get his/her CGPA upon successful completion of the courses of Semesters III to VIII within the stipulated time period as per the norms specified under **OC-70.21**.

Any student who has taken more than 4 chances for successful completion of Semester I / III courses and more than 3 chances for successful completion of Semester II / IV courses shall be permitted to attend Semester V / VII classes ONLY during the subsequent academic year as the case may be. In simpler terms there shall NOT be any ODD BATCH for any Semester.

Note: Grade AB shall be considered as fail and treated as one head for deciding academic progression. Such rules are also applicable for those students who fail to register for Examination(s) of any course in any Semester.

#### **OC-70.17 Carry forward of Internal Assessment marks**

In case a student fails to secure a minimum of 50% marks in any Theory or Practical course, then he/she shall reappear for the End Semester Examination of that course.

However his/her marks of the Internal Assessment shall be carried over and he/she shall be entitled for grade obtained by him/her on passing.

**OC-70.18 Improvement of Internal Assessment**

A student shall have the opportunity to improve his/her performance only once in the Sessional Examinations component of the Internal Assessment. The re-conduct of the Sessional Examinations shall be completed before the commencement of next End Semester Examinations.

**OC-70.19 Re-examination of End Semester Examinations**

Re-examination of End Semester Examinations shall be conducted as per the schedule given in Table XII for Tentative Schedule of End Semester Examinations.

**Table XII: Tentative schedule of End Semester Examinations:**

Semester	For Regular Candidates	For Failed Candidates
I, III, V and VII	November / December	May / June
II, IV, VI and VIII	May / June	November / December

The exact dates of examinations shall be notified from time to time by Goa University.

**OC-70.20 Passing and Award of Grades**

A student shall be declared PASS and eligible for getting grade in a course of B.Pharm programme if he/she secures at least 50% marks in that particular course including internal assessment. For example, to be declared as PASS and get a grade, the student has to secure a minimum of 50 marks for the total of 100 including continuous mode of assessment and End Semester Theory Examination and has to secure a minimum of 25 marks for the total 50 including Internal Assessment and End Semester practical examination.

**OC-70.21 Duration for completion of the program of study**

The duration for the completion of the program shall be fixed as double the actual duration of the program and the students have to pass within the said period, otherwise they have to get fresh Registration.

**OC-70.22 Re-admission after break of study**

Candidate who seeks re-admission to the program after break of study has to get the approval from the University by paying a condonation fee. No condonation is allowed for the candidate who has more than 2 years of break up period and he/she has to rejoin the program by paying the required fees.

**OC-70.23 Grading of Performances: Letter Grades and Grade Points Allocations:**

Based on the performances, each student shall be awarded a final Letter Grade at the end of the Semester for each course. The Letter Grades and their corresponding Grade Points are given in Table XIV entitled Letter Grades and Grade Points equivalent to Percentage of marks and performances.

**Table XIV: Letter Grades and Grade Points equivalent to Percentage of marks and performances**

Percentage of Marks Obtained	Letter Grade	Grade Point	Performance
90 - 100	O	10	Outstanding

80 < 90	A	9	Excellent
70 < 80	B	8	Good
60 < 70	C	7	Fair
50 < 60	D	6	Average
Less than 50	F	0	Fail
Absent	AB	0	Fail

A student who remains absent for any End Semester Examination shall be assigned a Letter Grade of AB and a corresponding Grade Point of Zero. He/she should reappear for the said evaluation/examination in due course of time.

**OC-70.24 The Semester Grade Point Average (SGPA)**

The performance of a student in a semester is indicated by a number called 'Semester Grade Point Average' (SGPA). The SGPA is the weighted average of the Grade Points obtained in all the courses by the student during the semester. For example, if a student takes five courses

(Theory/Practical) in a semester with credits C<sub>1</sub>, C<sub>2</sub>, C<sub>3</sub>, C<sub>4</sub> and C<sub>5</sub> and the student's Grade Points in these courses are G<sub>1</sub>, G<sub>2</sub>, G<sub>3</sub>, G<sub>4</sub> and G<sub>5</sub>, respectively, and then students' SGPA is equal to:

$$SGPA = \frac{C_1G_1 + C_2G_2 + C_3G_3 + C_4G_4 + C_5G_5}{C_1 + C_2 + C_3 + C_4 + C_5}$$

The SGPA is calculated to two decimal points. It should be noted that, the SGPA for any semester shall take into consideration the F and AB Grade awarded in that semester. For example if a student has a F or AB Grade in course 4, the SGPA shall then be computed as:

$$SGPA = \frac{C_1G_1 + C_2G_2 + C_3G_3 + C_4 \text{ ZERO} + C_5G_5}{C_1 + C_2 + C_3 + C_4 + C_5}$$

**Cumulative Grade Point Average (CGPA)**

The CGPA is calculated with the SGPA of all the Semesters to two decimal points and is indicated in final Grade Sheet showing the Grades of all the Semesters and their courses. The CGPA shall indicate "Fail" in case of F Grade(s), till the course(s) is/are passed. When the course(s) is/are passed by obtaining a pass grade on subsequent examination(s) the CGPA shall only reflect the new grade and not the fail Grades earned earlier. The CGPA is calculated as:

$$CGPA = \frac{C_1S_1 + C_2S_2 + C_3S_3 + C_4S_4 + C_5S_5 + C_6S_6 + C_7S_7 + C_8S_8}{C_1 + C_2 + C_3 + C_4 + C_5 + C_6 + C_7 + C_8}$$

where C<sub>1</sub>, C<sub>2</sub>, C<sub>3</sub>,... is the total number of credits for Semester I,II,III,... and S<sub>1</sub>,S<sub>2</sub>, S<sub>3</sub>,...is the SGPA of Semester I,II,III,....

**For calculation of CGPA of lateral entry students,**

S<sub>1</sub> Shall be considered as equivalent to the grade points calculated based on the average percentage of D. Pharm I & II, and C<sub>1</sub> shall be considered as 43.

$$Grade\ Point\ (S_1) = \frac{\text{Average percentage of D. Pharm I and II}}{10}$$

S<sub>2</sub> shall be calculated based upon the credit points (13/15<sup>s</sup>/16<sup>#</sup>) prescribed in the Table No. III (L).

**OC-70.25 Award of Class**

Class shall be awarded on the basis of CGPA as follows:

First Class with Distinction = CGPA of 7.50 and above

First Class = CGPA of 6.00 < 7.50

Second Class = CGPA of 5.00 < 6.00

**OC-70.26 Award of Ranks**

Ranks and Medals shall be awarded on the basis of final CGPA. However, candidates who fail in one or more courses during the B.Pharm programme shall not be eligible for award of ranks. Moreover, the candidates should have completed the B. Pharm programme in minimum prescribed number of years, (four years) for the award of Ranks.

**OC-70.27 Award of Degree**

Candidates who have successfully completed the B.Pharm Programme shall be eligible for the Award of the Bachelors Degree during the ensuing convocation.

**OC-70.28 Program Coordination Committee**

1. The B. Pharm. programme shall have a Coordination Committee constituted by the Head of the Institution in consultation with all the Heads of the Departments.

2. The composition of the Coordination Committee shall be as follows:

A senior teacher shall be the Chairperson; One Teacher from each Department handling

B.Pharm courses; and four Student Representatives of the Programme (one from each academic year), nominated by the Head of the Institution.

3. Duties of the Coordination Committee:

i. Periodically reviewing the progress of the classes.

ii. Discussing the problems concerning curriculum, syllabus and the conduct of classes.

iii. Discussing with the course teachers on the nature and scope of assessment for the course and the same shall be announced to the students at the beginning of respective semesters.

iv. Communicating its recommendation to the Head of the Institution on academic matters.

v. The Coordination Committee shall meet at least thrice in a Semester preferably at the end of each Sessional Examination (Internal Assessment) and before the End Semester Examination.

**OC-71 Bachelor of Performing Arts (B.P.A.) Degree Programme.  
(Effective from the Academic year 2019-20)**

**OC-71.1 The University awards B.P.A. in the following Disciplines:**

(i) Hindustani Classical Music in (Specialization)

(ii) Theatre

**OC-71.2 Aims and Objectives of the B.P.A. Programme**

(i) Hindustani Classical Music

The programme aims to impart full time professional training in Hindustani Classical Vocal and Instrumental Music (such as Tabla and Harmonium) leading to the Degree of Bachelor of Performing Arts in Hindustani Classical Music in (Specialization).

**(ii) Theatre**

The programme aims to impart full time professional training in Theatre leading to the Degree of Bachelor of Performing Arts in Theatre.

**OC-71.3 Duration of the Programme:-**

The duration of the Bachelor of Performing Arts programmes shall be of four Academic years consisting of a total of eight Semesters.

**OC-71.4 Admission and Eligibility**

**OC-71.4.1 Hindustani Classical Music**

Candidates passing the Foundation Course in Music of Goa University shall be eligible for admission to Semester I of the Bachelor of Performing Arts in Hindustani Classical Music Degree Programme and shall have preference over other categories of candidates.

Subject to availability of seats:

(a) Candidates who have passed the Higher Secondary School Certificate Examination - HSSCE (Std. XII) or an equivalent Examination of a recognized Board/Body with Music as a Subject, and

(b) Candidates who have passed the Higher Secondary School Certificate Examination - HSSCE (Std. XII) or above and who have also passed the "Sangeet Madhyama" or higher Examination or any other equivalent Diploma of a recognized music institution or having minimum four years of foundation training in Music from a qualified Guru/teacher shall be admitted to Semester I of the Bachelor of Performing Arts Degree Programme.

There shall be an entrance test for candidates mentioned in (a) and (b) above.

**OC- 71. 4.2 Theatre**

Candidates who have passed Higher Secondary School Certificate Examination- HSSCE (Std. XII) or an equivalent Examination of a recognized Board/Body and pass the Entrance Examination with a minimum of 40% marks, as well as successfully cleared the interview for selection conducted by the Institution offering the Programme, shall be eligible for admission to the B.P.A. in Theatre Programme.

**OC-71.5 Structure of the Programme**

**OC-71.5.1** The Programme shall consist of a total of four Academic years of eight Semesters. Each semester shall have a minimum of 90 teaching days.

**OC-71.5.2** The Programme shall be based on a system of time-integrated Units called Credits, under the CBCS.



**OC-71.5.3** A Credit shall consist of 15 clock hours of theory of 1 hour duration each or 15 practical classes of 2 hours duration each, per semester or its equivalent;

**OC-71.5.4** One Credit shall carry a maximum of 25 marks.

**OC-71.5.5** A student shall be required to complete a total of 160 Credits during the Programme.

**OC-71.5.6** The Programme shall comprise the following types of Courses:

- (a) CC - Core Course (including Practical)
- (b) AECC - Ability Enhancement Compulsory Course
- (c) SEC - Skill Enhancement Course
- (d) DSE - Elective Discipline Specific Course
- (e) GE - Elective Generic Course

**OC-71.5.7** The distribution of Credits for the B.P.A. Programme shall be as follows:

Semester	Course Code	Credits	Semester	Course Code	Credits
I	AECC 1A	04	II	AECC 1B	04
	AECC 2A	04		AECC 2B	04
	GE 1	02		GE 2	02
	CC 1A	04		CC 1B	04
	CC 2A	06		CC 2B	06
<b>Total</b>		<b>20</b>	<b>Total</b>		<b>20</b>
III	CC 3A	04	IV	CC 3B	04
	CC 4A	04		CC 4B	04
	AECC 3	06		AECC 4	06
	SEC 1	04		SEC 2	04
	GE 3	02		GE 4	02
<b>Total</b>		<b>20</b>	<b>Total</b>		<b>20</b>
V	CC 3C	04	VI	CC 3D	04
	CC 4C	04		CC 4D	04
	AECC 5	06		AECC 6	06
	SEC3	04		SEC 4	04
	GE 5	02		GE 6	02
<b>Total</b>		<b>20</b>	<b>Total</b>		<b>20</b>
VII	CC 3E	04	VIII	CC 3F	04
	CC 4E	04		CC 4F	04
	AECC 7	06		AECC 8	06
	SEC 5	04		SEC 6	04
	DSE 1	02		DSE 2	02

<b>Total</b>	<b>20</b>		<b>Total</b>	<b>20</b>
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**OC-71.6 Scheme of Examination:**

**OC-71-6.1** The Scheme of Examination for B.P.A. Programmes shall be as per Ordinance OC-66.5

**OC-71-6.2** The Semester I to Semester IV Examinations shall be conducted by the College on behalf of the University. The Semester End Examinations of Semester V to Semester VIII shall be conducted by the University.

**OC 71.7 Setting of Question Papers and number of Examiners for the various Examinations.**

The Question Papers for Theory Courses of University Examinations shall be set jointly by the Internal and External Examiners. The Internal Examiner shall be the Convenor of the Examination. The University Practical Examination shall be conducted jointly by the Internal as well as External Examiners. The Examiners shall be appointed from the Master Panel of Examiners recommended by the Board of Studies and approved by the Academic Council of the University.

**OC-71.8 Eligibility for appointment as External Examiner**

a) The Examiner shall possess a Master's Degree or its equivalent Diploma in a relevant subject from a recognized University and have minimum three years teaching experience at the Under Graduate/ Post Graduate Level.

OR

b) A performing artist of professional standing having commendable achievement in the subject concerned with minimum eight years of experience as a performer.

**OC-71.9 Attendance:**

The minimum attendance required for the B.P.A. Programme shall be as per Ordinance OA-17.

**OC-71.10** Entitlement/Grace Marks shall be as per Ordinance OA-26.

**OC-71.11 Award of Class.**

Ordinance OC-66.5.9 as amended from time to time shall be made applicable for B.P.A. Programme.

**OC-71.12 Grade Point Average (GPA)**

GPA for B.P.A. Programmes shall be as per Ordinance OC-66.6

**OC-71.13 College Committees**

The following Committees shall be constituted by the Principal of the College for a tenure of three years each.

4. College Examination Committee

5. College Unfair Means Inquiry Committee
6. College Grievance Committee

## **2. The College Examination Committee**

The College Examination Committee shall consist of:

- v) A senior teacher who shall be the Chairperson
  - vi) Two to four regular teachers (In addition to the Chairperson) there shall be no remission in work-load.
- (c) This Committee shall be in charge of all matters pertaining to all the Semester Examinations in the College.
- (d) The Committee shall prepare the examination time-table, arrange to get the question paper sets printed, answer books assessed, results tabulated and announced, and individual statement of marks prepared and issued to the candidates.

## **4. The College Unfair Means Inquiry Committee (CUMIC)**

The CUMIC shall be constituted with the following members:

- v) Vice-Principal or a senior teacher as Chairperson
  - vi) Two members of the College Examination Committee
- (c) This Committee shall investigate into the cases of unfair means and malpractices reported in a manner prescribed below and shall recommend to the Principal a course of action as prescribed in OA-5.14
- (d) The following procedure shall be followed for investigating the cases of candidates alleged to have used unfair means at Semesters I to VIII:
- xiii) The candidate shall be served with a show cause notice and made aware of the charges/allegations reported against him/her so as to enable him/her to prepare his/her defence at the time of appearance before the CUMIC and informing him/her thereby of the proposed action to be taken in his/her case, with a request to bring a written reply at the hearing as to why the action proposed should not be taken against him/her.
  - xiv) The reply received by the Committee from the candidate when he appears before it shall be considered by the Committee and the final recommendation in the matter be taken and reported to the Principal for his approval.
  - xv) The punishment finally awarded shall be equal to or less than what is mentioned in the show cause notice, but not more than what is mentioned therein.
  - xvi) The CUMIC is a recommendatory body. The Principal has to exercise his/her power under Statute SB-13 (iv) of the University and issue a final order.
  - xvii) The category of malpractice and the quantum of punishment for each category thereof shall be as given in Ordinance OA-5.14.19.

xviii) In addition to these guidelines, each case be examined in detail and punishment awarded on the merit of each case.

## **5. College Grievance Committee (CGC)**

The CGC shall be constituted as under:-

- v) Vice-Principal/Senior member of teaching staff as Chairperson, provided that he is not the Chairperson of CUMIC.
- vi) Two regular teachers, who are not members on CUMIC or the College Examination Committee.

(c) In case the grievance concerns any member of the Committee, the Principal shall reconstitute the Committee, excluding the concerned member.

(d) This Committee shall investigate into written complaints from the students referred to them by the Principal in the conduct of examinations in a manner as prescribed below, and recommend a course of action to the Principal as prescribed in OA-5.14.

vi) The Committee shall consider the written complaint of a student on the conduct of examination provided that:

- d) The complaint is submitted within 15 days after the declaration of results;
- e) The complaint is accompanied by a prescribed fee of Rs. 200/- or as notified from time to time, which shall be refundable if the complaint is found to be genuine; and
- f) The matter is referred to the Committee by the Principal.

vii) The Committee shall seek necessary explanation in connection with allegations made by the student, from the concerned party.

viii) After considering the explanation from the concerned party, the Committee shall recommend a course of action in writing to the Principal.

ix) The Principal shall inform the student about the findings of the Committee and shall take appropriate action including reassessment of the said answer book. However, if the marks are reduced after revaluation of the said answer book the original marks shall be retained and the student informed that there is no change in his/her results.

x) A minimum fine of Rs.200/- extending up to Rs.500/-, shall be imposed on the student complainant, if the said allegation(s) is/are found to be a deliberate attempt at casting aspersions on the teacher(s) concerned. If the allegations are found to be genuine and the same is recorded giving reasons, action shall be taken as provided under OA-5.2.6

**OC-71 Bachelor of Performing Arts (B.P.A.) Degree Programme.  
(Effective from the Academic year 2019-20)**

**OC-71.1 The University awards B.P.A. in the following Disciplines:  
i) Hindustani Classical Music in (Specialization)  
ii) Theatre**

**OC-71.2 Aims and Objectives of the B.P.A. Programme**

**i) Hindustani Classical Music**

The programme aims to impart full time professional training in Hindustani Classical Vocal and Instrumental Music (such as Tabla and Harmonium) leading to the Degree of Bachelor of Performing Arts in Hindustani Classical Music in (Specialization).

**ii) Theatre**

The programme aims to impart full time professional training in Theatre leading to the Degree of Bachelor of Performing Arts in Theatre.

**OC-71.3 Duration of the Programme:-**

The duration of the Bachelor of Performing Arts programmes shall be of four Academic years consisting of a total of eight Semesters.

**OC-71.4 Admission and Eligibility**

**OC-71.4.1 Hindustani Classical Music**

Candidates passing the Foundation Course in Music of Goa University shall be eligible for admission to Semester I of the Bachelor of Performing Arts in Hindustani Classical Music Degree Programme and shall have preference over other categories of candidates.

Subject to availability of seats:

- a) Candidates who have passed the Higher Secondary School Certificate Examination - HSSCE (Std. XII) or an equivalent Examination of a recognized Board/Body with Music as a Subject, and
- (b) Candidates who have passed the Higher Secondary School Certificate Examination - HSSCE (Std. XII) or above and who have also passed the "Sangeet Madhyama" or higher Examination or any other equivalent Diploma of a recognized music institution or having minimum four years of foundation training in Music from a qualified Guru/teacher shall be admitted to Semester I of the Bachelor of Performing Arts Degree Programme.

There shall be an entrance test for candidates mentioned in (a) and (b) above.

**OC- 71. 4.2 Theatre**

Candidates who have passed Higher Secondary School Certificate Examination- HSSCE (Std. XII) or an equivalent Examination of a

recognized Board/Body and pass the Entrance Examination with a minimum of 40%marks, as well as successfully cleared the interview for selection conducted by the Institution offering the Programme, shall be eligible for admission to the B.P.A. in Theatre Programme.

### **OC-71.5 Structure of the Programme**

**OC-71.5.1** The Programme shall consist of a total of four Academic years of eight Semesters. Each semester shall have a minimum of 90 teaching days.

**OC-71.5.2** The Programme shall be based on a system of time-integrated Units called Credits, under the CBCS.

**OC-71.5.3** A Credit shall consist of 15 clock hours of theory of 1 hour duration each or 15 practical classes of 2 hours duration each, per semester or its equivalent;

**OC-71.5.4** One Credit shall carry a maximum of 25 marks.

**OC-71.5.5** A student shall be required to complete a total of 160 Credits during the Programme.

**OC-71.5.6** The Programme shall comprise the following types of Courses:

- (a) CC - Core Course (including Practical)
- (b) AECC - Ability Enhancement Compulsory Course
- (c) SEC - Skill Enhancement Course
- (d) DSE - Elective Discipline Specific Course
- (e) GE - Elective Generic Course

**OC-71.5.7** The distribution of Credits for the B.P.A. Programme shall be as follows:

<b>Semester</b>	<b>Course Code</b>	<b>Credits</b>	<b>Semester</b>	<b>Course Code</b>	<b>Credits</b>
I	AECC 1A	04	II	AECC 1B	04
	AECC 2A	04		AECC 2B	04
	GE 1	02		GE 2	02
	CC 1A	04		CC 1B	04
	CC 2A	06		CC 2B	06
<b>Total</b>		<b>20</b>	<b>Total</b>		<b>20</b>
III	CC 3A	04	IV	CC 3B	04
	CC 4A	04		CC 4B	04
	AECC 3	06		AECC 4	06
	SEC 1	04		SEC 2	04
	GE 3	02		GE 4	02
<b>Total</b>		<b>20</b>	<b>Total</b>		<b>20</b>

V	CC 3C	04	VI	CC 3D	04
	CC 4C	04		CC 4D	04
	AECC 5	06		AECC 6	06
	SEC3	04		SEC 4	04
	GE 5	02		GE 6	02
<b>Total</b>		<b>20</b>	<b>Total</b>		<b>20</b>
VII	CC 3E	04	VIII	CC 3F	04
	CC 4E	04		CC 4F	04
	AECC 7	06		AECC 8	06
	SEC 5	04		SEC 6	04
	DSE 1	02		DSE 2	02
<b>Total</b>		<b>20</b>	<b>Total</b>		<b>20</b>

**OC-71.6 Scheme of Examination:**

**OC-71-6.1** The Scheme of Examination for B.P.A. Programmes shall be as per Ordinance OC-66.5

**OC-71-6.2** The Semester I to Semester IV Examinations shall be conducted by the College on behalf of the University. The Semester End Examinations of Semester V to Semester VIII shall be conducted by the University.

**OC 71.7 Setting of Question Papers and number of Examiners for the various Examinations.**

The Question Papers for Theory Courses of University Examinations shall be set jointly by the Internal and External Examiners. The Internal Examiner shall be the Convenor of the Examination. The University Practical Examination shall be conducted jointly by the Internal as well as External Examiners. The Examiners shall be appointed from the Master Panel of Examiners recommended by the Board of Studies and approved by the Academic Council of the University.

**OC-71.8 Eligibility for appointment as External Examiner**

a) The Examiner shall possess a Master's Degree or its equivalent Diploma in a relevant subject from a recognized University and have minimum three years teaching experience at the Under Graduate/ Post Graduate Level.

OR

b) A performing artist of professional standing having commendable achievement in the subject concerned with minimum eight years of experience as a performer.

**OC-71.9 Attendance:**

The minimum attendance required for the B.P.A. Programme shall be as per Ordinance OA-17.

**OC-71.10** Entitlement/Grace Marks shall be as per Ordinance OA-26.

**OC-71.11 Award of Class.**

Ordinance OC-66.5.9 as amended from time to time shall be made applicable for B.P.A. Programme.

**OC-71.12 Grade Point Average (GPA)**

GPA for B.P.A. Programmes shall be as per Ordinance OC-66.6

**OC-71.13 College Committees**

The following Committees shall be constituted by the Principal of the College for a tenure of three years each.

1. College Examination Committee
2. College Unfair Means Inquiry Committee
3. College Grievance Committee

**1. The College Examination Committee**

The College Examination Committee shall consist of:

- i) A senior teacher who shall be the Chairperson
  - ii) Two to four regular teachers (In addition to the Chairperson) there shall be no remission in work-load.
- (a) This Committee shall be in charge of all matters pertaining to all the Semester Examinations in the College.
- (b) The Committee shall prepare the examination time-table, arrange to get the question paper sets printed, answer books assessed, results tabulated and announced, and individual statement of marks prepared and issued to the candidates.

**2. The College Unfair Means Inquiry Committee (CUMIC)**

The CUMIC shall be constituted with the following members:

- i) Vice-Principal or a senior teacher as Chairperson
  - ii) Two members of the College Examination Committee
- (a) This Committee shall investigate into the cases of unfair means and malpractices reported in a manner prescribed below and shall recommend to the Principal a course of action as prescribed in OA-5.14
- (b) The following procedure shall be followed for investigating the cases of candidates alleged to have used unfair means at Semesters I to VIII:
- i) The candidate shall be served with a show cause notice and made aware of the charges/allegations reported against him/her so as to enable him/her to prepare his/her defence at the time of appearance before the CUMIC and informing him/her thereby of the proposed action to be taken in his/her case, with a request to bring a written reply at the hearing as to why the action proposed should not be



- taken against him/her.
- ii) The reply received by the Committee from the candidate when he appears before it shall be considered by the Committee and the final recommendation in the matter be taken and reported to the Principal for his approval.
  - iii) The punishment finally awarded shall be equal to or less than what is mentioned in the show cause notice, but not more than what is mentioned therein.
  - iv) The CUMIC is a recommendatory body. The Principal has to exercise his/her power under Statute SB-13 (iv) of the University and issue a final order.
  - v) The category of malpractice and the quantum of punishment for each category thereof shall be as given in Ordinance OA-5.14.19.
  - vi) In addition to these guidelines, each case be examined in detail and punishment awarded on the merit of each case.

### **3. College Grievance Committee (CGC)**

The CGC shall be constituted as under:-

- i) Vice-Principal/Senior member of teaching staff as Chairperson, provided that he is not the Chairperson of CUMIC.
  - ii) Two regular teachers, who are not members on CUMIC or the College Examination Committee.
- (a) In case the grievance concerns any member of the Committee, the Principal shall reconstitute the Committee, excluding the concerned member.
  - (b) This Committee shall investigate into written complaints from the students referred to them by the Principal in the conduct of examinations in a manner as prescribed below, and recommend a course of action to the Principal as prescribed in OA-5.14.
    - i) The Committee shall consider the written complaint of a student on the conduct of examination provided that:
      - a) The complaint is submitted within 15 days after the declaration of results;
      - b) The complaint is accompanied by a prescribed fee of Rs. 200/- or as notified from time to time, which shall be refundable if the complaint is found to be genuine; and
      - c) The matter is referred to the Committee by the Principal.
    - ii) The Committee shall seek necessary explanation in connection with allegations made by the student, from the concerned party.
    - iii) After considering the explanation from the concerned party, the Committee shall recommend a course of action in writing to the Principal.
    - iv) The Principal shall inform the student about the findings of the Committee and shall take appropriate action including reassessment of the said answer book. However, if the marks are

reduced after revaluation of the said answer book the original marks shall be retained and the student informed that there is no change in his/her results.

- v) A minimum fine of Rs.200/- extending up to Rs.500/-, shall be imposed on the student complainant, if the said allegation(s) is/are found to be a deliberate attempt at casting aspersions on the teacher(s) concerned. If the allegations are found to be genuine and the same is recorded giving reasons, action shall be taken as provided under OA-5.2.6

## **OC -72 Master of Performing Arts (MPA) in Hindustani Classical Music (in the relevant Specialization) Degree Programme**

**(Effective from Academic Year 2019-20)**

### **OC-72.1 Aims and objectives:**

The aims of the Programmes is to impart full time professional and advanced training in Hindustani Classical Vocal Music and Instrumental Music such as Sitar, Harmonium, Tabla, Pakhawaj etc. leading to the degree of Master of Performing Arts with special emphasis on developing performing ability to professional standards in the respective specialization by the candidates.

### **OC -72.2 Duration:**

The duration of the programme shall be of two Academic years consisting of a total of four Semesters.

### **OC-72.3 Admission and Eligibility**

**OC-72.3.1** Candidates passing the degree of Bachelor of Performing Arts with 55% and above marks shall be eligible for admission to the Master of Performing Arts Degree Programme.

**OC-72.3.2** Candidates who have passed B.A. (Hons.) in Music, B-Music (Hons.)with 55% and above marks from a recognized University or other graduates of recognized universities, having passed the "Sangeet Visharad of Akhil Bhartiya Gandharva Mahavidyalaya Mandal" or an equivalent Diploma with 55% and above marks of a recognized institution and having passed the Bridge Course, shall be eligible for admission to Semester I of the Master of Performing Arts Degree Programme.

**OC-72.3.3** In addition to the above, to be eligible for admission a candidate shall have to pass an Entrance Test conducted by the College/ University.

### **OC-72.4 Structure of the Programme**

The Programme shall consist of a total of two Academic years of four Semesters. A student shall be required to complete a total of 84 Credits during the Programme. The Programme shall comprise the following types of Courses:

- (a) CC - Core Course (including Practical)
- (b) AECC - Ability Enhancement Compulsory Course
- (c) SEC - Skill Enhancement Course

- (d) DSE - Discipline Specific Elective Course
- (e) GE - Generic Elective Course
- (f) DSP - Discipline Specific Project

**OC-72.4.1** The distribution of Credits for M.P.A. Programme shall be as follows:

Semester	Subject Code	Credits	Semester	Subject Code	Credits
I	CC 1A	04	II	CC 1B	04
	CC 2A	04		CC 2B	04
	AECC 1A	06		AECC 1B	06
	SEC 1A	04		SEC 1B	04
	DSE 1	02		DSE 2	02
<b>Total</b>		<b>20</b>	<b>Total</b>		<b>20</b>
III	CC 1C	04	IV	CC 1D	04
	CC 2C	04		CC 2D	04
	AECC 1C	06		AECC 1D	06
	SEC 1C	04		SEC 1D	04
	DSE 3	04		DSP	04
<b>Total</b>		<b>22</b>	<b>Total</b>		<b>22</b>

**OC-72.4.2** A compulsory project work of 4 credits shall be offered in lieu of DSE course in Semester IV and shall be designed to acquire Special/ Advanced knowledge; it shall be a specialized course involving application of knowledge in solving/analysing/ exploring a real situation/ difficult problems. Students shall undertake such projects under the guidance of a teacher/ faculty member. The topic of the project work shall be given at the beginning of Semester III. Students shall be required to carry out work for the project during Semester III and Semester IV. The assessment of the project shall be carried out at the end of Semester IV.

**OC-72.5 Scheme of Examination:**

**OC-72.5.1** a. The evaluation of the courses shall comprise Intra-Semester Assessment (ISA) and the Semester End Assessment (SEA)

b. The ISA test shall carry 20% of maximum marks allotted for the course and SEA shall carry 80%marks

**OC-72.5.2** a. The ISA for the theory component of the course shall be conducted in the given semester, through a written test, and a practical examination. There shall not be any averaging of ISA.

b. Generally, the ISA for the given course shall be conducted by the teacher/s teaching that course.

c. The schedule for the ISA shall be notified to all at the beginning of the semester.

d. The marks of ISAs shall be communicated to the students within two weeks.

e. Every College shall appoint a three member committee to monitor

the ISA in the college. There would be no remission in workload or remuneration for carrying out this work.

f. A student who does not appear for two ISAs of a course shall not be eligible to answer the SEA of that course.

**OC-72.5.3** a. The SEA shall be conducted at the conclusion of a given semester, and shall cover the entire syllabus prescribed for the respective course.

b. A candidate shall be considered to have successfully fulfilled the requirements of any semester to be eligible to appear for SEA, provided he/she has appeared for two ISAs of the course, and fulfils the minimum attendance requirements as per the relevant rules of the university. A candidate failing to fulfil these conditions shall have to repeat the semester.

c. The schedule of the examination and the setting of question paper(s) for SEA for Semester I to Semester IV shall be done centrally by the University.

i. A board of paper setters and examiners for the SEA of Semester I to Semester IV shall be appointed by the University

ii. The paper-setters shall finalise the question paper(s). There shall be no objective type of questions at SEA; however short answer questions may be set.

iii. The paper setters shall also prepare a key for answers to all question/sub-questions and the scheme of marking of the paper set at the examination. In case of descriptive type of answers, only important points to be expected may be highlighted in the key.

iv. The Chairperson shall personally hand over the sealed set question papers and answer keys to the Controller of Examinations in the prescribed manner.

v. Photocopies of these keys and the marking scheme for each course of the concerned semester I – semester IV shall be given to the examiners.

d. The duration of the SEA theory papers carrying 80 marks shall be of two and half hour duration and those above 80 marks shall be of three hours duration.

**OC-72.5.4** A candidate may be permitted, strictly on medical or other genuine grounds, to appear for practical examination out of turn, irrespective of timetable and the batch allotted to him/her, in the examination programme for Semester I to Semester IV issued by the University. This out of turn appearance may be in the same College in a different batch or in a different College. Such permission may be granted by the University if so recommended by the Principal of the College. The candidate shall be required to remit the requisite fee for his/her being examined out of turn.

**OC-72.5.5** The assessment of the Project course shall be done equally by Internal Examiners (Project Supervisor for 50 marks) and External examiner (for 50 marks) as per the guidelines defined.

**OC-72.5.6** Revaluation of answer books of the candidates shall be permitted as per the existing provisions of OA-5.15 for revaluation/verification.

**OC-72.5.7** a. i. Improvement of performance/ total score shall be permitted to a candidate who has passed the M.P.A. degree examination, in which case he/she shall be

required to appear again only in the SEA component of one or more courses of Semester I to Semester IV examinations, excluding the Project Course. For this purpose, the marks scored at the first appearance in the Project Course, as also in ISA component of the other courses, shall be carried forward for tabulation of the result under "improvement of performance"

- ii. This facility to reappear under improvement shall be available during the immediately subsequent regular Semester-III to Semester IV examinations, but within double the duration period.
  - iii. The performance of a candidate who appears under this provision and fails to improve, shall be ignored.
- b. i. The candidate availing of this provision shall be considered to have passed the examination "under improvement" and this fact shall be recorded on his/her statements of marks and other relevant documents.
- ii. The candidate shall be required to surrender the original statement of marks and other relevant documents at the time of receiving the fresh statement of marks in the event of improvement of performance/ total score.
  - iii. A candidate can appear only once under this clause.

**OC-72.6 Setting of Question Papers and number of Examiners for the various Examinations:**

The Question Papers for all SEA Examinations shall be set jointly by the Internal and External Examiners. The Internal Examiner shall be the Convenor of the Examination. The Practical Examination shall be conducted jointly by the Internal as well as External Examiners. The Examiners shall be appointed from the Master Panel of Examiners recommended by the Board of Studies and approved by the Academic Council of the University.

**OC-72.7 Eligibility for appointment as External Examiner:**

- a) The Examiner shall possess a Master's Degree or its equivalent Diploma in a relevant subject with minimum 55% marks from a recognized University and minimum three years teaching experience at the Under Graduate/ Post Graduate Level.

**OR**

- b) The Examiner shall be a performing artist of professional standing having commendable achievement in the subject concerned, with minimum ten years of experience as a performer.

**OC-72.8 Attendance:**

The minimum attendance required for the Programme shall be as per Ordinance OA-17.

**OC-72.9 Standard of passing**

**OC-72.9.1** To pass the examination, a candidate must obtain a minimum of 40% of the total marks for each Course.

**OC-72.9.2** Entitlement/Grace Marks shall be as per Ordinance OA-5.15

**OC-72.10 Award of Grades**

Letter Grade	Grade Point	Marks%
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O(Outstanding)	10	85 – 100
A+(Excellent)	9	75 - <85
A (Very Good)	8	65 - <75
B+(Good)	7	55 - <65
B (Above Average)	6	50 - <55
C (Average)	5	45 - <50
P (Pass)	4	40 - <45
F (Fail)	0	0 - <40
Ab (Absent)	0	---

### **OC-72.11 Grade Point Average**

The Grade Point Average shall be converted to a letter Grade, on the following basis to the successful candidates:

<b>CGPA</b>	<b>Grades</b>
<b>10.0</b>	<b>O(Outstanding)</b>
<b>9.0 -&lt;10</b>	<b>A+ (Excellent)</b>
<b>8.0 -&lt;9.0</b>	<b>A (Very Good)</b>
<b>7.0 -&lt;8.0</b>	<b>B+ (Good)</b>
<b>6.0 -&lt;7.0</b>	<b>B (Above Average)</b>
<b>5.0 -&lt;6.0</b>	<b>C (Average)</b>
<b>4.0 -&lt;5.0</b>	<b>P (Pass)</b>
<b>Less than required credits or CGPA &lt;4.0</b>	<b>F (Fail)</b>

### **OC-72.12 Advancement to the next Semester and conditions for A.T.K.T (Allowed To Keep Terms)**

**OC-72.12.1** A student shall be eligible for ATKT provided he/she passes all the practical courses of the previous Semester. The result of the next semester examination shall not be declared unless he/she has cleared the remaining papers of previous semester examinations.

**OC-72.12.2** A student failing in the final semester MPA examination shall be eligible to appear at the next examination as an external candidate and complete the Programme within the maximum period available for completing the Programme.

**OC-72.12.3** A student who obtains minimum passing marks prescribed in each theory course shall be exempted from reappearing for that course only.

**OC-72.12.4** The syllabus for various specialisations shall be subject to such revision, modification as may be made by the Academic Council from time to time on the recommendations of the Board of Studies in the specialisation.

### **OC-72.13 College Examination Committee, College Unfair Means Inquiry Committee and College Grievance Committee.**

The following Committees shall be constituted by the Principal of the College for tenure of three years each.

1. College Examination Committee
2. College Unfair Means Inquiry Committee
3. College Grievance Committee

#### **1. The College Examination Committee**

The College Examination Committee shall consist of:

- i) A senior teacher who shall be the Chairperson
  - ii) Two to four regular teachers (In addition to the Chairperson) there shall be no remission in work-load.
- (a) This Committee shall be in charge of all matters pertaining to all the Semester Examinations in the College.
- (b) The Committee shall prepare the examination time-table, arrange to get the question paper sets printed, answer books assessed, results tabulated and announced, and individual statement of marks prepared and issued to the candidates.

#### **2. The College Unfair Means Inquiry Committee (CUMIC)**

The CUMIC shall be constituted with the following members:

- i) Vice-Principal or a senior teacher as Chairperson
- ii) Two members of the College Examination Committee

(a) This Committee shall investigate into the cases of unfair means and malpractices reported in a manner prescribed below and shall recommend to the Principal a course of action as prescribed in OA-5.14

(b) The following procedure shall be followed for investigating the cases of candidates alleged to have used unfair means at Semesters I to VIII:

i) The candidate shall be served with a show cause notice and made aware of the charges/allegations reported against him/her so as to enable him/her to prepare his/her defence at the time of appearance before the CUMIC and informing him/her thereby of the proposed action to be taken in his/her case, with a request to bring a written reply at the hearing as to why the action proposed should not be taken against him/her.

ii) The reply received by the Committee from the candidate when he appears before it shall be considered by the Committee and the final recommendation in the matter be taken and reported to the Principal for his approval.

iii) The punishment finally awarded shall be equal to or less than what is mentioned in the show cause notice, but not more than what is mentioned therein.

iv) The CUMIC is a recommendatory body. The Principal has to exercise his/her power under Statute SB-13 (iv) of the University and issue a final order.

v) The category of malpractice and the quantum of punishment for each category thereof shall be as given in Ordinance OA-5.14.19.

vi) In addition to these guidelines, each case be examined in detail and punishment awarded on the merit of each case.

### **3.College Grievance Committee (CGC)**

The CGC shall be constituted as under:-

- i) Vice-Principal/Senior member of teaching staff as Chairperson, provided that he is not the Chairperson of CUMIC.
- ii) Two regular teachers, who are not members on CUMIC or the College Examination Committee.

(a) In case the grievance concerns any member of the Committee, the Principal shall reconstitute the Committee, excluding the concerned member.

(b) This Committee shall investigate into written complaints from the students referred to them by the Principal in the conduct of examinations in a manner as prescribed below, and recommend a course of action to the Principal as prescribed in OA-5.14.

i) The Committee shall consider the written complaint of a student on the conduct of examination provided that:

a)The complaint is submitted within 15 days after the declaration of results;

b) The complaint is accompanied by a prescribed fee of Rs. 200/- or as notified from time to time, which shall be refundable if the complaint is found to be genuine; and

c) The matter is referred to the Committee by the Principal.

ii) The Committee shall seek necessary explanation in connection with allegations made by the student, from the concerned party.

iii) After considering the explanation from the concerned party, the Committee shall recommend a course of action in writing to the Principal.

iv) The Principal shall inform the student about the findings of the Committee and shall take appropriate action including reassessment of the said answer book. However, if the marks are reduced after revaluation of the said answer book the original marks shall be retained and the student informed that there is no change in his/her results.

v) A minimum fine of Rs.200/- extending up to Rs.500/-, shall be imposed on the student complainant, if the said allegation(s) is/are found to be a deliberate attempt at casting aspersions on the



teacher(s) concerned. If the allegations are found to be genuine and the same is recorded giving reasons, action shall be taken as provided under OA-5.2.6.

**OC -73      Bridge Course in Hindustani Classical Music (in the relevant discipline) (Effective from Academic Year 2019-20)**

**OC-73.1      Aims and Objectives:**

The aim of the Bridge Course is to make candidates passing the three years B.A (Hons.) in Music and B-Music Degree, eligible for admission to the Master of Performing Arts Programme of Goa University.

**OC -73.2      Duration:**

The duration of the Bridge Course shall be of one year.

**OC-73.3      Admission and Eligibility**

- i) Candidates passing B.A (Hons.) in Music, B-Music from a recognized University or any other graduate of a recognised University with at least 55% marks, having passed the "Sangeet Visharad of Akhil Bhartiya Gandharva Mahavidyalaya Mandal" or an equivalent Diploma with at least 55% marks shall be eligible for admission to the Bridge Course.
- ii) In addition to the above, to be eligible for admission to the Bridge Course a candidate shall have to pass an Entrance Test conducted by the College.

**OC-73.4      Structure of the Programme**

**OC-73.4.1** The Programme shall consist of one Academic year of two Semesters. Each semester shall have a minimum of 90 teaching days.

**OC-73.4.2** The Programme shall be based on a system of time-integrated Units called Credits, under the CBCS.

**OC-73.4.3** A Credit shall consist of 15 clock hours of theory of 1 hour duration each or 15 practical classes of 2 hours duration each, per semester or its equivalent;

**OC-73.4.4** One Credit shall carry a maximum of 25 marks.

**OC-73.4.5** A student shall be required to complete a total of 90 Credits during the Programme.

**OC-73.4.5** The Programme shall comprise the following types of Courses:

- (a) CC - Core Course (including Practical)
- (b) AECC - Ability Enhancement Compulsory Course

- (c) SEC - Skill Enhancement Course
- (d) DSE - Discipline Specific Elective Course

**OC-73.4.5** *(Effective from 5<sup>th</sup> December, 2019)*

A student shall be required to complete a total of 40 credits during the programme.

**OC-73.4.6** The distribution of Credits for the Bridge Course shall be as follows:

Semester	Subject Code	Credits	Semester	Subject Code	Credits
I	CC 1A	04	II	CC 1B	04
	CC 2A	04		CC 2B	04
	AECC 1	06		AECC 2	06
	SEC 1	04		SEC 2	04
	DSE 1	02		DSE 2	02
<b>Total</b>		<b>20</b>	<b>Total</b>		<b>20</b>

**OC-73.5** **Scheme of Examination:**

The Scheme of Examination shall be as per Ordinance OC-66.5.

**OC-73.6** **Setting of Question Papers and number of Examiners for the various Examinations:**

The Question Papers for all Semester End Examinations shall be jointly by Internal as well as External Examiners. The Internal Examiner shall be the Convenor of the Examination. The Practical Examination shall be conducted jointly by the Internal as well as External Examiners. The Examiners shall be appointed from the Master Panel of Examiners recommended by the Board of Studies and approved by the Academic Council of the University.

**OC-73.7** **Eligibility for appointment as External Examiner**

a) The Examiner shall possess a Master's Degree or its equivalent Diploma in a relevant subject from a recognized University and minimum three years teaching experience at the Under Graduate/ Post Graduate Level.

**OR**

b) The Examiner shall be a performing artist of professional standing having commendable achievement in the subject concerned, with minimum eight years of experience as a performer.

**OC-73.8** **Attendance:**

The minimum attendance required shall be as per Ordinance OA-17.

- OC-73.9** Entitlement/Grace Marks shall be as per Ordinance OA-26.
- OC-73.10 Grade Point Average (GPA)**  
GPA of the B.P.A. Programmes shall be applicable to the Bridge Course.
- OC-73.11 Award of Certificate**  
A student who successfully completes the Bridge Course shall be issued a Statement of Marks and a Completion Certificate by the University.
- OC-73.12 College Examination Committee, College Unfair Means Inquiry Committee and College Grievance Committee.**  
The College Examination Committee, College Unfair Means Inquiry Committee and College Grievance Committee constituted for the B.P.A. Programmes shall also be applicable for the Bridge Course under this Ordinance.
- OC-74 RELATING TO B.SC FASHION & APPAREL DESIGN, AND B.SC INTERIOR DESIGN PROGRAMME OF GOA UNIVERSITY (effective from the academic year 2019-2020)**
- OC-74.1 GENERAL**
- OC- 74.1.1 Degree to be awarded**  
The Degree to be awarded respectively shall be
- 1. Bachelor of Science in FASHION & APPAREL DESIGN**
- OR**
- 2. Bachelor of Science in INTERIOR DESIGN**
- OC-74.1.2 Objective of the Programme**  
To develop adequate skills and competencies to enable candidates for employability and entrepreneurial ventures in society in the areas of fashion and interior design
- OC-74.1.3 Duration of the Programme**
- (i) The B.Sc. Programme shall be three years full-time having six semesters. A student shall be permitted to exit the Programme after completion of the Credit requirements of a Diploma Programme of one year duration, or a minimum of a single Course for a Certificate Course, which shall form a subset of the requirement for the B.Sc. Programme.
- (ii) A student once admitted, shall be required to complete the Programme in a maximum of twice the duration of the Programme.

- (iii) A student shall not opt for more than 30 instructional hours in a week.

#### **OC-74.1.4**

#### **Eligibility and Admission**

- (i) **Eligibility (First Year)**

A candidate who passes the Higher Secondary School Certificate (Std. XII) examination of the Goa Board of Secondary and Higher Secondary Education, or equivalent or a Diploma in relevant discipline, shall be eligible for admission to the Programme.

- (ii) **Eligibility (Second Year under Lateral Entry to BSc (Fashion & Apparel Design))**

A candidate who passes the 3 years Diploma in Garment Technology Examination of Directorate of Technical Education Govt. of Goa or equivalent examination approved by the AICTE New Delhi, shall be eligible for admission to the Programme under lateral entry.

- (iii) **Eligibility (Second Year under Lateral Entry to BSc (Interior Design))**

A candidate who passes the 3 years Diploma in Interior Design/ Architecture/ Civil Engineer/Draftsmanship Examination of Directorate of Technical Education Govt. of Goa or equivalent examination approved by the AICTE New Delhi, shall be eligible for admission to the Programme under lateral entry.

- (iv) **Admission procedure**

The procedure for admission to the Programme shall be decided by the Admissions Committee for the academic year, appointed by the Head of the Institution, and shall consist of selected faculty members of the Institution and one representative of the Faculty. A class size shall not exceed sixty students. Allocation of supernumerary seats shall be as per Government rules.

#### **OC-74.2**

#### **PROGRAMME STRUCTURE**

##### **OC-74.2.1**

##### **Programme Structure**

1. The Programme shall be based on a system of time-integrated Units called Credits, under the Choice Based Credit System (CBCS).
2. The Programme shall comprise Courses such as Core, Elective and Ability Enhancement Courses.

3. A Credit consists of 15 clock hours of Theory or 15 Practical classes of 3 hours duration each, or its equivalent; field work and such other as recommended by Board of Studies (BoS), shall be considered under Practical category for calculating Credits and Workload.
4. A student shall be eligible for the award of Bachelor's Degree on successful completion of minimum of **180** Credits, to be completed over a minimum of six Semesters.

## **OC-74.2.2 Programme Structure**

1. Each Course may carry different weightage in terms of number of Credits. Each Course shall define learning objectives and learning outcomes. A Course may be designed so as to comprise any or combination of lectures/ tutorials/ laboratory work/ field work/ outreach activities/ project work/ vocational training/ viva/ seminars/ term papers/ assignments/ presentations/ self-study and such other.

### **2. Core Course**

A Core Course (CC) shall be of 4 or 6 Credits and may consist of Theory component and/or a Practical component as prescribed by BoS and approved by the Academic Council.

### **3. Elective Course**

An Elective Course can be chosen from a pool of Courses, which may be very specific/ specialized/ advanced/ supportive to the discipline/ subject of study or which provides an extended scope, or which enables an exposure to some other discipline/ subject/ domain or nurtures the candidate's proficiency/ skill. An Elective Course may be Discipline Specific Elective Course or Generic Elective Course.

#### **3.1 Discipline Specific Elective**

Discipline Specific Elective (DSE) Courses, which may be also of interdisciplinary nature, shall be offered in the main discipline/ subject of study. Each DSE shall be as prescribed by the BoS and approved by the Academic Council.

#### **3.2 A. Internship**

An Internship work of 4 Credits is compulsory in Semester V. A student shall undertake such an Internship under the guidance of a faculty member. The topic for the Internship work shall be given in Semester V. Evaluation of Internship shall be based on Documentation (Report), Presentation and Viva-Voce.

#### **Scheme of Evaluation**

Documentation (Report)      40 Marks

Presentation	20 Marks
Viva-Voce	40 Marks

### 3.2 B. Project

A Project work of 10 Credits is compulsory in Semester VI. A student shall undertake such a Project under the guidance of a faculty member. The topic for the Project work shall be given in Semester V. The candidate shall be required to carry out work for the Project during Semesters V and VI. The assessment of the Project will be carried at the end of Semester VI.

#### Scheme of Evaluation

Documentation (Report)	40 Marks
Presentation	20 Marks
Viva-Voce	40 Marks

### 3.3 Generic Elective Course

A Generic Elective (GE) Course shall be of 4 or 6 Credits, and may be chosen from an unrelated discipline/ subject, with an intention to seek exposure. A Core Course offered in a discipline/ subject may be treated as a GE Course for another discipline/ subject and vice versa as prescribed by BoS and approved by the Academic Council.

### 4. Ability Enhancement Courses

The Ability Enhancement (AE) Courses may be of two kinds: Ability Enhancement Compulsory Courses (AECC) Courses and Skill Enhancement (SE) Courses.

**4.1 AEC Courses** shall be based on the content that leads to knowledge enhancement and are mandatory.

**4.2 SE Courses** shall be value-based and/or skill-based and are aimed at providing hands on-training, competencies, skills.

### OC-74.3 Programme Structure

Course	Course Code	SEMESTER						Total
		I	II	III	IV	V	VI	
Course 1	CC	4	4	4	4	6	4	26
Course 2	CC	6	6	6	6	6	4	34
Course 3	CC	6	6	6	6	6	4	34
Course 4	CC	6	6	6	6		4	28
Course 5	AECC	4	4	4	4			16

Course in SY/TY	GE	4	4	4		4	4	20
Course in SY	SEC				4	4		8
Course in TY Internship	DSE					4		4
Project	DSE						10	10
<b>Total</b>		<b>30</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>180</b>

NOTE:

(i) The Codes in the second column refer to the type of Courses [Core Course (CC), Discipline Specific Elective Course (DSE), Generic Elective Course (GE), Ability Enhancement Compulsory Course (AECC) and Skill Enhancement Course (SE).

(ii) Internship shall be a compulsory SEC.

(iii) Project shall be a compulsory DSE.

### 1. SEMESTER-I

There shall be:

(i) Four Compulsory Core Courses from each specialization in Fashion & Apparel Design and Interior Design (CC).

(ii) One Compulsory Course in Constitution of India and Human Rights (AECC).

The CC Courses in (i) above shall carry 100 marks each (60 marks for Theory and 40 marks for Practical component). The Course in Constitution of India and Human Rights shall carry 100 Marks.

### 2. SEMESTER-II

There shall be:

(i) Four Compulsory Core Courses from each specialization in Fashion & Apparel Design and Interior Design (CC).

(ii) One Compulsory Course in Environmental Science (AECC).

The CC Courses in (i) and (ii) above shall carry 100 marks each (60 marks for Theory and 40 marks for Practical component). The AECC in Environmental Studies shall carry 100 marks.

### 3. SEMESTER-III

There shall be:

(i) Four Compulsory Courses from each specialization in Fashion & Apparel Design and Interior Design (CC).

(ii) One Compulsory Core Course in Indian History, Cultural & Diversity (AECC).

(iii) One Course from Generic Elective (GE) shall be Theory/Practical.

The Courses in (i), (ii) and (iii) above shall carry 100 marks each (60 marks for Theory and 40 marks for Practical component). One Compulsory Core Course in Indian History, Cultural & Diversity (AECC) shall carry 100 marks.

#### **4. SEMESTER-IV**

There shall be:

- (i) Four Compulsory Core Courses from each specialization in Fashion & Apparel Design and Interior Design (CC).
- (ii) One Compulsory Core Course in Life Skills & Personality Development (AECC).
- (iii) One Course from Skill Enhancement (SE). The SE Course shall be Theory/Practical. The Course in (i), (ii) and (iii) above shall carry 100 marks each (60 marks for theory and 40 marks for practical component). The SE Course shall carry 100 marks.

#### **5. SEMESTER-V**

There shall be:

- (i) Three Compulsory Core Courses from specialization in Fashion & Apparel Design and Interior Design
- (ii) One Course of Discipline Specific Elective (DSE).
- (iii) One Course of Generic Elective (GE).
- (iv) One internship as Discipline Specific Elective (DSE).

The Five Courses in (i), (ii) and (iii) above shall carry 100 marks each (60 marks for Theory and 40 marks for Practical component).

#### **6. SEMESTER-VI**

There shall be:

- (i) Four Compulsory Core Courses from specialization in Fashion & Apparel Design and Interior Design
- (ii) One Course of Discipline Specific Elective (DSE), which is the project.
- (iii) One Course from Generic Elective (GE).

The Five Courses in (i), (ii) above shall carry 100 marks each (60 marks for Theory and 40 marks for Practical component). (ii) Above shall carries 100 marks (Documentation 40 marks, Viva-Voce 40 marks, Presentation 20 marks).

#### **OC-74.4 Scheme of Examination**

- a. The evaluation for the Courses, shall comprise of the Intra-Semester Assessment (ISA) and Semester End Examination (SEE).
- b. The ISA tests shall carry 20% of maximum marks allotted for the Course, and SEE shall carry 80% marks. A Course of only Theory carrying 100 marks shall have ISA component of 20 marks and a SEE component of 80 marks. A Theory Course having both Theory and Practical component, shall have ISAs only for Theory component for total of 15 marks, and SEE for Theory component of 60 marks and Practical component of 25 marks. A Theory



Course carrying 50 marks shall have ISA component of 10 marks and SEE component of 40 marks.

- c. The ISA for the Theory component of a Course shall be conducted twice in a given Semester, once through a written test, and the other by using alternate modes of evaluation including assignment/ presentation/ orals/ such other. There shall not be any averaging of ISA marks.
- d. Generally, ISA for a given Course shall be conducted by the teacher(s) teaching that Course.
- e. The schedule for the ISAs shall be notified at the beginning of the Semester.
- f. The marks of ISA shall be communicated to the students within two weeks.
- g. ISA written test shall preferably be completed by the end of July for odd Semesters and end of January for even Semesters. Students who fail to appear for the test due to a genuine reason shall be given another opportunity by the end of August/ February respectively, on a date pre-determined by the College. The other mode of ISA will be completed as decided by the teacher but before the end of the Semester.
- h. Every College shall appoint a three member committee to monitor the ISA in the college. There will be no remission in workload or remuneration for carrying out this work.
- i. The SEE shall be conducted at the conclusion of a given Semester, and shall cover the entire syllabus prescribed for the respective Course.
- j. A candidate shall be considered to have successfully fulfilled the requirements of a Semester to be eligible to appear for the SEE, fulfills the minimum attendance requirements as per the relevant rules of Goa University. A candidate, failing to fulfill these conditions, shall have to repeat the Semester.
- k. A tentative schedule of SEE examination, evaluation and declaration of results shall be prepared by the College, preferably at the beginning of each Academic Year for the first two years, and shall be notified to the students, with a copy to the University.
- l. Setting of the question papers, assessment and evaluation of answer-scripts for SEE from Semester I-IV shall be done by the teachers teaching the Course by the College itself and declaration of results shall be done by the College itself.
- m. The pattern of question paper(s) to be set for the SEE in a given Course and the scheme of marking shall be decided by the BoS in that Course. For this purpose, the Board of Studies shall frame specimen question paper(s) in the concerned Course for each Semester, for the information of the students. Similarly, for Practical examinations, the number of laboratory exercises, marks

distribution for each exercise and other relevant details shall be decided by the BoS.

- n. The schedule of the Examination and the setting of the question paper(s), evaluation of answer-scripts for SEE from Semester- V and VI shall be done centrally by the Goa University.

**(i)** For the SEE, a Panel of Paper-Setters and Examiners shall be

recommended by the BoS, approved by the Academic Council,

and the examiners shall be appointed by the University

**(ii).** The Paper-Setters shall finalize the question paper(s); there

shall be no objective type of questions at SEE; however short

answer questions may be set. There shall be a blueprint in each Course.

**(iii)** They shall also prepare a key of answers to all question/ sub-questions and the scheme of marking of the paper set at the examination. In case of descriptive type of answers, important points to be expected may be highlighted.

**(iv)** The Chairperson shall personally hand over the sealed set of question papers and answer keys to the Controller of Examinations in the prescribed manner.

**(v)** Photocopies of the key and the marking scheme for each of the Courses of the concerned Semester V and VI shall be given to the examiners assessing the papers.

- o. The duration of SEE Theory Course of 60 marks shall be of two hours, Practical examination of 40 marks shall be of three hours duration or as recommended by the BoS and approved by the Academic Council.

- p. **(i)** Examination(s) for Courses having Practical component shall have marks allotted for journal/ lab record book/field work/experiment/orals as recommended by the BoS and approved by the Academic Council.

**(ii)** For assessing the candidate's performance in the assigned experiment, the examiner shall take into account the planning, the procedure and the technique followed by the candidate along with the readings/ observations, the results and the presentation.

**(iii)** Examiner(s) shall take into account the regularity of the candidate in attending the Laboratory Course and presentation of the journal. For subjects having fieldwork component, the candidate shall be required to submit the report of such field excursion(s) along with the journal(s) for assessment. The examiner(s) shall consider the report along with journal(s) while allotting the marks.

- (iv)** In oral examination, the examiner(s) shall assess the knowledge of the candidate in the Course as well as the experiment(s) performed by the candidate.
- q. Record of the breakup of marks thus obtained by the candidate for Semesters I to VI, shall be maintained by the respective College in a sealed envelope for a minimum period of 4 years.
- r. The Practical examination shall be treated as an independent head of passing.
- s. A candidate may be permitted, strictly on medical or other genuine grounds, to appear for the Practical examination out of turn, irrespective of the timetable and the batch allotted to him/her, in the examination Programme for Semester-V and Semester-VI issued by the University. Such permission may be granted by the University if so recommended by the Principal of the College. The candidate shall be required to remit the requisite fee for being examined out of turn.
- t. **(i)** A Project in the area/ field of subject is compulsory, which shall be carried out by the student in Semester VI.
- (ii)** Project work and the Report shall be based on field work/ library work/ laboratory work /on-the-job training / similar work assigned by the teacher.
- (iii)** Project work shall be assigned to individual students; no group project shall be permitted.
- (iv)** The teachers shall be assigned according to the requirement of the Subject.
- (v)** The Project Report shall be submitted at the end of Semester VI for evaluation.
- u. **(i)** A teacher shall be permitted to guide a maximum of 8 students.
- (ii)** The Project vacancies shall be decided by the College based on the available guides and their interest.
- v. The assessment of the Project Course shall be done equally by the Internal Examiner and the External Examiner (Documentation 40 marks, Viva Voce 40 Marks & Presentation 20 Marks).
- w. A remission in workload per week to the teacher for guiding students shall be distributed over Semesters V – VI. The remission shall be calculated as 1 lecture hour for every 2 students, an odd number of students being rounded up to the next higher even number, for calculation of this remission.
- x. **(a)** Revaluation of answer books of the candidates at Semesters I to VI shall be permitted. Personal verification of marks shall also be granted to the candidate in the presence of Principal/ Vice-Principal and the concerned Examiner. The candidate shall apply for the same along with payment of prescribed fees, within one week of the declaration of results.

- (b)** The following shall be the procedure for the verification of marks:
- (i)** On a notified day and time, which should be not later than 10 days after the receipt of application from the candidate, the candidate shall be shown the answer book in the chamber of the Principal/Vice-Principal in the presence of the Examiner concerned.
  - (ii)** If the candidate is not satisfied with the result on personal verification of answer book, s/he may apply to College Grievance Committee within a week.
  - (iii)** The College Grievance Committee shall take appropriate action as per the relevant Ordinance and inform the candidate of the decision taken accordingly.
- y. A supplementary examination shall be conducted, preferably after 15 days from the declaration of results of Semesters I to IV examinations. Students who have a backlog of any, or all of the Courses (Theory / Practical) of Semesters I to IV are eligible to appear for this examination.
- z. **(a) (i)** Improvement of performance/total score shall be permitted to a candidate who has passed the B.Sc. Degree examination, in which case he/she shall be required to appear again only in the SEE component of the Courses of Semester V and/or Semester VI examinations, excluding the Project Course. For this purpose, the marks scored at the first appearance in the Project Course, and also in component of the other Courses, shall be carried forward for tabulation of the result under "Improvement of Performance".
- (ii)** A candidate shall not be permitted to reappear for improvement of performance at Semesters I, II, III and IV.
  - (iii)** The facility to reappear "under improvement" shall be available during the immediately subsequent regular Semester-V and Semester-VI examinations, but within double the duration period.
  - (iv)** The performance of a candidate, who appears under this provision and fails to improve, shall be ignored.
- (b)(i)** The candidate availing of this provision shall be considered to have passed Semesters V and/or VI "under improvement" and this fact shall be recorded on his/her Statement of Marks and other relevant documents.
- (ii)** The candidate shall be required to surrender the original Statement of Marks and other relevant documents at the time of receiving the fresh statement of marks in the event of improvement of performance/ total score.
  - (iii)** A candidate can appear only once under this clause.
  - (iv)** To be eligible for Rank the student shall be required to complete the Programme in the minimum prescribed period and shall be required to

pass each of Semesters I to VI, in a single attempt. The Rank shall be awarded on the basis of the provisions formulated by the University.

#### **OC-74.5 GRIEVANCE COMMITTEE**

There shall be a College Grievance Committee in accordance with the General Ordinance of the University.

#### **OC-74.6 Award of Grades**

1. Marks awarded in each Course shall be represented in the form of Grades in the grade sheet issued at the end of each Semester.
2. Letter Grade shall be the index of the performance of students in a said Course, denoted by letters O, A+, A, B+, B, C, P and F, and calculated based on Grade Point and marks obtained for each Course, as shown in the Table below. A candidate registered for the three years B.Sc. Degree Programme, to be declared successful, shall be required to obtain a minimum Pass Grade (P) in all Courses.
3. The conversion of marks into Grade and Grade Point shall be as shown below;

<b>Marks %</b>	<b>Letter Grade</b>	<b>Grade Point</b>
85 – 100	O (Outstanding)	10
75 – <85	A+(Excellent)	9
65 – <75	A (Very Good)	8
55 – <65	B+(Good)	7
50 – <55	B (Above Average)	6
45 – <50	C (Average)	5
40 – <45	P (Pass)	4
0 – <40	F (Fail)	0
---	Ab (Absent)	0

4. A student shall be required to score a minimum of 'P' grade in Theory component (ISA and SEE taken together) and in Practical components to pass in a Course in Semesters I to VI. Marks secured by the student in ISA shall be carried forward even if he/she fails in the paper.
5. A Semester-end Grade Point Average (SGPA) Certificate shall be issued to all the registered students after every Semester, based on the Grades earned. The Certificate will display the Course details (code, title, number of credits, grade secured).
6. Provision for gracing or entitlement marks shall be as specified under OA-5.16; once allotted, these marks shall neither be permitted to be withdrawn, nor transferred.

#### **OC-74.7 Cumulative Grade Point Average (CGPA)**

1. The Final result shall be declared as CGPA, earned at the end of the Programme, which shall be a measure of overall cumulative performance of a student over Semesters V – VI.
2. The CGPA shall be the ratio of Total Credit Points secured by a student in all Core Courses and best of DSEs to the maximum number of Credits required in the T. Y. Semesters V and VI, calculated as specified under Ordinance OA-16.4.6.
3. In case a candidate has accumulated more than required number of Credits, the CGPA shall be calculated taking into accounts all the Core Courses at T. Y. and the best of Discipline Specific Elective (DSE) Courses, without forgoing the minimum number of DSEs required under each Subject.
4. Additional DSEs offered if any will be shown on the grade sheet. CGPA shall be expressed up to two decimal places.
5. The CGPA shall be converted to the Final Letter Grade, as shown in the table below:

CGPA	Grades
10.0	O(Outstanding)
9.0 – <10	A+ (Excellent)
8.0 – <9.0	A (Very Good)
7.0 – <8.0	B+ (Good)
6.0 – <7.0	B (Above Average)
5.0 – <6.0	C (Average)
4.0 – <5.0	P (Pass)
Less than required credits or CGPA <4.0	F (Fail)

**OC-74.8.1 College Examination Committee, College Unfair Means Committee and College Grievance Committee**

The following committees shall be constituted by the Principal of the College and shall work under the supervision of the Principal, for the terms mentioned against each of these:

- (A) College Examination Committee - 3 years
- (B) College Unfair Means Inquiry Committee (CUMIC) - 3 years
- (C) College Grievance Committee - 3 years

**(A) The College Examination Committee shall consist of :**

- (i) A senior teacher who shall be the Chairperson
- (ii) Two to four regular teachers (In addition to the Chairperson)
  - (a) There shall be no remission in work-load.
  - (b) This Committee shall be generally in charge of all matters pertaining to B.Sc. Examinations in the College.
  - (c) The Committee shall prepare the examination time-table, arrange to get the question paper sets printed and answer books assessed.
  - (d) The Committee shall arrange to get the results prepared, settled, announced and individual statement of marks prepared and issued to the candidates.

**(B) The (CUMIC) shall be constituted with the following members**

- (i) Vice-Principal or a senior teacher as Chairman
- (ii) Two members of the College Examination Committee
  - (a) The Committee shall inquire into the cases of unfair means and malpractices reported in a manner prescribed by **OC-74.8.2** and shall recommend to the Principal a course of action as prescribed in OA-5.14.

**(C) The College Grievance Committee shall be constituted as under :-**

- (i) Vice-Principal/Senior member of teaching staff as Chairman, provided that he is not the Chairman of CUMIC.
- (ii) Two regular teachers, preferably not members of CUMIC and the College Examination Committee.
- (iii) In case the grievance concerns any member of the Committee, the Principal shall reconstitute the Committee for the concerned grievance, excluding the concerned member. The Committee shall inquire into written complaints from the students, referred to the Committee by the Principal, in the conduct of examinations and recommend a course of action to the Principal as prescribed in **OC-74.8.3** and **OA- 5.14**

**OC-74.8.2 Inquiry into cases of unfair means**

The following procedure shall be followed for inquiring into the cases of candidates alleged to have used unfair means at the F. Y. and/or S. Y. B.Sc. examinations.

The candidate shall be served with a show cause notice and be made aware of the charges/allegations reported against him/her so as to enable him/her to prepare his defense at the time of this appearance before the CUMIC and inform him/her thereby of the proposed action to be taken in his/her case, directing him/her to reply to the show cause notice as to why the action proposed should not be taken against him/her.

(a) The reply received by the Committee from the candidate when he/she appears before it will be considered by the Committee and the final recommendation in the matter be taken and reported to the Principal for approval.

(b) The punishment finally awarded can be equal to, or less than, what is mentioned in the show cause notice, but not more than what is mentioned therein.

(c) The CUMIC is a recommendatory body. The Principal will exercise his/her power under Statute SB-13(iv) of the University and issue the final order.

(d) The broad category of malpractice and the quantum of punishment for each category thereof shall be as given in Ordinance on malpractices OA-5.14.19. Besides these provisions, each case may be examined in detail and punishment awarded on the merit of each case.

### **OC-74.8.3 Committee**

### **Investigation of Grievance by the College Grievance**

1. The Committee shall consider the written complaint submitted by a student on the conduct of examination provided that

(i) the complaint is submitted within 15 days after the declaration of results;

(ii) the complaint is accompanied with a fee of Rs.200/- (refundable if the complaint is found genuine); and

2. The matter is referred to the Committee by the Principal.

(i) The Committee shall invite a reply to the allegations, if any, made by the student from the concerned party.

3. After considering the reply of the concerned party, the Committee shall recommend a course of action in writing to the Principal.

4. The Principal may inform the student about the findings of the Committee and shall take appropriate action including reassessment of the said answer book. However, if the marks are reduced after revaluation of the said answer book, the original marks shall be retained and shall be communicated that there is no change in his/her result.

A minimum fine of Rs.200/- which shall not exceed Rs.500/-, shall be imposed on the student complainant, if the said allegation(s) is (are) found to be a deliberate attempt at casting aspersions on the teacher(s) concerned. If the allegations are found to be genuine and



the same is recorded giving reasons, the action shall be taken as provided under OA-5.2.6.

#### **OC-74.9 Academic Audit Committee (AAC)**

1. There shall be an AAC to assess the manner in which classes are conducted and the method as well as the content of evaluation of each Course of each Semester.
2. The Committee shall be appointed by the Vice-Chancellor for a period not exceeding three years, for each College, from a master panel recommended by the BoS and approved by the Academic Council. The Committee shall consist of at least three members of which at least two will be from outside the College, as the case may be.
3. The AAC shall meet at least once in two years and submit the report to Vice-Chancellor. Vice-Chancellor may forward the same to BoS for consideration.

#### **OC-75 Ordinance relating to the examination in the Faculty of Medicine the Degree of Bachelor of Medicine & Bachelor of Surgery (M.B.B.S.) (Under Section 24(1) of the Goa University Act, 1984). (Effective from Academic Year 2019-20)**

##### **OC-75.1 Objective of the Indian Medical Graduate Training Programme**

The undergraduate medical education programme is designed with a goal to create an "Indian Medical Graduate" (IMG) possessing requisite knowledge, skills, attitudes, values and responsiveness, so that he/she may function appropriately and effectively as a physician of first contact of the community while being globally relevant.

##### **OC-75.2 Broad Outline on Training Format**

In order to ensure that training is in alignment with the goals and competencies:

- (i) There shall be a "Foundation Course" to orient medical learners to the MBBS programme, and provide them with the requisite knowledge, communication (including electronic), technical and language skills.
- (ii) The curricular contents shall be vertically and horizontally aligned and integrated to the maximum extent possible in order to enhance the learner's interest and eliminate redundancy and overlap.
- (iii) Teaching-learning methods shall be learner-centric and shall predominantly include small group learning, interactive teaching methods and case-based learning.

- (iv) Clinical training shall emphasize early clinical exposure, skill acquisition, certification in essential skills, community/primary/secondary care-based learning experiences and emergencies.
- (v) Training shall primarily focus on preventive and community based approaches to health and disease, with specific emphasis on national health priorities such as family welfare, communicable and non communicable diseases including cancer, epidemics and disaster management.
- (vi) Acquisition and certification of skills shall be through experiences in patient care, diagnostic and skill laboratories.
- (vii) The development of ethical values and overall professional growth as an integral part of the curriculum shall be emphasized through a structured longitudinal and dedicated programme on professional development including attitude, ethics and communication.
- (viii) Progress of the medical learner shall be documented through structured periodic assessment that includes formative and summative assessments. Logs of skill-based training shall be also maintained.
- (ix) Appropriate Faculty Development Programmes shall be conducted regularly by institutions to facilitate medical teachers at all levels to continuously update their professional and teaching skills, and align their teaching skills to curricular objectives.

**OC-75.2.1 Degree to be awarded:** The candidate who successfully completes the programme shall be eligible for the award of the degree of Bachelor of Medicine and Bachelor of Surgery (M.B.B.S.)

**OC-75.2.2 Medium of Instruction:** The medium of instruction shall be English.

**OC-75.3 Eligibility for admission to First Year M.B.B.S.**

For being eligible for admission to the Medical College affiliated to this University, candidates for the degree of MBBS must have:

- (i) Completed the age of 17 years on or before 31st December of the academic year of admission to become eligible for admission to First Year.
- (ii) Passed the Higher Secondary Certificate (Std. XII) examination of Goa Board of Secondary and Higher Secondary Education or its equivalent examination with English and secured not less than 50% marks in the aggregate of subjects of Physics, Chemistry and Biology taken together (40% for the applicants belonging to SC, ST and OBC only and 45% for applicants belonging to PH category).
- (iii) Appeared and obtained a valid score /rank at NEET conducted by CBSE / any other notified agency for this purpose for the year of admission.

**OC-75.4** Admission to the First M.B.B.S. course shall be made by 1st August in each academic year.

**OC-75.5 Duration and time distribution**

- (a) Every learner shall undergo a period of certified study extending over 4½ academic years, divided into nine semesters from the date of commencement of course to the date of completion of examination which shall be followed by one year of compulsory rotating internship.
- (b) Each academic year will have at least 240 teaching days with a minimum of eight hours of working on each day including one hour as lunch break.

**OC-75.5.1** The period of 4 ½ years is divided as follows:

- (A) **Pre-Clinical Phase [(Phase I)]** - First Professional phase of 13 months preceded by Foundation Course of one month]: will consist of preclinical subjects – Human Anatomy, Physiology, Biochemistry, Introduction to Community Medicine, Humanities, Professional development including Attitude, Ethics & Communication (AETCOM) module and early clinical exposure, ensuring both horizontal and vertical integration.
- (B) **Para-clinical phase [(Phase II)]** - Second Professional (12 months)]: shall consist of Para-clinical subjects namely Pathology, Pharmacology, Microbiology, Community Medicine, Forensic Medicine and Toxicology, Professional development including Attitude, Ethics & Communication (AETCOM) module and introduction to clinical subjects ensuring both horizontal and vertical integration. Clinical exposure for learners shall be in the form of learner-doctor method of clinical training in all phases with emphasis on primary, preventive and comprehensive health care. A part of training during clinical postings should take place at the primary level of health care. Wherever possible, learning experiences in secondary health care is to be provided. The Clinical exposure will involve:
  - (i) Experience in recognizing and managing common problems seen in outpatient, inpatient and emergency settings,
  - (ii) Involvement in patient care as a team member,
  - (iii) Involvement in patient management and performance of basic procedures.
- (C) **Clinical Phase – [(Phase III) Third Professional (28 months)]**
  - (a) **Part I (13 months)** - The clinical subjects include General Medicine, General Surgery, Obstetrics & Gynaecology, Pediatrics, Orthopaedics, Dermatology, Otorhinolaryngology, Ophthalmology, Community Medicine, Forensic Medicine and Toxicology, Psychiatry, Respiratory Medicine, Radiodiagnosis & Radiotherapy and Anaesthesiology & Professional development including AETCOM module.
  - (b) **Electives (2 months)** - To provide learners with an opportunity for diverse learning experiences, to do research/community projects that will stimulate enquiry, self-directed experimental learning and lateral thinking [7.5.1].
  - (c) **Part II (13 months)** - Clinical subjects include:
    - (i) Medicine and allied specialties (General Medicine, Psychiatry, Dermatology Venereology and Leprosy (DVL), Respiratory Medicine including Tuberculosis)

- (ii) Surgery and allied specialties (General Surgery, Orthopedics [including trauma]), Dentistry, Physical Medicine and rehabilitation, Anaesthesiology and Radiodiagnosis)
- (iii) Obstetrics and Gynecology (including Family Welfare)
- (iv) Pediatrics
- (v) AETCOM module

**OC-75.5.2** Didactic lectures shall not exceed one third of the schedule; two third of the schedule shall include interactive sessions, practicals, clinical or/and group discussions. The learning process shall include clinical experiences, problem oriented approach, case studies and community health care activities. The admission shall be made strictly in accordance with the statutory notified time schedule towards the same.

**OC-75.5.3** The admission timing and admission process shall be organized in such a way that teaching in the First Professional year commences with induction through Foundation Course by 1<sup>st</sup> August of each year.

**OC-75.5.4** Supplementary examinations shall be conducted within 90 days from the date of declaration of the results of the main examination, so that the learners who pass can join the main batch for progression and the remainder would appear for the examination in the subsequent year.

**OC-75.5.5** A candidates shall not be entitled to graduate later than ten (10) years of his/her joining the first MBBS course.

**OC-75.5.6** No more than four attempts shall be permitted for a candidate to pass the First Professional Examination. The total period for successful completion of the First Professional course shall not exceed four (4) years.

**OC-75.5.7** Partial attendance at the examination in any subject shall be counted as an attempt.

**OC-75.5.8** A candidate who fails in the Second Professional Examination, shall not be permitted to appear for the Third Professional Part I Examination unless she/he passes all the subjects of the Second Professional Examination.

**OC-75.5.9** Passing in the Third Professional (Part I) Examination shall not be compulsory before starting Part II Training; however, passing of Third Professional (Part I) shall be compulsory for being eligible for the Third Professional (Part II) Examination.

**OC-75.5.10** During para-clinical and clinical phases, including the prescribed 2 months of electives, clinical postings of three hours duration daily as specified in this Ordinance would apply for various departments.

**OC-75.6 Migration:**

- (a) Migration of students from one medical college to another medical college may be granted on any genuine ground subject to the availability of vacancy in the college where migration is sought and fulfilling the other requirements laid down in the Regulations. Migration would be restricted to 5% of the sanctioned intake of the college during the year. No migration will be permitted on any ground from one medical college to another located within the same city.
- (b) Migration of students from one College to another is permissible only if both the colleges are recognised by the Central Government under section 11(2) of the Indian Medical Council Act, 1956 and further subject to the condition

that it shall not result in an increase in the sanctioned intake capacity for the academic year concerned in respect of the receiving medical college.

- (c) The applicant candidate shall be eligible to apply for migration only after qualifying in the First Professional MBBS examination. Migration during clinical course of study shall not be allowed on any ground.
- (d) For the purpose of migration, an applicant candidate shall first obtain a "No Objection Certificate" from the college where he/she is currently studying and the University to which that college is affiliated and also from the college to which the migration is sought and the university to which that college is affiliated.
- (e) The candidate shall submit his/her application for migration with in a period of 1 month of passing (Declaration of result of the 1<sup>st</sup> Professional MBBS examination) along with the above cited four "No Objection Certificates" to:(a) the Director of Medical Education of the State, if migration is sought from one college to another within the same State or (b) the Medical Council of India, if the migration is sought from one college to another located outside the State.

#### **OC-75.7 Curriculum, Phase Distribution and Timing of Examination**

The Competency based Undergraduate Curriculum and Attitude, Ethics and Communication (AETCOM) course, prescribed by the Medical Council of India approved by the Academic Council shall be the curriculum for the batches admitted in MBBS from the academic year 2019-20 onwards.

#### **OC-75.7.1 The Professional Phase-wise Distribution of subjects shall be as follows:**

<b>Phase &amp; Year of MBBS Training</b>	<b>Subject &amp; New Teaching Elements</b>	<b>Duration</b>	<b>University Examination</b>
First Professional MBBS	<ul style="list-style-type: none"> <li>• Foundation Course (1 month)</li> <li>• Human Anatomy, Physiology, Biochemistry, introduction to Community Medicine, Humanities</li> <li>• Early Clinical Exposure</li> <li>• Attitude, Ethics and Communication Module (AETCOM)</li> </ul>	1+13 months	I Professional (Subjects to be answered: Human Anatomy, Physiology, Biochemistry)

Second Professional MBBS	<ul style="list-style-type: none"> <li>• Pathology, Microbiology, Pharmacology, Forensic Medicine and Toxicology</li> <li>• Introduction to clinical subjects including Community Medicine</li> <li>• Clinical postings</li> <li>• Attitude, Ethics and Communication Module (AETCOM)</li> </ul>	12 months	II Professional (Subjects to be answered: Pathology, Microbiology, Pharmacology)
Third Professional MBBS Part I	<ul style="list-style-type: none"> <li>• General Medicine, General Surgery, Obstetrics &amp; Gynecology, Pediatrics, Orthopedics, Dermatology, Psychiatry, Otorhinolaryngology, Ophthalmology, Community Medicine, Forensic Medicine and Toxicology, Respiratory Medicine, Radiodiagnosis, &amp; Radiotherapy, Anesthesiology</li> <li>• Clinical subjects/ postings</li> <li>• Attitude, Ethics and Communication Module (AETCOM)</li> </ul>	13 months	III Professional (Part I) (Subjects to be answered: Otorhinolaryngology, Ophthalmology, Community Medicine, Forensic Medicine and Toxicology)
Electives	<ul style="list-style-type: none"> <li>• Electives, Skills and assessment*</li> </ul>	2 months	
Third Professional MBBS (Part II)	<ul style="list-style-type: none"> <li>• General Medicine, Pediatrics, General Surgery, Orthopedics, Obstetrics &amp; Gynecology including Family Welfare and allied specialties</li> <li>• Clinical subjects/ postings</li> <li>• Attitude, Ethics and Communication Module (AETCOM)</li> </ul>	13 months	II Professional (Part II) (Subjects to be answered: General Medicine, Pediatrics, General Surgery, Orthopedics, Obstetrics & Gynecology including Family Welfare and allied specialties)

\*Assessment of electives shall be included in Internal Assessment.

**OC-75.7.2 Minimum teaching hours prescribed in various disciplines shall be as under:**

**OC-75.7.2.1 Foundation Course (one month)**

<b>Subjects/Contents</b>	<b>Teaching hours</b>	<b>Self Directed Learning (hours)</b>	<b>Total hours</b>
Orientation	30	0	30
Skills Module	35	0	35
Field visit to Community Health Centre	8	0	8
Introduction to Professional Development & AETCOM Module	-	-	40
Sports & extracurricular activities	22	0	22
Enhancement of language/computer skills	40	0	40
<b>Total</b>	-	-	<b>175</b>

- (a) The Orientation course will be completed as single block in the first week and will contain elements outlined in clause 9.1 of the Regulations on Graduate Medical Education (Amendment), 2019.
- (b) Skill Modules will contain elements outlined in clause 9.1 as above.
- (c) Based on the perceived need of learners, one may choose language enhancement (English or local spoken or both) and computer skills. This should be provided longitudinally through the duration of the Foundation Course.
- (d) Teaching of Foundation Course will be organized by pre-clinical departments.

#### **OC-75.7.2.2 First Professional Teaching Hours**

<b>Subjects</b>	<b>Lectures (hours)</b>	<b>Small group learning (Tutorials/Integrated learning/Practical ( hours)</b>	<b>Self Directed learning (hours)</b>	<b>Total (hours)</b>
Human Anatomy	220	415	40	675
Physiology*	160	310	25	495
Biochemistry	80	150	20	250
Early Clinical Exposure**	90	-	0	90
Community Medicine	20	27	5	52
Attitude, Ethics & Communication Module (AETCOM) ***	-	26	8	34
Sports & extracurricular activities	-	-	-	60
Formative assessment and Term examinations	-	-	-	80
<b>Total</b>	-	-	-	<b>1736</b>

\* including Molecular Biology.

\*\* Early clinical exposure hours to be divided equally in all three subjects.

\*\*\* AETCOM module shall be a longitudinal programme.

**OC-75.7.2.3 Second Professional Teaching Hours**

<b>Subjects</b>	<b>Lectures (hours)</b>	<b>Small group learning (Tutorials/Seminars) /Integrated learning ( hours)</b>	<b>Clinical Postings (hours)</b>	<b>Self Directed learning (hours)</b>	<b>Total (hours)</b>
Pathology	80	138	-	12	230
Pharmacology	80	138	-	12	230
Microbiology	70	110	-	10	190
Community Medicine	20	30	-	10	60
Forensic Medicine & Toxicology	15	30	-	5	50
Clinical subjects	75**	-	540***	-	615
Attitude, Ethics & Communication module (AETCOM)	-	29	-	8	37
Sports and extracurricular activities	-	-	-	28	28
<b>Total</b>	-	-	-	-	<b>1440</b>

\* At least 3 hours of clinical instruction each week must be allotted to training in clinical and procedural skill laboratories. Hours may be distributed weekly or as a block in each posting based on institutional logistics.

\*\* 25 hours each for Medicine, Surgery and Gynecology & Obstetrics.

\*\*\*The clinical postings in the Second Professional shall be 15 hours per week (3 hrs per day from Monday to Friday).

**OC-75.7.2.4 Third Professional Part I Teaching Hours**

<b>Subjects</b>	<b>Lecture hours</b>	<b>Small group teaching / tutorials / integrated learning / practical (hours)</b>	<b>Self directed learning (hours)</b>	<b>Total (hours)</b>
General Medicine	25	35	5	65



General Surgery	25	35	5	65
OBG	25	35	5	65
Pediatrics	20	30	5	55
Orthopedics	15	20	5	40
Forensic Medicine & Toxicology	25	45	5	75
Community Medicine	40	60	5	105
Dermatology	20	5	5	30
Psychiatry	25	10	5	40
Respiratory Medicine	10	8	2	20
Otorhinolaryngology	25	40	5	70
Ophthalmology	30	60	10	100
Radiodiagnosis and Radiotherapy	10	8	2	20
Anesthesiology	8	10	2	20
Clinical Postings *	-	-	-	756
Attitude, Ethics & Communication module (AETCOM)		19	6	25
<b>Total</b>	<b>303</b>	<b>401</b>	<b>66</b>	<b>1551</b>

\* The clinical postings in the Third Professional Part I shall be 18 hours per week (3 hrs per day from Monday to Saturday).

#### **OC-75.7.2.5 Third Professional Part II Teaching Hours**

<b>Subjects</b>	<b>Teaching Hours</b>	<b>Tutorials/ Seminars/ Integrated Teaching (hours)</b>	<b>Self-Directed Learning (hours)</b>	<b>Total* (hours)</b>
General Medicine	70	125	15	210
General Surgery	70	125	15	210
Obstetrics & Gynecology	70	125	15	210
Pediatrics	20	35	10	65
Orthopaedics	20	25	5	50
Clinical postings**	-	-	-	792
Attitude, Ethics & Communication Module (AETCOM)***	28	-	16	43

Electives	-	-	-	200
<b>Total</b>	<b>250</b>	<b>435</b>	<b>60</b>	<b>1780</b>

\* 25% of allotted time of Third Professional shall be utilized for integrated learning with pre- and para- clinical subjects and shall be assessed during the examinations for clinical subjects. This allotted time will be utilized as integrated teaching by para-clinical subjects with clinical subjects (as Clinical Pathology, Clinical Pharmacology and Clinical Microbiology).

\*\* The clinical postings in the Third Professional Part II shall be 18 hours per week (3 hrs per day from Monday to Saturday).

\*\*\* Hours from clinical postings can also be used for AETCOM modules.

### OC-75.7.3 Distribution of Clinical Postings:

Subjects	Period of training in weeks			Total weeks
	II MBBS	III MBBS Part I	III MBBS Part II	
Electives	-	-	8*(4 regular clinical posting)	4
General Medicine <sup>1</sup>	4	4	8+4	20
General Surgery	4	4	8+4	20
Obstetrics & Gynecology <sup>2</sup>	4	4	8+4	20
Pediatrics	2	4	4	10
Community Medicine	4	6	-	10
Orthopedics -including Trauma <sup>3</sup>	2	4	2	8
Otorhinolaryngology	4	4	-	8
Ophthalmology	4	4	-	8
Respiratory Medicine	2	-	-	2
Psychiatry	2	2	-	4
Radiodiagnosis <sup>4</sup>	2	-	-	2
Dermatology, Venereology & Leprosy	2	2	2	6
Dentistry & Anesthesia	-	2	-	2
Casualty	-	2	-	2
<b>Total</b>	<b>36</b>	<b>42</b>	<b>48</b>	<b>126</b>

\* Regular clinical postings shall be accommodated in four of the eight weeks of electives.

Clinical postings may be adjusted within the time framework.

<sup>1</sup> This posting includes Laboratory Medicine (Para-clinical) & Infectious Diseases (Phase III Part I).

<sup>2</sup> This includes maternity training and family welfare (including Family Planning).

<sup>3</sup> This posting includes Physical Medicine and Rehabilitation.

<sup>4</sup> This posting includes Radiotherapy, wherever available.

#### **OC-75.7.4 Duration of Clinical Postings**

- (a) Second Professional : 36 weeks of clinical posting (Three hours per day - five days per week : Total 540 hours)
- (b) Third Professional Part I: 42 weeks of clinical posting (Three hours per day - six days per week : Total 756 hours)
- (c) Third Professional Part II: 44 weeks of clinical posting (Three hours per day - six days per week : Total 792 hours)
- (d) Time allotted excludes time reserved for Internal / University examinations, and vacation.
- (e) Second Professional clinical postings shall commence before / after declaration of results of the First Professional Phase examinations, as decided by the Institution/ University. Third Professional Part I and Part II clinical postings shall start no later than two weeks after the completion of the previous professional examination.
- (f) 25% of allotted time of Third Professional shall be utilized for integrated learning with pre- and para- clinical subjects. This will be included in the assessment of clinical subjects.

#### **OC-75.7.5 Teaching Learning Elements**

##### **OC-75.7.5.1 Electives:**

- (i) The objective of the Elective shall be to provide the learner with opportunities:
  - (a) For diverse learning experiences,
  - (b) To do research/community projects that will stimulate enquiry, self-directed, experiential learning and lateral thinking.
- (ii) Two months shall be designated for elective rotations after completion of the examination at end of the Third MBBS Part I and before commencement of Third MBBS Part II.
- (iii) It shall be mandatory for candidates to do an elective. The elective time should not be used to make up for missed clinical postings, shortage of attendance or other purposes.

##### **(iv) Structure:**

- (a) The learner shall rotate through two elective blocks of 04 weeks each.
- (b) Block 1 shall be done in a pre-selected preclinical or para-clinical or other basic sciences laboratory OR under a researcher in an ongoing research project. Regular clinical postings shall continue during the electives.
- (c) Block 2 shall be done in a clinical department (including specialties, super-specialties, ICUs, blood bank and casualty) from a list of electives developed and available in the institution.  
OR  
as a supervised learning experience at a rural or urban community clinic.

- (d) Institutions shall pre-determine the number and nature of electives, names of the supervisors, and the number of learners in each elective based on the local conditions, available resources and faculty.
- (v) Each institution shall develop its own mechanism for allocation of electives.**
- (a) Elective choices are to be made available to the candidates at the beginning of the academic year.
- (b) Candidates shall maintain and submit a learning log book based on both blocks of the elective.
- (c) 75% attendance in the electives and submission of log book maintained during the elective shall be mandatory for being eligible to appear in the Final MBBS Examination.
- (d) Institutions may use part of this time for strengthening basic skill certification.

**OC-75.7.5.2 Professional Development including Attitude, Ethics and Communication Module (AETCOM)**

**(i) Objectives of the programme:** At the end of the programme, the learner must demonstrate ability to:

- (a) understand and apply principles of bioethics and law as they apply to medical practice and Research
- (b) understand and apply the principles of clinical reasoning as they apply to the care of the patients,
- (c) understand and apply the principles of system based care as they relate to the care of the patient,
- (d) understand and apply empathy and other human values to the care of the patient,
- (e) communicate effectively with patients, families, colleagues and other health care professionals,
- (f) understand the strengths and limitations of alternative systems of medicine,
- (g) respond to events and issues in a professional, considerate and humane fashion,
- (h) translate learning from the humanities in order to further his / her professional and personal growth.

**(ii) Learning experiences:**

- (a) This will be a longitudinal programme spread across the continuum of the MBBS programme including internship,
- (b) Learning experiences may include – small group discussions, patient care scenarios, workshop, seminars, role plays, lectures etc.
- (c) Attitude, Ethics & Communication Module (AETCOM module) developed by Medical Council of India should be used longitudinally for purposes of instruction.

**(iii) Internal Assessment will include:**

- (a) Written tests comprising of short notes and creative writing experiences,
- (b) OSCE based clinical scenarios / viva voce.

**(iv)** At least one question in each paper of the clinical specialties in the University examination shall test the knowledge competencies acquired during the professional development programme.

**(v)** Skill competencies acquired during the Professional Development Programme must be tested during the clinical, practical and viva voce.

### **OC-75.7.6 Learner – Doctor Programme (Clinical Clerkship)**

<b>Year of Curriculum</b>	<b>Focus of Learner – Doctor Programme</b>
Year 1	Introduction to hospital environment. Early clinical exposure. Understanding perspectives of illness
Year 2	History taking, Physical examination. Assessment of change in clinical status, communication and patient education
Year 3	All of the above and choice of investigations, basic procedures and continuity of care
Year 4	All of the above and decision making, management and outcomes

### **OC-75.8 Assessment**

#### **OC-75.8.1. Eligibility to appear for Professional Examinations**

The performance in essential components of training are to be assessed, based on:

##### **(a) Attendance**

- (i) Candidates shall have a minimum attendance of 75% in theory and 80% in practical /clinical to be eligible to appear for the examinations in that subject. In subjects that are taught in more than one phase – the learner must have 75% attendance in theory and 80% in practical in each phase of instruction in that subject.
- (ii) If an examination comprises more than one subject (for e.g., General Surgery and allied branches), the candidate must have 75% attendance in each subject and 80% attendance in each clinical posting.
- (iii) Candidates who do not have at least 75% attendance in the electives will not be eligible for the Third Professional - Part II examination.

##### **(b) Internal Assessment:**

Internal assessment shall be based on day-to-day assessment. It shall relate to different ways in which candidates participate in the learning process including assignments, preparation for seminar, clinical case presentation, preparation of clinical case for discussion, clinical case study/problem solving exercise, participation in project for health care in the community, proficiency in carrying out a practical or a skill in small research project, a written test etc.

- (i) Regular periodic examinations shall be conducted throughout the course. There shall be no less than three internal assessment examinations in each Preclinical

/ Para-clinical subject and no less than two examinations in each clinical subject in a professional year. An end of posting clinical assessment shall be conducted for each clinical posting in each professional year.

- (ii) When subjects are taught in more than one phase, the internal assessment must be done in each phase and must contribute proportionately to final assessment. For example, General Medicine must be assessed in Second Professional, Third Professional Part I and Third Professional Part II, independently.
- (iii) Day to day records and log book (including required skill certifications) should be given importance in internal assessment. Internal assessment should be based on competencies and skills.
- (iv) The final internal assessment in a broad clinical specialty (e.g., Surgery and allied specialties etc.) shall comprise of marks from all the constituent specialties. The proportion of the marks for each constituent specialty shall be determined by the time of instruction allotted to each.
- (v) Learners must secure at least 50% marks of the total marks (combined in theory and practical / clinical; not less than 40% marks in theory and practical separately) assigned for internal assessment in a particular subject in order to be eligible for appearing at the final University examination of that subject. Internal assessment marks will reflect as a separate head of passing at the summative examination.
- (vi) The results of internal assessment should be displayed on the notice board within 1-2 weeks of the test. Universities shall guide the colleges regarding formulating policies for remedial measures for students who are either not able to score qualifying marks or have missed on some assessments due to any reason.
- (vii) Candidates must have completed the required certifiable competencies for that phase of training and completed the log book appropriate for that phase of training to be eligible for appearing at the final university examination of that subject.

#### **OC-75.8.2 University Examinations**

- (a) University examinations shall be designed with a view to ascertain whether the candidate has acquired the necessary knowledge, minimal level of skills, ethical and professional values with clear concepts of the fundamentals which are necessary for him/her to function effectively and appropriately as a physician of first contact. Assessment shall be carried out on an objective basis to the extent possible.
- (b) The nature of questions shall include different types such as structured essays (Long Answer Questions- LAQ), Short Answers Questions (SAQ) and objective type questions (e.g. Multiple Choice Questions - MCQ). Marks for each part should be indicated separately. MCQs shall be accorded a weightage of not more than 20% of the total theory marks. In subjects that have two papers,

the learner must secure at least 40% marks in each of the papers with minimum 50% of marks in aggregate (both papers together) to pass.

- (c) Practical/clinical examinations shall be conducted in the laboratories and /or hospital wards. The objective will be to assess proficiency and skills to conduct experiments, interpret data and form logical conclusions. Clinical cases kept in the examination must be common conditions that the learner may encounter as a physician of first contact in the community. Selection of rare syndromes and disorders as examination cases is to be discouraged. Emphasis should be on the candidate's capability to elicit history, demonstrate physical signs, write a case record, analyze the case and develop a management plan.
- (d) Viva/oral examination should assess the candidate's approach to patient management, emergencies, attitudinal, ethical and professional values. The candidate's skill in interpretation of common investigative data, X-rays, identification of specimens, ECG, etc. is also to be assessed.
- (e) There shall be one main examination in an academic year and a supplementary examination to be held not later than 90 days after the declaration of the results of the main examination.

### **OC-75.8.3 University Examinations shall be held as under:**

#### **(a) First Professional**

- (i) The First Professional examination shall be held at the end of First Professional training (1+12 months), in the subjects of Human Anatomy, Physiology and Biochemistry.
- (ii) A maximum number of four permissible attempts would be available to clear the First Professional University examination, whereby the First Professional course will have to be cleared within 4 years of admission to the said course. Partial attendance at any University examination shall be counted as an availed attempt.

#### **(b) Second Professional**

- (i) The Second Professional examination shall be held at the end of Second Professional Training (11 months), in the subjects of Pathology, Microbiology, and Pharmacology.

#### **(c) Third Professional**

- (i) The Third Professional Part I shall be held at end of Third Professional Part 1 of Training (12months) in the subjects of Ophthalmology, Otorhinolaryngology, Community Medicine and Forensic Medicine and Toxicology.
- (ii) The Third Professional Part II - (Final Professional) examination shall be at the end of training (14 months including 2 months of electives) in the subjects of General Medicine, General Surgery, Obstetrics & Gynecology and Pediatrics. The discipline of Orthopedics, Anesthesiology, Dentistry and Radiodiagnosis shall constitute 25% of the total theory marks incorporated as a separate section in Paper II of General Surgery.

(iii) The discipline of Psychiatry and Dermatology, Venereology and Leprosy (DVL), Respiratory Medicine including Tuberculosis will constitute 25% of the total theory marks in General Medicine incorporated as a separate section in Paper II of General Medicine.

(d) Examination schedule shall be as per the academic terms decided by the University.

(e) Marks distribution for the various subjects and passing criteria shall be as under:

Phase of Course	Written-Theory - Total	Practicals/ Orals/ Clinicals	Pass Criteria
<b>First Professional</b>			<u>Internal Assessment:</u> 50% combined in theory and practical (not less than 40% in each) for eligibility for appearing for University Examinations
Human Anatomy - 2 papers	200	100	
Physiology - 2 papers	200	100	
Biochemistry - 2 papers	200	100	<u>University Examination</u> Mandatory 50% marks separately in theory and practical (practical = practical/clinical + viva)
<b>Second Professional</b>			
Pharmacology - 2 Papers	200	100	
Pathology - 2 papers	200	100	
Microbiology - 2 papers	200	100	
<b>Third Professional Part – I</b>			
Forensic Medicine & Toxicology - 1 paper	100	100	
Ophthalmology – 1 paper	100	100	
Otorhinolaryngology – 1 paper	100	100	
Community Medicine - 2 papers	200	100	
<b>Third Professional Part – II</b>			
General Medicine - 2 papers	200	200	
General Surgery - 2 papers	200	200	
Pediatrics – 1 paper	100	100	
Obstetrics & Gynaecology - 2 papers	200	200	

(f) At least one question in each paper of the clinical specialties should test knowledge -competencies acquired during the Professional Development Programme (AETCOM module); Skills competencies acquired during the Professional Development Programme (AETCOM module) must be tested during clinical, practical and viva.

(g) In subjects that have two papers, a candidate must secure at least 40% marks in each of the papers with minimum 50% of marks in aggregate (both papers together) to pass in the said subject.

**OC-75.8.4 Criteria for passing in a subject:** A candidate shall have to obtain a minimum of 50% marks at the University examination separately in Theory and Practical (practical includes: practical/ clinical and viva voce) in order to pass



in that subject.

### **OC-75.8.5 Appointment of Examiners**

- (a) A Person appointed as an examiner in a particular subject must have at least four years of total teaching experience as Assistant Professor after obtaining postgraduate degree in the subject in a college affiliated to a recognized/approved/permitted medical college.
- (b) For the Practical/ Clinical examinations, there shall be at least four examiners for 100 candidates, of whom not less than 50% must be external examiners. Of the four examiners, the senior-most internal examiner will act as the Chairman and coordinator of the whole examination programme so that uniformity in the matter of assessment of candidates is maintained. Where candidates appearing are more than 100, two additional examiners (one external & one internal) for every additional 50 or part thereof of candidates appearing are to be appointed.
- (c) In case of non-availability of medical teachers, approved teachers without a medical degree (engaged in the teaching of MBBS students as full-time teachers in a recognized medical college), may be appointed examiners in their concerned subjects provided they possess requisite doctorate qualifications and four years teaching experience (as assistant professors) of MBBS students. Provided further that at least 50% of the examiners (Internal & External) are from the medical qualification stream.
- (d) External examiners may not be from the same University.
- (e) The internal examiner in a subject shall not accept external examinership for a college from which external examiner is appointed in his/her subject.
- (f) In case of more than one college there shall be separate sets of examiners for each college, with internal examiners from the concerned college.
- (g) External examiners shall rotate at an interval of 2 years.
- (h) There shall be a Chairman of the Board of paper-setters who shall be an internal examiner and shall moderate the questions.
- (i) All eligible examiners with requisite qualifications and experience can be appointed internal examiners by rotation in their subjects.
- (j) All theory paper assessment shall be carried through the Central Assessment Program (CAP) of the University.
- (k) Internal examiners shall be appointed from the same institution for unitary examination in the same institution. For pooled examinations at one Centre, approved internal examiners from the University may be appointed.
- (l) Grace marks up to a maximum of five marks shall be awarded to a candidate for clearing the examination as a whole but not for clearing a subject resulting in exemption.

### **OC-75.9 Internship**

- (a) For being eligible for the award of the degree of Bachelor of Medicine and Bachelor of Surgery, a candidate shall be required to successfully undergo the Compulsory Rotatory Internship Training of twelve months duration, in the manner hereinafter provided, to the satisfaction of the Head of the Institution and Goa University.
- (b) Internship shall be a phase of training wherein a graduate will acquire the skills and competencies for practice of medical and health care under supervision so that he/she can be certified for independent medical practice as an Indian Medical Graduate. In order to make trained work force available, it may be considered as a phase of training wherein the graduate is expected to conduct actual practice under the supervision of a trained doctor. The learning methods and modalities have to be done during the MBBS Programme itself with larger number of hands-on sessions and practice on simulators.
- (c) The goal of the internship programme is to train medical students to fulfill their roles as doctors of first contact in the community.

#### **OC-75.9.1 Objectives:**

At the end of the internship period, the medical graduate will possess the following competencies required of an Indian Medical Graduate:

- (a) Independently provide preventive, promotive, curative and palliative care with compassion,
- (b) Function as leader and member of the health care team and health system,
- (c) Communicate effectively with patients, families, colleagues and the community,
- (d) Be certified in diagnostic and therapeutic skills in different disciplines of medicine taught in the undergraduate programme,
- (e) Be a lifelong learner committed to continuous improvement of skills and knowledge,
- (f) Be a professional committed to excellence, who is ethical, responsive and accountable to patients, the community and the profession.

#### **OC-75.9.2 Time Distribution**

Community Medicine (Residential posting)	2 months
General Medicine including 15 days of Psychiatry	2 months
General Surgery including 15 days Anaesthesia	2 months
Obstetrics & Gynaecology including Family Welfare Planning	2 months
Pediatrics	1 month
Orthopaedics including PM & R	1 month
Otorhinolaryngology	15 days
Ophthalmology	15 days
Casualty	05 days
Elective posting (1x15 days)	15 days

**OC-75.9.3** The Subjects for Elective posting will be as follows:

- (a) Dermatology, Venereology & Leprosy
- (b) Respiratory Medicine
- (c) Radio diagnosis
- (d) Forensic Medicine & Toxicology
- (e) Blood Bank
- (f) Psychiatry

Note: Structured internship with assessment at the end in the College.

**OC-75.9.4 Other details:**

- (a) The core rotations of the internship shall be done in primary and secondary/ tertiary care institutions in India. In case of any difficulties, the matter may be referred to the Medical Council of India to be considered on individual merit.
- (b) Every candidate shall be required, after passing the final MBBS examination, to undergo compulsory rotational internship to the satisfaction of the College authorities and University for a period of 12 months so as to be eligible for the award of the degree of Bachelor of Medicine and Bachelor of Surgery (MBBS) and full registration.
- (c) The University shall issue a provisional MBBS pass certificate on passing the final examination.
- (d) The State Medical Council will grant provisional registration to the candidate upon production of the provisional MBBS pass certificate. The provisional registration will be for a period of one year. In the event of the shortage or unsatisfactory work, the period of provisional registration and the compulsory rotating internship shall be suitably extended by the appropriate authorities.
- (e) Interns shall be entrusted with clinical responsibilities under the direct supervision of a designated supervising physician. They shall not work independently.
- (f) Interns will not issue medical certificates or death certificates or other medico-legal documents under their signature.
- (g) Each medical college must ensure that the student gets learning experience in primary/ secondary and urban/rural centers in order to provide a diverse learning experience and facilitate the implementation of national health programmes/ priorities. These shall include community and outreach activities, collaboration with rural and urban community health centers, participation in government health missions, etc.
- (h) One year's approved service in the Armed Forces Medical Services, after passing the final MBBS examination shall be considered as equivalent to the pre-registration training detailed above; such training shall, as far as possible, be at

the Base/General Hospital. The training in Community Medicine should fulfill the norms of the MCI as proposed above.

- (i) In recognition of the importance of hands-on experience, full responsibility for patient care and skill acquisition, internship should be increasingly scheduled to utilize clinical facilities available in District Hospitals, Taluka Hospitals, Community Health Centres and Primary Health Centres, in addition to the Teaching Hospitals. A critical element of internship will be the acquisition of specific experiences and skills as listed in major areas; provided that where an intern is posted to a District/Sub-Divisional Hospital for training, there shall be a committee consisting of representatives of the College/University, the State Government and the District Administration, who shall regulate the training of such trainee. Provided further that, for such trainee a certificate of satisfactory completion of training shall be obtained from the relevant administrative authorities which shall be countersigned by the Principal/Dean of College

#### **OC-75.9.5 Assessment of Internship:**

- (a) The intern shall maintain a record of work in a log book, which is to be verified and certified by the medical officer under whom he/she works. Apart from scrutiny of the record of work, assessment and evaluation of training shall be undertaken by an objective approach using situation tests in knowledge, skills and attitude during, and at the end of the training.
- (b) Based on the record of work and objective assessment at the end of each posting, the Dean/Principal shall issue a cumulative certificate of satisfactory completion of training at the end of internship, following which the University shall award the MBBS degree or declare him/her eligible for it.
- (c) Full registration shall only be given by the State Medical Council/Medical Council of India on the award of the MBBS degree by the University or its declaration that the candidate is eligible for it.

#### **OC-75.10 Guidelines for the implementation of the INTERNSHIP – DISCIPLINE-RELATED Training Programme:**

##### **OC-75.10.1 Community Medicine**

The aim of teaching the undergraduate student in Community Medicine is to impart such knowledge and skills that may enable him to diagnose and treat common medical illnesses and recognize the importance of community involvement. He/she shall acquire competence to deal effectively with an individual and the community in the context of primary health care. This is to be achieved by hands-on experience in the District Hospital and Primary Health Centre. The details are as under: -

**I) District Hospital /Community Health Centre/Attachment to General Practitioner:**

**A]. An intern must be able to do the following without assistance:**

1. An intern must:

- a) Be able to diagnose common ailments and advise primary care;
- b) Demonstrate knowledge on 'Essential drugs' and their usage;
- c) Recognize medical emergencies, resuscitate and institute initial treatment and refer to a suitable institution.

2. An intern must be familiar with all National Health Programmes (e.g. RCH, UIP, CDD, ARI, FP,ANC, Tuberculosis, Leprosy and others), as recommended by the Ministry of Health and Family Welfare.

3. An intern must:

- a) Gain full expertise in immunization against infectious disease;
- b) Participate in programmes related to prevention and control of locally prevalent endemic diseases including nutritional disorders;
- c) Learn skills in family welfare planning procedures;

4. An intern must:

- a) Conduct programmes on health education,
- b) Gain capabilities to use Audiovisual aids,
- c) Acquire capability of utilization of scientific information for promotion of community health

**B] An intern must have observed or preferably assisted at the following:**

1. An intern should be capable of establishing linkages with other agencies as water supply, food distribution and other environmental/social agencies

2. An intern should acquire managerial skills including delegation of duties to and monitoring the activities of paramedical staff and other health professionals.

**II) Taluka Hospital/ First Referral Unit**

**A ] An intern must be able to do the following without assistance:**

1. An intern shall provide health education to an individual/community on:

- a) Tuberculosis,
- b) Small family, spacing, use of appropriate contraceptives,
- c) Applied nutrition and care of mothers and children,
- d) Immunization

**B] An intern must be able to do with supervision:**

An intern shall attend at least one school health programme with the medical officer.

**III) Primary Health Centre / Urban Health Centre**

**A] An intern must be able to do the following without assistance:**

- a) Participate in family composite health care (birth to death), inventory of events.
- b) Participate in use of the modules on field practice for community health e.g. safe motherhood, nutrition surveillance and rehabilitation, diarrheal disorders, etc.
- c) Participate in and maintain documents related to immunization and cold chain.

- d) Acquire competence in diagnosis and management of common ailments e.g. malaria, tuberculosis, enteric fever, congestive heart failure, hepatitis, meningitis, acute renal failure, etc.

**B] An intern must be able to do under supervision the following:**

- a) Acquire proficiency in Family Welfare Programmes (antenatal care, normal delivery, contraception etc.).
- b) Undergo village attachment of at least one week duration to understand issues of community health along with exposure to village health centres, ASHA Sub Centres.
- c) Participate in Infectious Diseases Surveillance and Epidemic Management activities along with the medical officer.

**OC-75.10.2 General Medicine**

The aim of teaching the undergraduate student in General Medicine is to impart such knowledge and skills that may enable him to diagnose and treat common medical illnesses. He/she shall acquire competence in clinical diagnosis based on history, physical examination and relevant laboratory investigations and institute appropriate line of management; this would include diseases common in tropics (parasitic, bacterial or viral infections, nutritional disorders, including dehydration and electrolyte disturbances) and various system illnesses.

**A] An intern must be able to do without assistance and interpret the results of:**

1. The following laboratory investigations:
  - a) Blood: (Routine haematology smear and blood groups),
  - b) Urine: (Routine chemical and microscopic examination),
  - c) Stool: (for ova/cyst and occult blood),
  - d) Sputum and throat swab for gram stain or acid-fast stain, and
  - e) Cerebrospinal Fluid (CSF) for smear,
  - f) Electrocardiogram (ECG),
  - g) Glucometer recording of blood sugar,
  - h) Routine radiographs of chest, abdomen, skull etc.
  
2. Perform independently the following:
  - a) Diagnostic procedures such as Proctoscopy, Ophthalmoscopy/Otology, Indirect laryngoscopy.
  - b) Therapeutic procedures such as Urethral catheterization, Insertion of Ryle's Tube, Pleural, Ascitic fluid aspiration, Cerebrospinal Fluid (CSF) aspiration, Air way tube installation, Oxygen administration etc.

**B] An intern must have observed or preferably assisted at the following operations/ procedures:**

- a) Biopsy Procedures: Liver, Kidney, Skin, Nerve, Lymph node, and muscle biopsy, Bone marrow aspiration, Biopsy of Malignant lesions on surface, nasal/nerve/skin smear for leprosy, under supervision.

**C] Skills that an intern should be able to perform under supervision:**

- a) An intern should be familiar with lifesaving procedures, including use of aspirator, respirator and defibrillator, cardiac monitor, blood gas analyser.
- b) An intern should be able to advise about management and prognosis of acute & chronic illnesses like viral fever, gastroenteritis, hepatitis, pneumonias, myocardial infarction and angina, TIA and stroke, seizures, diabetes mellitus, hypertension, renal and hepatic failure, thyroid disorders and hematological disorders. He/she should participate in counseling sessions for patients with non-communicable diseases and tuberculosis, HIV patients etc.
- c) An intern should be able to confirm death and demonstrate understanding of World Health Organisation cause of death reporting and data quality requirements.
- d) An intern should be able to demonstrate understanding of the coordination with local and national epidemic management plans
- e) An intern shall be able to demonstrate prescribing skills and demonstrate awareness of pharmacovigilance, antibiotics policy, prescription audit and the concept of essential medicines list.

**OC-75.10.3 Pediatrics**

The aim of teaching the undergraduate student in Pediatrics is to impart such knowledge and skills that may enable him to diagnose and treat common childhood illnesses including neonatal disorders. He/she shall acquire competence for clinical diagnosis based on history, physical examination and relevant laboratory investigations and institute appropriate line of management; this would include diseases common in tropics (parasitic, bacterial or viral infections, nutritional disorders, including dehydration and electrolyte disturbances) and various system illnesses.

**A] An intern must be able to do without assistance:**

An intern shall be able to diagnose and manage common childhood disorders including neonatal disorders and acute emergencies, examining a sick child, and making a record of information.

An intern shall perform:

- a) Diagnostic techniques: blood collection (including from femoral vein and umbilical cord), drainage of abscess, collection of cerebrospinal, pleural and peritoneal fluids, suprapubic aspiration of urine.
- b) Techniques related to patient care: immunization, perfusion techniques, nasogastric tube insertion, feeding procedures, tuberculin testing & breast-feeding counseling.
- c) Use of equipments: vital monitoring, temperature monitoring, resuscitation at birth and care of children receiving intensive care.
- d) Institute early management of common childhood disorders, with special reference to pediatric dosage and oral rehydration therapy.

**B] An intern must have observed or preferably assisted at the following operations/ procedures:**

- a) Screening of newborn babies and those with risk factors for any anomalies and steps for prevention in future; detect congenital abnormalities;
- b) Recognise growth abnormalities; recognise anomalies of psychomotor development;

- c) Assess nutritional and dietary status of infants and children and organize prevention, detection and follow up of deficiency disorders both at individual and community levels, such as protein-energy malnutrition, deficiencies of vitamins especially A, B, C and D; Iron deficiency

**C] Skills that an intern should be able to perform under supervision:**

- a) An intern should be familiar with life-saving procedures, including use of aspirator, respirator, cardiac monitor, blood gas analyser.
- b) An intern should be able to advise about management and prognosis of acute & chronic illnesses like viral fever, gastroenteritis, hepatitis, pneumonias, congenital heart diseases, seizures, renal and hepatic diseases, thyroid disorders and hematological disorders. He/she should participate in counseling sessions with parents including HIV counseling.

**OC-75.10.4 General Surgery**

The aim of teaching the undergraduate student in General Surgery is to impart such knowledge and skills that may enable him to diagnose and treat common surgical ailments. He/she shall have the ability to diagnose and suspect with reasonable accuracy, all acute and chronic surgical illnesses.

**A] Therapeutic - An intern must perform or assist in:**

- a) Venesection or venous access
- b) Tracheostomy and endotracheal intubation
- c) Catheterization of patients with acute retention or trocar cystostomy
- d) Drainage of superficial abscesses
- e) Basic suturing of wound and wound management (including bandaging)
- f) Biopsy of surface tumours
- g) Perform vasectomy

**B] Skill that an intern should be able to perform under supervision:**

- a) Advise about prognosis of acute & chronic surgical illnesses, head injury, trauma, burns and cancer. Counsel patients regarding the same.
- b) Advise about rehabilitation of patients after surgery and assist them for early recovery.
- c) An intern should be able to demonstrate understanding of World Health Organisation cause of death reporting and data quality requirements.
- d) An intern should be able to demonstrate understanding of the use of national and sub-national cause of death statistics.

**C] An intern must have observed or preferably assisted at the following operations/procedures:**

- a) Resuscitation of critical patients
- b) Basic surgical procedures for major and minor surgical illnesses
- c) Wound dressings and application of splints
- d) Laparoscopic/ Minimally Invasive surgery
- e) Lymph node biopsy

**OC-75.10.5 Casualty:**

The aim of teaching the undergraduate student in casualty is to impart such



knowledge and skills that may enable him/her to diagnose and treat common acute surgical /medical ailments. He/she shall have the ability to diagnose and suspect, with reasonable accuracy, acute surgical illnesses including emergencies, resuscitate a critically injured patient and a severely burned patient, control surface bleeding and manage open wounds and monitor and institute first-line management of patients of head, spine, chest, abdominal and pelvic injury as well as acute abdomen.

**A] Therapeutic- An intern must perform or assist in:**

- a) Identification of acute emergencies in various disciplines of medical practice,
- b) Management of acute anaphylactic shock,
- c) Management of peripheral-vascular failure and shock,
- d) Management of acute pulmonary edema and Left Ventricular Failure (LVF),
- e) Emergency management of drowning, poisoning and seizure,
- f) Emergency management of bronchial asthma and status asthmaticus,
- g) Emergency management of hyperpyrexia,
- h) Emergency management of comatose patients regarding airways, positioning, prevention of aspiration and injuries,
- i) Assessment and administering emergency management of burns,
- j) Assessing and implementing emergency management of various trauma victims,
- k) Identification of medico-legal cases and learn filling up of forms as well as complete other medico-legal formalities in cases of injury, poisoning, sexual offenses, intoxication and other unnatural conditions.

**B] Skill that an intern should be able to perform under supervision:**

- a) Advise about prognosis of acute surgical illnesses, head injury, trauma and burns. Counsel patients regarding the same.

**C] An intern must have observed or preferably assisted at the following operations/ procedures:**

- a) Resuscitation of critical patients
- b) Documentation of medico legal cases
- c) Management of bleeding and application of splints

**OC-75.10.6 Obstetrics and Gynaecology**

The aim of teaching the undergraduate student in Obstetrics & Gynaecology is to impart such knowledge and skills that may enable him/her to diagnose and manage antenatal and post natal follow up; manage labor and detect intrapartum emergencies; diagnose and treat common gynaecologic ailments

**A] Therapeutic - An intern must perform or assist in:**

- a) Diagnosis of early pregnancy and provision of antenatal care; antenatal pelvic assessment and detection of cephalopelvic disproportion
- b) Diagnosis of pathology of pregnancy related to abortion, ectopic pregnancy, tumours complicating pregnancy, acute abdomen in early pregnancy, hyper emesis gravidarum,
- c) Detection of high risk pregnancy cases and give suitable advice e.g. PIH, hydramnios, antepartum haemorrhage, multiple pregnancies, abnormal presentations and intra-uterine growth retardation,
- d) Induction of labor and amniotomy under supervision,

- e) Management of normal labor, detection of abnormalities, post-partum hemorrhage and repair of perineal tears,
- f) Assist in forceps delivery,
- g) Detection and management of abnormalities of lactation,
- h) Evaluation and prescription of oral contraceptives with counseling,
- i) Per speculum, per vaginam and per rectal examination for detection of common congenital, inflammatory, neoplastic and traumatic conditions of vulva, vagina, uterus and ovaries,
- j) Medico-legal examination in Gynecology and Obstetrics.

**B] Skills that an intern should be able to perform under supervision:**

- a) Dilatation and curettage and fractional curettage,
- b) Endometrial biopsy,
- c) Endometrial aspiration,
- d) Pap smear collection,
- e) Intra Uterine Contraceptive Device (IUCD) insertion,
- f) Minilap ligation,
- g) Urethral catheterization,
- h) Suture removal in postoperative cases,
- i) Cervical punch biopsy.

**C] An intern must have observed or preferably assisted at the following operations/ procedures:**

- a) Major abdominal and vaginal surgery cases,
- b) Second trimester Medical Termination of Pregnancy (MTP) procedures e.g. Emcredyl Prostaglandin instillations, Caesarean section.

**OC-75.10.7 Otorhinolaryngology (ENT)**

The aim of teaching the undergraduate student in Otorhinolaryngology is to impart such knowledge and skills that may enable him/her to diagnose and treat common otorhinolaryngological conditions such as ear pain, foreign bodies and acquire ability for a comprehensive diagnosis of common Ear, Nose and Throat (ENT) diseases including emergencies and malignant neoplasms of the head and neck.

**A] Therapeutic - An intern must perform or assist in:**

- a) Ear syringing, antrum puncture and packing of the nose for epistaxis,
- b) Nasal douching and packing of the external canal,
- c) Removing foreign bodies from nose and ear,
- d) Observing or assisting in various endoscopic procedures and tracheostomy.

**B] Skill that an intern should be able to perform under supervision:**

- a) An intern shall have participated as a team member in the diagnosis of various ENT- related diseases and be aware of National programme on prevention of deafness,
- b) An intern shall acquire knowledge of various ENT related rehabilitative programmes.

**C] An intern must have observed or preferably assisted at the following operations/ procedures:**

- a) An Intern shall acquire skills in the use of head mirror, otoscope and indirect laryngoscopy and first line of management of common Ear Nose and Throat (ENT) problems.

### **OC-75.10.8 Ophthalmology**

The aim of teaching the undergraduate student in Ophthalmology is to impart such knowledge and skills that may enable him/her to diagnose and treat common ophthalmological conditions such as Trauma, Acute conjunctivitis, allergic conjunctivitis, xerosis, entropion, corneal ulcer, iridocyclitis, myopia, hypermetropia, cataract, glaucoma, ocular injury and sudden loss of vision.

**A] Therapeutic - An intern must perform or assist in:**

- a) Subconjunctival injection
- b) Ocular bandaging
- c) Removal of concretions
- d) Epilation and electrolysis
- e) Corneal foreign body removal
- f) Cauterization of corneal ulcers
- g) Chalazion removal
- h) Entropion correction
- i) Suturing conjunctival tears
- j) Lids repair
- k) Glaucoma surgery (assisted)
- l) Enucleation of eye in cadaver.

**B] Skill that an intern should be able to perform under supervision:**

- a) Advise regarding methods for rehabilitation of the blind.

**C] An intern must have observed or preferably assisted at the following operations/ procedures:**

- a) Assessment of refractive errors and advise its correction,
- b) Diagnose ocular changes in common systemic disorders,
- c) Perform investigative procedures such as tonometry, syringing, direct ophthalmoscopy, subjective refraction and fluorescein staining of cornea.

### **OC-75.10.9 Orthopaedics**

The aim of teaching the undergraduate student in Orthopaedics and Physical Medicine and Rehabilitation is to impart such knowledge and skills that may enable him to diagnose and treat common ailments. He/she shall have ability to diagnose and suspect presence of fracture, dislocation, actinosteomyelitis, acute poliomyelitis and common congenital deformities such as congenital talipes equinovarus (CTEV) and dislocation of hip (CDH).

**A] Therapeutic - An intern must assist in:**

- a) Splinting (plaster slab) for the purpose of emergency splintage, definitive splintage and postoperative splintage and application of Thomas splint,
- b) Manual reduction of common fractures – phalangeal, metacarpal, metatarsal and Colles' fracture,

- c) Manual reduction of common dislocations – interphalangeal, metacarpophalangeal, elbow and shoulder dislocations,
- d) Plaster cast application for undisplaced fractures of arm, forearm, leg and ankle,
- e) Emergency care of a multiple injury patient,
- f) Transport and bed care of spinal cord injury patients.

**B] Skill that an intern should be able to perform under supervision:**

- a) Advise about prognosis of poliomyelitis, cerebral palsy, CTEV and CDH,
- b) Advise about rehabilitation of amputees and mutilating traumatic and leprosy deformities of hand.

**C] An intern must have observed or preferably assisted at the following operations:**

- a) Drainage for acute osteomyelitis,
- b) Sequestrectomy in chronic osteomyelitis,
- c) Application of external fixation,
- d) Internal fixation of fractures of long bones.

**OC-75.10.10 Dermatology, Venereology and Leprosy**

The aim of teaching the undergraduate student in Dermatology, Venereology & Leprosy is to impart such knowledge and skills that may enable him/her to diagnose and treat common dermatological infections and leprosy. He/she shall acquire competence for clinical diagnosis based on history, physical examination and relevant laboratory investigations and institute appropriate line of management; this would include diseases common in tropics (parasitic, bacterial or viral infections), and cutaneous manifestations of systemic illnesses.

**A] Therapeutic: At the end of internship an intern must be able to:**

- a) Conduct proper clinical examination; elicit and interpret physical findings, and diagnose common disorders and emergencies,
- b) Perform simple, routine investigative procedures for making bedside diagnosis, especially the examination of scraping for fungus, preparation of slit smears and staining for AFB for leprosy patient and for STD cases,
- c) Manage common diseases recognizing the need for referral for specialized care in case of inappropriateness of therapeutic response.

**B] An intern must have observed or preferably assisted at the following operations/ procedures:**

- a) Skin biopsy for diagnostic purpose

**OC-75.10.11 Psychiatry**

The aim of teaching the undergraduate student in Psychiatry is to impart such knowledge and skills that may enable him/her to diagnose and treat common psychiatric illnesses. He/she shall acquire competence for clinical diagnosis based on history, physical examination and relevant laboratory investigations and institute appropriate line of management. He/she should also be able to recognize the behavioural manifestations of systemic illnesses.

**A] Therapeutic: An intern must perform or assist in:**

- a) Diagnosing and managing common psychiatric disorders,
- b) Identifying and managing psychological reactions,
- c) Diagnosing and managing behavioural disorders in medical and surgical patients.

**B] An intern must have observed or preferably assisted at the following operations/ procedures:**

- a) ECT administration,
- b) Therapeutic counseling and follow-up.

**OC-75.10.12 Respiratory Medicine**

The aim of teaching the undergraduate student in Respiratory Medicine is to impart such knowledge and skills that may enable him/her to diagnose and treat common respiratory illnesses. He/she shall acquire competence for clinical diagnosis based on history, physical examination and relevant laboratory investigations and institute appropriate line of management.

**A] Therapeutic: An intern must perform or assist in:**

- a) Diagnosing and managing common respiratory disorders and emergencies,
- b) Simple, routine investigative procedures required for making bedside diagnosis, especially sputum collection, examination for etiological organism like AFB, interpretation of chestX-rays and respiratory function tests,
- c) Interpreting and managing various blood gases and pH abnormalities in various illnesses.

**B] An intern must have observed or preferably assisted at the following operations/ procedures:**

- a) Laryngoscopy,
- b) Pleural aspiration, respiratory physiotherapy, laryngeal intubation and pneumo-thoracic drainage aspiration,
- c) Therapeutic counseling and follow up.

**OC-75.10.13 Anaesthesiology**

The aim of teaching the undergraduate student in Anaesthesia is to impart such knowledge and skills that may enable him/her to understand principles of Anaesthesia and recognize risk and complications of Anaesthesia. At the end of internship, the graduate should be able to perform cardio-pulmonary resuscitation correctly, including recognition of cardiac arrest.

**A] Therapeutic: An intern must perform or assist in:**

- a) Pre-anaesthetic checkup and prescribe pre-anaesthetic medications,
- b) Venepuncture and set up intravenous drip,
- c) Laryngoscopy and endotracheal intubation,
- d) Lumbar puncture, spinal anaesthesia and simple nerve blocks,
- e) Simple general anaesthetic procedures under supervision,
- f) Monitor patients during anaesthesia and in the post-operative period,
- g) Maintain anaesthetic records,

- h) Perform cardio-pulmonary resuscitation correctly, including recognition of cardiac arrest.

**B] Skill that an intern should be able to perform under supervision:**

- a) Counseling and advise regarding various methods of anaesthesia,
- b) Recognise and manage problems associated with emergency anaesthesia,
- c) Recognise and treat complications in the post-operative period.

**C] An intern must have observed or preferably assisted at the following operations/ procedures:**

- a) Anaesthesia for major and minor surgical and other procedures;

**OC-75.10.14 Radiodiagnosis**

The aim of teaching the undergraduate student in Radiodiagnosis is to impart such knowledge and skills that may enable him/her to understand principles of imageology and recognize risk and complications of radiologic procedures and the need for protective techniques. At the end of internship, the graduate should be able to counsel and prepare patients for various radiologic procedures.

**A] An intern must acquire competency in:**

- a) Identifying and diagnosing acute abdominal conditions clinically, and choose appropriate imaging modality for diagnosis,
- b) Identifying and diagnosing acute traumatic conditions in bones and skull using X-rays / CT Scans with emphasis on fractures and head injuries,
- c) Recognising basic hazards and precautions in radio-diagnostic practices specially related to pregnancy,
- d) Demonstrating awareness of the various laws like PC PNDDT Act.

**OC-75.10.15 Physical Medicine and Rehabilitation**

The aim of teaching the undergraduate student in Physical Medicine & Rehabilitation is to impart such knowledge and skills that may enable him/her to diagnose and treat common rheumatologic, orthopedic and neurologic illnesses requiring physical treatment. He/she shall acquire competence for clinical diagnosis based on history, physical examination and relevant laboratory investigations and institute appropriate line of management.

**A] Therapeutic: An intern must perform or assist in:**

- a) Diagnosing and managing with competence clinical diagnosis and management based on detailed history and assessment of common disabling conditions like poliomyelitis, cerebral palsy, hemiplegia, paraplegia, amputations etc.
- b) Participation as a team member in total rehabilitation including appropriate follow up of common disabling conditions,
- c) Procedures of fabrication and repair of artificial limbs and appliances.

**B] An intern must have observed or preferably assisted at the following operations/ procedures:**

- a) Use of self-help devices and splints and mobility aids
- b) Accessibility problems and home making for disabled
- c) Simple exercise therapy in common conditions like prevention of deformity in polio, stump exercise in an amputee etc.
- d) Therapeutic counselling and follow up

**OC-75.10.16 Forensic Medicine and Toxicology**

The aim of teaching the undergraduate student in Forensic Medicine is to impart such knowledge and skills that may enable him/her to manage common medico-legal problems in day to day practice. He/she shall acquire competence for post mortem diagnosis based on history, physical examination and relevant observations.

**A] An intern must perform or assist in:**

- a) Identifying and documenting medico-legal problems in a hospital and general practice,
- b) Identifying the medico-legal responsibilities of a medical man in various hospital situations,
- c) Diagnosing and managing with competence basic poisoning conditions in the community,
- d) Diagnosing and managing with competence and documentation in cases of sexual assault,
- e) Preparing medico-legal reports in various medico legal situations.

**B] An intern must have observed or preferably assisted at the following operations/ procedures, as given in the Table in OC-75.11**

- a) Various medico legal / post-mortem procedures and formalities during their performance by police.

**OC-75.11 Certifiable Procedural Skills:**

A comprehensive list of skills recommended as desirable for Bachelor of Medicine and Bachelor of Surgery (MBBS) – Indian Medical Graduate is given below:

<b>Specialty</b>	<b>Procedure</b>
General Medicine	<ul style="list-style-type: none"> <li>• Venipuncture (I)</li> <li>• Intramuscular injection(I)</li> <li>• Intradermal injection (D)</li> <li>• Subcutaneous injection(I)</li> <li>• Intra Venous (IV) injection (I)</li> <li>• Setting up IV infusion and calculating drip rate (I)</li> <li>• Blood transfusion (O)</li> <li>• Urinary catheterization (D)</li> <li>• Basic life support (D)</li> <li>• Oxygen therapy (I)</li> <li>• Aerosol therapy / nebulization (I)</li> </ul>

	<ul style="list-style-type: none"> <li>• Ryle's tube insertion (D)</li> <li>• Lumbar puncture (O)</li> <li>• Pleural and ascitic aspiration (O)</li> <li>• Cardiac resuscitation (D)</li> <li>• Peripheral blood smear interpretation (I)</li> <li>• Bedside urine analysis (D)</li> </ul>
General Surgery	<ul style="list-style-type: none"> <li>• Basic suturing (I)</li> <li>• Basic wound care (I)</li> <li>• Basic bandaging (I)</li> <li>• Incision and drainage of superficial abscess (I)</li> <li>• Early management of trauma (I) and trauma life support (D)</li> </ul>
Orthopedics	<ul style="list-style-type: none"> <li>• Application of basic splints and slings (I)</li> <li>• Basic fracture and dislocation management (O)</li> <li>• Compression bandage (I)</li> </ul>
Gynecology	<ul style="list-style-type: none"> <li>• Per Speculum (PS) and Per Vaginal (PV) examination (I)</li> <li>• Visual Inspection of Cervix with Acetic Acid (VIA) (O)</li> <li>• Pap Smear sample collection &amp; interpretation (I)</li> <li>• Intra-Uterine Contraceptive Device (IUCD) insertion &amp; removal (I)</li> </ul>
Obstetrics	<ul style="list-style-type: none"> <li>• Obstetric examination (I)</li> <li>• Episiotomy (I)</li> <li>• Normal labor and delivery (including partogram) (I)</li> </ul>
Pediatrics	<ul style="list-style-type: none"> <li>• Neonatal resuscitation (D)</li> <li>• Setting up Pediatric IV infusion and calculating drip rate (I)</li> <li>• Setting up Pediatric Intraosseous line (O)</li> </ul>
Forensic Medicine	<ul style="list-style-type: none"> <li>• Documentation and certification of trauma (I)</li> <li>• Diagnosis and certification of death (D)</li> <li>• Legal documentation related to emergency cases (D)</li> <li>• Certification of medical-legal cases e.g. Age estimation, sexual assault etc. (D)</li> <li>• Establishing communication in medico-legal cases with police, public health authorities, other concerned departments, etc (D)</li> </ul>
Otorhinolaryngology	<ul style="list-style-type: none"> <li>• Anterior nasal packing (D)</li> <li>• Otoscopy (I)</li> </ul>
Ophthalmology	<ul style="list-style-type: none"> <li>• Visual acuity testing (I)</li> <li>• Digital tonometry (D)</li> <li>• Indirect ophthalmoscopy (O)</li> <li>• Epilation (O)</li> <li>• Eye irrigation (I)</li> <li>• Instillation of eye medication (I)</li> <li>• Ocular bandaging (I)</li> </ul>
Dermatology	<ul style="list-style-type: none"> <li>• Slit skin smear for leprosy (O)</li> <li>• Skin biopsy (O)</li> <li>• Gram's stained smear interpretation (I)</li> <li>• KOH examination of scrapings for fungus (D)</li> <li>• Dark ground illumination (O)</li> <li>• Tissue smear (O)</li> </ul>



	• Cautery - Chemical and electrical (O)
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- (I) - Independently performed on patients,
- (O)-Observed in patients or on simulations,
- (D)- Demonstration on patients or simulations and performance under supervision in patients

**Certification of Skills:**

Any faculty member of the concerned Department shall certify skills. For common procedures, the certifying faculty shall be decided by the institution.

**OC-75.12 Award of Class:**

Candidates securing 75% marks of the aggregate marks obtained at the theory and practical examinations taken together shall be awarded Distinction in that subject.

**Schedule OSC-1**  
(See OC-9 of Part C)

**Syllabus for Bridge Course in Chemistry for candidates who have passed Std. XII science without Chemistry, and desiring to opt for Chemistry as one of the subjects for the degree course**

**Physical Chemistry**

**I. Gas Laws:**

Explanation of the following: Boyle's Law, Charle's Law, concept of Absolute Scale of Temperature, Dalton's Law of Partial Pressure, Graham's Law of Diffusion.

**II. The Mole Concept:**

**(4)**

Gay Lussac's Law of Combining Volumes, Avogadro's Law, Avogadro Number and the Mole, Weight and Volume Relationship of Gases, Concept of Atomic Weight and

Equivalent weight, Relation between Atomic, Weight, Equivalent Weight and Valency, Molecular Weight, Vapour density, The relationship between the two.

### **III. Chemical Equilibrium: (4)**

Reversible and Irreversible reactions, Chemical Equilibrium, Meaning of Equilibrium Constant  $K_p$  and  $K_c$ , Factors affecting the equilibrium such as concentration Pressure, Temperature and Catalyst, La Chatelier's Principle and its application in the manufacture of ammonia and ozone.

### **IV. Chemical Reactions and Energetics: (8)**

Types of System: Open, Closed and Isolated, Statements of First Law of Thermodynamics, and its mathematical form, Concept of Internal Energy and Enthalpy, Heat changes at constant pressure and constant volume, Heat Capacity at Constant Pressure and Constant Volume and relation between them, Internal energy as a thermodynamic state function, Work of Pressure Volume type. Reversibility and maximum work, Meaning of Isothermal and adiabatic processes, Units of energy, work and the gas constant.

Thermochemistry: exothermic and endothermic reactions, Types of Heat of Reactions, Hess's Law of constant Heat summation, Variation of heat of reaction with temperature, Kirchoff's equations. A chemical substance as a store of energy.

### **V. Ionic Equilibrium:**

Theory of acids and bases: Arrhenius Theory, Concept of Lowry and Bronsted and Lewis concept, Ionisation of water and expression for ionic products of water, Definition of pH and pOH and relation between them, Hydrolysis of salts, hydrolysis constant, degree of hydrolysis constant, degree of hydrolysis derivation of  $K_h$  for different types of salts, calculation of pH of strong acids and strong bases, weak acids and weak bases, Ostwald's Dilution Law Buffer Solution: Properties and Mechanism of Buffer Action.

### **VI. Electro-Chemistry:**

Emf Series and its application, Nerust Theory of single Electrode Potential, Concept of galvanic or voltaic cells, illustration with Daniel Cell (Construction and working), Electrochemical cell notations, Types of electrodes, Write cell reactions when cell notations are given and vice-versa. Reference electrodes. Construction and working of hydrogen and calomel electrode.

Secondary cell (e.g. Pb accumulator) and its working, Charging and discharging.

## **Inorganic Chemistry**

### **I. Electronic structure of items:**

Bohr's Atom Model, Quantum Numbers, Types of orbitals, Shapes of s and p orbitals, Pauli's Exclusion Principle, Hund's Rule of Maximum Multiplicity, Aufbau Principle for filling of orbitals, Orbitals Electronic Configuration of Atoms.

### **II. Periodicity of Elements:**

Long Form of Periodic Table and classification of Elements on the basis of electronic configurations, Trends of properties such as Atomic radii, ionization potential, valency and oxidation state, electronegativity, electron affinity, metallic and non-metallic properties of elements across a period and down the group of periodic table. Further illustration of periodicity of properties in alkali metals, alkaline earth metals and third row elements, also solid state structures of third row elements.

### III. Nature of Chemical Bond:

Octet Theory and its limitations, Writing electronic structures of simple molecules, Valence Bond Theory and its limitations, Overlap of atomic orbitals in H<sub>2</sub>, HF and F<sub>2</sub> molecules, Hybridization, Types of Hybridization, Formation of Methane, H<sub>2</sub>O, NH<sub>3</sub>, C<sub>2</sub>H<sub>4</sub>, B<sub>2</sub>F<sub>2</sub> and C<sub>2</sub>H<sub>2</sub> using hybrid orbitals.

## Organic Chemistry

### I. Chemistry of Carbon Compounds

(4)

Alkanes, alkyl groups and functional groups, Types of organic compounds obtained by combination of alkyl groups and functional groups.

Classification of hydrocarbons into alkanes, alkenes, alkynes, Homologous series, Common and IUPAC nomenclature of various organic compounds such as alkanes, alkyl halides, alcohols, aldehydes, ketones, acids, esters, ethers and amines, Concept of Isomerism and its types, 1°, 2° & 3° carbons.

### II. Halogen Derivatives of Hydrocarbons:

(10)

Classification of halogen derivatives into mono di and trihalides with examples, Monohalogen derivatives: preparation by halogenations of alkenes, addition of HX to alkenes, action of phosphorous halides and thionyl chloride on alcohols, Substitution reactions, Wurtz reaction, Elimination reaction and reaction with Grignard reagent, Homolytic and Heterolytic fission, Nucleophilic and Electrophilic Reagents, Mobility of electrons in single and double bonds: Inductive, electromeric and resonance effect.

SN1 and SN2 reactions mechanism with energy profile diagrams. Optical activity - optically active compound, asymmetric carbon atom, dextro and laevo-form, racemic mixture (explain taking 2-chlorobutane as an example).

### III. Aromatic Compounds

(3)

Introduction to Aromatic Compounds structure of Benzene, Reactions of Benzene; addition of chlorine, H<sub>2</sub> and Ozone, Substitution reactions such as halogenation, nitration, sulphonation, Friedel Crafts, 'Reactions'.

### IV. Alcohols and Carbohydrates:

**Alcohols:** Preparation of primary and secondary alcohols by hydrolysis of alkyl halides, hydration of alkenes and reduction of aldehydes and Ketones. Reactions of various types of alcohols with sodium, hydrogen halides and phosphorous halides, also esterification, dehydration and oxidation reactions.

#### Carbohydrates:

Classification of carbohydrates, Preparation, Reactions and Laboratory identification of glucose.

### V. Aldehydes and Ketones:

(7)

Preparation of aldehydes and ketones by oxidation of alcohols, hydrolysis of gem-dihalides, decarboxylation of calcium salts of fatty acids and by action of Grignard reagent. Reactions of aldehydes and ketones such as (1) action of HCN, NaHSO<sub>3</sub> (2) reduction with hydrogen from Na-alcohol: Raney Ni & H<sub>2</sub>, Zn & Conc. HCl; and lithium aluminium hydride, Action of Fehling's solution, Tollens' reagent and Schiff's reagent.

### VI. Amines:

Classification of amines; basicity of amines, Preparation of amines by (1) action of haloalkanes

on ammonia (2) hypohalite reaction of amides and (3) reduction of oximas, nitriles and nitroparaffins, Reactions such as (1) formation of quaternary ammonium salts, their decomposition and Hofmann's elimination (2) action of nitrous acid (3) acetylation (4) carbylamine reaction.

## Course in Practical

### 1. Volumetric Analysis:

A) Acid - Base titrations involving various combinations of strong and weak acids; strong and weak bases.

B) Redox titrations involving compounds such as potassium permanganate, ferrous salts, oxalic acid (and sometimes bases such as sodium or potassium hydroxide).

### 2. Qualitative Analysis:

A solid mixture of two salts; from the student must identify either two basic radicals or two acidic radicals. (The two radicals must belong to different groups). The following radicals may be given for analysis.

Basic Radicals:  $\text{Pb}^{+2}$ ,  $\text{Cu}^{+2}$ ,  $\text{Cd}^{+2}$ ,  $\text{Fe}^{+2}$ ,  $\text{Al}^{+3}$ ,  $\text{Co}^{+2}$ ,  $\text{Ni}^{+2}$ ,  $\text{Zn}^{+2}$ ,  $\text{Ba}^{+2}$ ,  $\text{Sr}^{+2}$ ,  $\text{Ca}^{+2}$ ,  $\text{Mg}^{+2}$ ,  $\text{K}^{+}$  and  $\text{NH}_4$ .

Acidic Radicals:  $\text{CO}_3^{-2}$ ,  $\text{SO}_4^{-2}$ ,  $\text{Cl}^{-}$ ,  $\text{Br}^{-}$ ,  $\text{NO}_3$ ,  $\text{NO}_2^{-1}$  and  $\text{PO}_4^{-3}$ ,  $\text{S}^{-2}$   
(Minimum Four Mixtures in each category must be given).

### 3. Organic Spotting:

A) **Solids:** Benzoic Acid, Salicylic acid, Oxalic acid, Naphtalene, Phenol, B-naphthol, Glucose.

B) **Liquids:** Acetic acid, Phenol, Aniline, Chloroform, Bezedehydes, Ocatone, Nitrobenzene.

**Schedule SOC-2**  
(See OC-10 of Part C)

Regulations regarding F.Y., S.Y. and T.Y. degree course in Engineering (Revised), (Civil, Mechanical, Electrical, Electronics, Telecommunications, Computer Engineering).

**Semester I (Revised)**

Sr.No.	Subject	Department	Scheme of Instruction			Duration of Paper	Scheme of Examination				
			L	T	P		Theory	Practical	T.W.	Orals	Total
1	Applied Mathematics	Mathematics	3	1	--	3	100	--	--	--	100
2	Applied Physics	Physics	3	1	2	3	100	--	25	--	125
3	Applied Chemistry	Chemistry	3	1	2	3	100	--	25	--	125
4	Communication Skills (English)	English	1	--	3	2	75	--	25	--	100
5	Engineering Graphics 1	Mechanical	2	--	6	4	100	--	50	--	150
6	Basic Electrical Engineering	Electrical	3	1	2	3	100	--	25	--	125
7	Basic Civil Engineering	Civil	3	1	2	3	100	--	25	--	125
8	Workshop Practical	Mech. Workshop	--	--	--	5	--	--	50	--	50
		<b>Total</b>	18	5	22	--	675	--	225	--	900

### SOC-2.2 Semester II

Sr.No.	Subject	Department	Scheme of Instruction			Duration of Paper	Scheme of Examination				
			L	T	P		Theory	Practical	T.W.	Orals	Total
1	Applied Mathematics	Mathematics	3	1	--	3	100	--	--	--	100
2	Engineering Mechanical	Civil	3	1	2	3	100	--	25	--	125
3	Introduction to Computer Programming and Problem Solving	Computer	3	1	3	3	100	--	25	--	125
4	Basic Mechanical Engineering	Mechanical	3	1	2	3	100	--	25	--	125
5	Basic Electronics	Electronics & Telecommunications	3	1	2	3	100	--	25	--	125
6	Engineering Graphics II	Mechanical	2	--	6	4	100	--	50	--	100
7	Workshop Practice	Mech. Workshop	--	--	6	--	--	--	50	--	50
		<b>Total</b>	17	5	21	--	600	--	200	--	800

### SOC-2.3 Regulations regarding Second Year Degree course in Engineering (Revised)

#### S.E. Civil Semester III

Sr.No.	Subject	Scheme of Instruction			Duration of Paper	Scheme of Examination				
		L	T	P		Theory	Practical	T.W.	Orals	Total
1	Engineering Mathematics III	4	1	--	3	100	--	--	--	100 Maths
2	Engineering Geology I	4	--	--	3	100	--	--	--	100 Geology
3	Strength of Materials	4	2	4	3	100	--	25	--	125
4	Engineering Economics	4	--	--	3	100	--	--	--	100 Hum.
5	Surveying I	4	1	6	3	100	--	50	--	150
6	Hydraulics	4	2	4	3	100	--	25	--	125
		24	6	14	--	600	--	100	--	700

**SOC-2.4 S.E. Mechanical Semester III**

Sr. No.	Subject	Department	Scheme of Instruction			Duration of Paper	Scheme of Examination				
			L	T	P		Theory	Practical	T.W.	Orals	Total
1	Engineering Maths	Civil	4	1	--	3 hours	100	--	--	--	100
2	Applied Thermodynamics	Mechanical	4	1	3	3 hours	100	--	--	--	100
3	Engineering Materials Science	Mechanical	4	--	2	3 hours	100	--	--	--	125
4	Machine Drawing	Mechanical	2	--	8	3 hours	100	25	--	--	125
5	Electrical Engineering	Electrical	4	1	3	3 hours	100	25	--	--	125
6	Fluid Mechanics	Civil	4	1	3	3 hours	100	25	--	--	125
			22	4	19	--	600	75	--	--	700

**SOC-2.5 S.E. Electrical Semester III**

Sr. No.	Subject	Department	Scheme of Instruction			Duration of Paper	Scheme of Examination				
			L	T	P		Theory	Practical	T.W.	Orals	Total
1	Engineering Mathematics I	Mathematics	4	1	--	3 hours	100	--	--	--	100
2	Electrical Machines	Electrical	4	1	3	3 hours	100	--	25	--	125
3	Electrical & Electronics Materials & components	Electrical	4	1	--	3 hours	100	--	--	--	100
4	Basic Electronics I	Electrical	4	1	3	3 hours	100	--	25	--	125
5	Elect. Instruments	Electrical	4	1	3	3 hours	100	--	25	--	125
6	Electromagnetic Field	Electrical	4	1	3	3 hours	100	--	25	--	125
			24	6	12	--	600	--	100	--	700

**SOC-2.6 S.E. Electronics & Telecommunications Semester III**

Sr. No.	Subject	Department	Scheme of Instruction			Duration of Paper	Scheme of Examination				
			L	T	P		Theory	Practical	T.W.	Orals	Total
1	Applied Mathematics III	Mathematics	4	1	3	3 hours	100	--	--	--	100
2	Electronics Material Science	Electronics & telecom	4	1	--	3 hours	100	--	--	--	100
3	Electrical Engineering	Electrical	4	1	3	3 hours	100	25	--	--	125
4	Electrical Measurements & Instruments	Electrical	4	1	3	3 hours	100	25	--	--	125
5	Network I	Electronics & Telecom.	4	1	3	3 hours	100	25	--	--	125
6	Electronic Devices & Circuits I	Electronics & Telecom.	4	1	3	3 hours	100	25	--	--	125
			24	6	12	--	600	100	--	--	700

**SOC-2.7 S.E. Computer Engineering Semester III**

Sr. No.	Subject	Department	Scheme of Instruction			Duration of Paper	Scheme of Examination				
			L	T	P		Theory	Practical	T.W.	Orals	Total
1	Applied Mathematics III	Mathematics	3	1	--	3 hours	100	--	--	--	100
2	Electronics Material Science	Electronics & Telecom	4	1	--	3 hours	100	--	--	--	100
3	Analog Electronics	Computer	4	1	3	3 hours	100	25	--	--	125
4	Logic Design	Computer	4	1	3	3 hours	100	25	--	--	125
5	Data Structure	Computer	4	1	4	3 hours	100	25	--	--	125
6	Electrical Technology	Electrical	4	1	3	3 hours	100	25	--	--	125
			23	6	13	--	600	100	--	--	700



**SOC-2.8 S.E. Civil Semester IV**

Sr. No.	Subject	Scheme of Instruction			Duration of Paper	Scheme of Examination				
		L	T	P		Theory	Practical	T.W.	Orals	Total
1	Numerical Methods in Civil Engineering	4	--	2	3	100	--	25	--	125 Maths 4
2	Hydraulics II	4	2	2	3	100	--	25	25	150
3	Surveying II	4	2	3	3	100	50	25	--	175
4	Engineering Geology II	4	--	2	3	100	25	25	--	150 Geology 5
5	Building Construction	4	2	3	3	100	--	25	25	150
6	Building Drawing I	1	-	6	4	100	25	25	25	175
		21	06	18	--	600	100	150	75	925

**SOC-2.9 S.E. Mechanical Semester IV**

Sr. No.	Subject	Department	Scheme of Instruction			Duration of Paper	Scheme of Examination				
			L	T	P		Theory	Practical	T.W.	Orals	Total
1	Numerical Methods for Computer Programming	Computer	4	--	3	3	100	25	--	25	150
2	Kinematics of Machinery	Mechanical	4	4	--	3	100	25	--	25	150
3	Mechanics of Solids I	Mechanical	4	1	2	3	100	--	--	--	100
4	Industrial Electronics	Electronics & Telecom	4	-	3	3	100	25	--	--	125
5	Energy Conversion I	Mechanical	4	1	3	3	100	25	50	25	200
6	Manufacturing Tech-I	Mechanical	4	--	4	3	100	25	50	25	200
			24	6	15	--	600	125	100	100	925

**SOC-2.10 S.E. Electrical Semester IV**

Sr.No.	Subject	Department	Scheme of Instruction			Duration of Paper	Scheme of Examination				
			L	T	P		Theory	Practical	T.W.	Orals	Total
1	Engineering Mathematics II	Mathematics	4	1	--	3	100	--	--	--	100
2	Network Analysis and Synthesis	Electrical	4	1	3	3	100	25	--	50	175
3	Electrical Machines II	Electrical	4	1	3	3	100	25	50	--	175
4	Basic Electronics II	Electrical	4	1	3	3	100	25	50	--	175
5	Basic Machine Design & Thermodynamics	Mechanical	4	1	3	3	100	25	--	--	125
6	Hydraulics & Hydraulic Machines	Civil	4	1	3	3	100	25	--	50	125
			24	6	15	--	600	125	100	100	925

**SOC-2.11 S.E. Electronics & Telecommunication Semester IV**

Sr. No.	Subject	Department	Scheme of Instruction			Duration of Paper	Scheme of Examination				
			L	T	P		Theory	Practical	T.W.	Orals	Total
1	Applied Mathematics IV	Mathematics	3	1	--	3	100	--	--	--	100
2	Electromagnetic Field & Waves	Electronics & Telecom.	4	1	3	3	100	25	--	--	125
3	Pulse & digital Techniques	Electronics & Telecom.	4	1	3	3	100	25	50	--	175
4	Electronics Devices & Circuits II	Electronics & Telecom	4	1	3	3	100	25	50	--	175
5	Communication Engineering I	Electronics & Telecom.	4	1	3	3	100	25	--	50	175
6	Signals & Systems	Electronics & Telecom.	4	1	3	3	100	25	--	50	175
			23	6	15	--	600	125	100	100	925

**SOC-2.12 S.E. Computer Semester IV**

Sr. No.	Subject	Department	Scheme of Instruction			Duration of Paper	Scheme of Examination				
			L	T	P		Theory	Practical	T.W.	Orals	Total
1	Discrete Mathematics Structures	Mathematics	3	1	--	3	100	--	--	--	100
2	Signals and Systems	Computer	3	1	3	3	100	25	--	--	125
3	Electronic Instruments	Electronics & Telecom.	4	1	3	3	100	25	--	50	175
4	Pulse and digital Electronics	Computer	4	1	3	3	100	25	50	--	175
5	Computer Organisation	Computer	4	1	3	3	100	25	--	50	175
6	Data Processing and File Structures	Computer	3	1	3	3	100	25	50	--	175
			21	06	15	--	600	125	100	100	925

**SOC-2.13 T.E. Civil Semester V**

Sr. No.	Subject	Department	Scheme of Instruction			Duration of Paper	Scheme of Examination				
			L	T	P		Theory	Practical	T.W.	Orals	Total
1	Structural Analysis I	Civil	4	2	3	3	100	--	25	--	125
2	Geotechnical Engineering	Civil	4	1	4	3	100	--	25	25	150
3	Hydraulics III	Civil	4	-	4	3	100	--	25	25	150
4	Surveying III	Civil	4	1	4	3	100	50	25	--	175
5	Project Management	Civil	4	-	-	3	100	--	--	--	100 Hum 6
6	Building Drawing II	Civil	--	2	4	4	100	--	50	25	175
			20	6	19	--	600	50	150	75	875

**SOC-2.14 T.E. Mechanical Semester V**

Sr. No.	Subject	Department	Scheme of Instruction			Duration of Paper	Scheme of Examination				
			L	T	P		Theory	Practical	T.W.	Orals	Total
1	Industrial Economics	Civil	4	1	-	3	100	--	--	--	100
2	Quality Management	Mechanical	5	2	--	3	100	--	25	25	150
3	Dynamics of Machinery I	Mechanical	4	2	2	3	100	--	25	25	150
4	Heat Mass Transfer and Compressible Flow	Mechanical	4	1	2	3	100	--	25	25	150
5	Mechanics of Solids II	Mechanical	4	1	2	3	100	--	25	25	150
6	Manufacturing Tech II	Mechanical	5	--	4	4	100	--	50	25	175
			26	7	10	--	600	--	150	125	875

**SOC-2.15 T.E. Electrical Semester V**

Sr. No.	Subject	Department	Scheme of Instruction			Duration of Paper	Scheme of Examination				
			L	T	P		Theory	Practical	T.W.	Orals	Total
1	Basic Control System	Electrical	4	1	3	3	100	--	25	--	125
2	Electrical Machines III	Electrical	4	1	3	3	100	--	25	50	175
3	Computer Oriented Numerical Techniques	Electrical	4	1	3	3	100	--	25	--	125
4	Generation & Transmission of Electrical Energy	Electrical	4	1	-	3	100	--	--	--	100
5	Linear Integrated Circuits	Electrical	4	1	3	3	100	--	25	50	175
6	Industrial Electronics	Electrical	4	1	3	3	100	--	25	50	175
			24	6	15	--	600	--	125	150	875

**SOC-2.16 T.E. Electrical & Telecommunication Semester V**

Sr. No.	Subject	Department	Scheme of Instruction			Duration of Paper	Scheme of Examination				
			L	T	P		Theory	Practical	T.W.	Orals	Total
1	Probability theory and Random Processes	Mathematics	3	1	--	3	100	--	--	--	100
2	Central System Analysis	Electronics & Telecom.	4	1	3	3	100	--	25	--	125
3	Transmission Lines & Wave Guides	Electronics & Telecom	4	1	3	3	100	--	25	50	175
4	Communication Engineering II	Electronics & Telecom	4	1	3	3	100	--	25	50	175
5	Introduction to Digital Systems	Electronics & Telecom	4	1	3	3	100	--	25	50	175
6	Programming for Numerical computer Methods	Computer Engineering	3	1	4	3	100	--	25	--	125
			22	6	16	--	600	--	125	150	875

**SOC-2.17 T.E. Computer Engineering (Revised) Semester V**

Sr.No.	Subject	Department	Scheme of Instruction			Duration of Paper	Scheme of Examination				
			L	T	P		Theory	Practical	T.W.	Orals	Total
1	Principles of Economics & Management (Humanities)	Computer Engineering	3	1	-	3	100	--	--	--	100
2	Programming of Numerical Methods	Computer Engineering	3	1	3	3	100	--	25	--	125
3	Automata, Languages & Computation	Computer Engineering	4	1	3	3	100	--	25	--	125
4	Data Base Management System	Computer Engineering	4	1	4	3	100	--	25	50	175
5	Microprocessor I	Computer Engineering	4	1	3	3	100	--	25	50	175
6	Computer Hardware Design	Computer Engineering	4	1	3	3	100	--	25	50	175
			22	6	16	--	600	--	125	150	875

**SOC-2.18 T.E. Civil Semester VI**

Sr.No.	Subject	Department	Scheme of Instruction			Duration of Paper	Scheme of Examination				
			L	T	P		Theory	Practical	T.W.	Orals	Total
1	Structural Analysis I	Civil	4	1	3	3	100	--	25	25	150
2	Geo-technical Engineering II	Civil	4	1	2	3	100	--	25	25	150
3	Structural Design in Steel	Civil	4	1	3	3	100	25	25	25	175
4	Transportation Engineering	Civil	4	1	2	3	100	--	25	25	150
5	Quantity Surveying	Civil	4	1	4	3	100	25	25	25	175
6	Structural Design in Concretes	Civil	4	1	4	3	100	--	50	25	175
			24	6	18	--	600	50	175	150	975

**SOC-2.19 T.E. Mechanical Semester VI**

Sr.No.	Subject	Department	Scheme of Instruction			Duration of Paper	Scheme of Examination				
			L	T	P		Theory	Practical	T.W.	Orals	Total
1	Machine Design I	Mechanical	4	1	4	3	100	--	25	50	175
2	Manufacturing Tech. III	Mechanical	4	1	2	3	100	50	25	--	175
3	Dynamics of Machinery II	Mechanical	4	1	2	3	100	--	25	25	150
4	Industrial Engineering & Management	Mechanical	4	1	2	3	100	--	--	50	150
5	Energy Conversion II	Mechanical	4	1	4	3	100	50	25	25	200
6	Engineering Measurements	Mechanical	4	--	2	3	100	--	25	--	125
			24	5	16	--	600	100	125	150	975

**SOC-2.20 T.E. Electrical Semester VI**

Sr.No.	Subject	Department	Scheme of Instruction			Duration of Paper	Scheme of Examination				
			L	T	P		Theory	Practical	T.W.	Orals	Total
1	Distribution and Utilization of Electrical Energy	Electrical	4	1	--	3	100	--	--	50	150
2	Electronics Instruments	Electrical	4	1	3	3	100	--	25	50	175
3	Digital Integrated Circuits	Electrical	4	1	3	3	100	50	25	--	175
4	Microprocessor & its applications	Electrical	4	1	3	3	100	50	25	--	175
5	Electrical & Elec. Workshop	Electrical	--	1	3	--	--	--	25	50	75
6	Elements of Communication engineering	ETCD & COM.	4	1	3	--	100	--	25	--	125
7	Industrial Economics Management	Humanities	4	--	--	3	100	--	--	--	100
			24	6	15	--	600	100	125	150	975

**SOC-2.21 T.E. Electronics & Telecommunication Engineering Semester VI**

Sr.No.	Subject	Department	Scheme of Instruction			Duration of Paper	Scheme of Examination				
			L	T	P		Theory	Practical	T.W.	Orals	Total
1	Antenna and Wave Propagation	Electrical & Telecom	4	1	--	3	100	--	--	--	100
2	Communication Engineering III	Electrical & Telecom	4	1	3	3	100	-	25	50	175
3	Power Electronics	Electrical & Telecom	4	1	3	3	100	--	25	50	175
4	Computer Organisation & Design	Electrical & Telecom	4	1	3	3	100	--	25	50	175
5	Economics and Principles of Management	Humanities	3	1	3	3	100	--	--	--	100
6	System Design Using Integrated Circuits	Electrical & Telecom	4	1	3	3	100	50	25	--	175
7	Electrical Workshop	Electrical & Telecom	-	--	4	--	--	50	25	-	75
			23	6	16	--	600	100	125	150	975

**SOC-2.22 T.E. Computer Engineering Semester VI**

Sr.No.	Subject	Department	Scheme of Instruction			Duration of Paper	Scheme of Examination				
			L	T	P		Theory	Practical	T.W.	Orals	Total
1	Operations Research	Mechanical	3	1	--	3	100	--	--	--	100
2	Microprocessors II	Mechanical	4	1	3	3	100	50	25	--	175
3	Introduction to Systems Programming	Computer	4	1	3	3	100	50	25	--	175
4	Artificial Intelligence	Computer	4	1	3	3	100	--	25	50	175
5	Computer Graphics	Computer	4	1	3	3	100	--	25	50	175
6	Fundamentals of Programming Language	Computer	4	1	3	3	100	--	25	50	175
			23	6	15	--	600	100	125	150	975

**SOC-2.23 B.E. Civil Semester VII**

Sr.No.	Subject	Department	Scheme of Instruction			Duration of Paper	Scheme of Examination				
			L	T	P		Theory	Practical	T.W.	Orals	Total
1	Structural Design & Drawing in Concrete	Civil	4	--	5	4	100	--	50	25	175
2	Irrigation Engineering	Civil	4	2	--	3	100	--	50	--	150
3	Civil Engineering Project	Civil	--	--	5	--	--	--	--	50	50
4	Geo-technical Engineering III	Civil	4	--	3	3	100	--	25	25	150
5	Environmental Engineering	Civil	4	1	3	3	100	--	50	25	175
6	Elective I	Civil	4	2	--	3	100	--	25	50	175
			20	5	20	--	500	--	200	175	875

**Elective I**

1. Civil Engineering Systems. 2. Advanced Structural Analysis. 3. Advanced Highway Engineering. 4. Ground Improvement Techniques. 5. Air Pollution. 6. Applied Hydrology. 7. Low Cost Housing. 8. Experimental Stress Analysis.



**SOC-2.24 B.E. Mechanical Semester VII**

Sr.No	Subject	Department	Scheme of Instruction			Duration of Paper	Scheme of Examination				
			L	T	P		Theory	Practical	T.W.	Orals	Total
1	Power Plant Engineering Mechanical	Mechanical	5	--	--	--	100	--	25	25	150
2	Operations Planning and Control	Mechanical	5	3	--	3	100	--	25	25	150
3	Computer Applications in Mechanical Engineering	Mechanical	4	1	3	3	100	--	25	25	150
4	Machine Design II	Mechanical	4	1	3	3	100	--	50	50	200
5	Elective I	Mechanical	5	--	3	3	100	--	25	50	175
6	Project	Mechanical	--	--	5	--	--	--	--	50	50
			23	5	17	--	500	--	150	225	875

**Elective I**

1. Applied Operation Research. 2. Automobile Engineering. 3. Synthesis of Mechanisms. 4. Advanced theory of metal cutting. 5. Maintenance Management. 6. Alternative Energy Sources. 7. Tribology. 8. Vibration and Acoustic Design. 9. Machine Tool Design; and 10. Finitic Element Method.

**SOC-2.25 B.E. Electrical Semester VII**

Sr.No	Subject	Department	Scheme of Instruction			Duration of Paper	Scheme of Examination				
			L	T	P		Theory	Practical	T.W.	Orals	Total
1	Electrical Drives and Control	Electrical	4	1	3	3	100	--	25	50	175
2	Electronic Circuit Design	Electrical	4	1	3	3	100	--	25	--	125
3	Power System Analysis	Electrical	4	1	3	3	100	--	25	50	175
4	Electrical Machine Design	Electrical	4	1	3	3	100	--	25	50	175
5	Elective I	Electrical	4	1	3	3	100	--	25	50	175
6	Project	Electrical	--	--	5	Seminar	--	--	--	--	50
			20	5	20	--	500	--	125	200	875

**Elective I**

1. Microprocessor System Design; 2. Generalized Machine Theory; 3. Modern Control Systems; 4. Advanced Communications & Systems; 5. Computer Programming; 6. Special Semiconductor Devices; 7. High Voltage Engineering; 8. Computer Organisation Switching Theory and Logic Design; 9. Biomedical Engineering; 10. Audio and Electric Acoustics; 11. Advanced Network Analysis.

**SOC-2.26 B.E. Electronics and Telecommunications Semester VII**

Sr.No	Subject	Department	Scheme of Instruction			Duration of Paper	Scheme of Examination				
			L	T	P		Theory	Practical	T.W.	Orals	Total
1	Advanced Communication Systems	Electronics & Telecom.	4	1	3	3	100	--	25	50	175
2	Digital Signal Processing	Electronics & Telecom.	4	1	3	3	100	--	25	--	125
3	Microprocessors and Application	Electronics & Telecom.	4	1	3	3	100	--	25	50	175
4	Elective I	Electronics & Telecom.	4	1	3	3	100	--	25	50	175
5	Electronic Instrument	Electronics & Telecom.	4	1	3	3	100	--	25	50	175
6	Project	Electronics & Telecom.	--	--	5	Seminar	--	--	--	--	50
			20	5	20	--	500	--	125	200	875

**Elective I**

1. Acoustic Engineering; 2. Network Synthesis; 3. Speech Signal Analysis & Synthesis; 4. Image Processing; 5. Bio Medical Electronics; 6. Solid State Devices; 7. Electronic Control of Drives; 8. Advanced Control Theory; 9. Design & Technology of Electronic Devices; 10. Active Network Synthesis; 11. Information Theory and Coding; 12. Programming Languages; 13. Reliability Engineering; 14. VLSI Technology; and 15. Radar Engineering.

**SOC-2.27 B.E. Computer Engineering Semester VII**

Sr.No	Subject	Department	Scheme of Instruction			Duration of Paper	Scheme of Examination				
			L	T	P		Theory	Practical	T.W.	Orals	Total
1	Principles of Data Communication	E & TC	3	1	--	3	100	--	--	--	100
2	Peripheral Devices & Interfaces	Computer	4	1	3	3	100	--	25	50	175
3	Compiler Construction	Computer	4	1	3	3	100	--	25	50	175
4	Operating Systems	Computer	4	1	3	3	100	--	25	50	175
5	Elective I	Computer	4	1	3	3	100	--	25	50	200
6	Project	Computer	--	--	6	Seminar	--	--	--	50	50
			19	5	18	--	500	--	100	250	875

**Elective I**

1. Digital Stimulation and Modeling; 2. Algorithm, Analysis and Design; 3. Software Engineering; and 4. Information Systems Design.

**SOC-2.28 B.E. (Civil) Semester VIII**

Sr.No	Subject	Department	Scheme of Instruction			Duration of Paper	Scheme of Examination				
			L	T	P		Theory	Practical	T.W.	Orals	Total
1	CAD in Civil Engineering	Civil	4	1	6	--	100	--	50	25	175
2	Advanced Construction	Civil	4	--	5	2	100	--	50	25	175
3	Civil Engineering Project	Civil	--	--	15	--	--	--	50	50	100
4	Elective II	Civil	4	2	4	3	100	--	50	50	200
			12	3	30	--	300	--	200	150	650

**Elective II**

1. Rock Mechanics; 2. Structural Dynamics; 3. Industrial Waste Treatment; 4. Design of Hydraulic; 5. Advanced Pre-stressed Concrete; 6. Offshore Structure; 7. Application of \_\_\_\_\_ to Civil Engineering; and 8. Soil Foundation Structure Interaction.

**SOC-2.29 B.E. Mechanical Semester VIII**

Sr.No	Subject	Department	Scheme of Instruction			Duration of Paper	Scheme of Examination				
			L	T	P		Theory	Practical	T.W.	Orals	Total
1	Mechanical Systems Design	Mechanical	5	1	4	3	100	--	50	50	200
2	Refrigeration and Air Conditioning	Mechanical	5	1	3	3	100	--	25	50	175
3	Elective II	Mechanical	5	1	3	3	100	--	25	50	175
4	Project	Mechanical	--	--	15	3	--	--	50	50	100
			15	3	25	--	300	--	150	200	650

**Elective II**

1. Computer Aided Modelling, Analysis and Simulation; 2. Earth Moving Machinery; 3. CAD/CAM; 4. Advanced Dynamics of Machinery; 5. Machine Tool Control; 6. Information System; 7. Industrial Robotics; 8. Advanced Metal Forming; 9. Materials Management; and 10. Marketing Management.

**SOC-2.30 B.E. Electrical Semester VIII**

Sr.No	Subject	Department	Scheme of Instruction			Duration of Paper	Scheme of Examination				
			L	T	P		Theory	Practical	T.W.	Orals	Total
1	Power Electronics	Electrical	4	1	3	3	100	--	25	50	175
2	Switchgear & Protection	Electrical	4	--	3	3	100	--	25	50	175
3	Elective II	Electrical	5	1	3	3	100	--	50	50	200
4	Project	Electrical	--	--	15	--	--	--	50	50	100
			3	3	24	--	300	--	150	200	650

**Elective II**

1. Instrumentation; 2. Non-conventional Source of Energy & Systems; 3. Power System Operation & Control; 4. Principles Database Management; 5. Synthesis and Design of Control Systems; 6. Computer Architecture & Systems; 7. Solid State Devices; 8. Digital Data System; 9. Electrical Energy System Theory; 10. Power System Stability; 11. Design of Special Electrical Machines; 12. Analog Filter Theory and Design; and 13. Industrial Process Control.

**SOC-2.31 B.E. Electronics & Telecommunications Semester VIII**

Sr.No	Subject	Department	Scheme of Instruction			Duration of Paper	Scheme of Examination				
			L	T	P		Theory	Practical	T.W.	Orals	Total
1	Microwave Engineering	Electronics & Telecom	4	1	4	3	100	--	25	50	175
2	Radio & Television	Electronics & Telecom	4	1	4	3	100	--	25	50	175
3	Elective II	Electronics & Telecom	5	1	4	3	100	--	50	50	200
4	Project	Electronics & Telecom	--	--	15	--	--	--	50	50	100
			13	3	27	--	300	--	150	200	650

**Elective II (Only one chosen from the following list)**

1. Optical Communication; 2. Satellite Communication; 3. Data Communication; 4. Industrial Instrumentation; 5. Microprocessor based instrumentation; 6. Microwave integrated circuits; 7. Computer Aided Design; 8. Communication Switching Systems; 9. Information Systems and Data Bases; 10. Design of Microcomputer Systems; 11. Computer Simulation; 12. Introduction to Robotics; 13. Introduction to Artificial Intelligence; 14. Optimization Techniques; and 15. Pattern re-organisation.

**SOC-2.32 B.E. Computer Engineering Semester VIII**

Sr.No	Subject	Department	Scheme of Instruction			Duration of Paper	Scheme of Examination				
			L	T	P		Theory	Practical	T.W.	Orals	Total
1	Computer Networks	Computer	4	1	4	3	100	--	25	50	175
2	Advanced Computer Networks	Computer	4	1	4	3	100	--	25	50	175
3	Elective	Computer	4	1	4	3	100	--	50	50	200
4	Project II	Computer	--	--	15	--	--	--	50	50	100
			12	3	27	--	300	--	150	200	650

**Elective II (Only one chosen from the following list)**

1. Software Tools for CAD/CAM; 2. Distributed Computing; 3. Image Processing; and 4. Robotics.

**SOC-3**  
(See OC-11 of Part C)

**SOC-3 Scheme of Instruction and Examination – M.E. (Civil and Industrial Engineering)**

**SOC-3.1 M.E. (Civil) in Foundation Engineering (Scheme of Instruction and Examinations) Semester I**

Sr.No	Subject	Department	Scheme of Instruction		Duration of Paper	Scheme of Examination				
			L	P		Theory	Practical	T.W.	Orals	Total
1	Advanced Soil Mechanics	Civil	5	3	3	100	--	50	--	150
2	Rock Mechanics I	Civil	5	3	3	100	--	50	--	150
3	Advanced Foundation Engineering	Civil	5	2	3	100	--	50	--	150
4	Project II	Civil	--	8	--	--	--	--	--	--
5	Elective I	Civil	5	2	3	100	--	50	--	150
			20	18	--	400	--	200	--	600

**SOC-3.2 M.E. (Civil) in Foundation Engineering (Scheme of Instruction and Examinations) Semester II**

Sr. No	Subject	Department	Scheme of Instruction		Duration of Paper	Scheme of Examination				
			L	P		Theory	Practical	T.W.	Orals	Total
1	Foundation for Marine Structure	Civil	5	2	3	100	--	50	--	150
2	Advanced method of analysis in Foundation Engineering	Civil	5	3	3	100	--	50	--	150
3	Advanced Foundation Engineering	Civil	5	3	3	100	--	50	--	150
4	Soil Dynamics & Machine Foundation	Civil	5	2	3	100	--	50	--	150
5	Seminar	Civil	--	2	--	--	--	50	--	50
6	Project	Civil	--	8	--	--	--	150	--	150
			20	20	--	400	--	400	--	800

**SOC-3.3 M.E. (Civil) in Foundation Engineering (Scheme of Instruction and Examinations) Semester III**

Sr.No	Subject	Department	Scheme of Instruction		Duration of Paper	Scheme of Examination				
			L	P		Theory	Practical	T.W.	Orals	Total
1	Dissertation	Civil	--	--	--	--	--	--	300	300

**SOC-3.4 M.E. (Industrial Engineering) (Scheme of Instruction and Examinations) Semester I**

Sr.No	Subject	Department	Scheme of Instruction		Duration of Paper	Scheme of Examination				
			L	P		Theory	Practical	T.W.	Orals	Total
1	Engineering Statistics	Mechanical	4	2	3	100	--	50	--	150
2	Principles of Industrial Engineering and Management	Mechanical	4	2	3	100	--	50	--	150
3	Seminar	Mechanical	4	6	--	--	--	50	--	50
			12	10	--	200	--	150	--	350

**SOC-3.5 M.E. (Industrial Engineering) Semester II**

Sr.No	Subject	Department	Scheme of Instruction		Duration of Paper	Scheme of Examination				
			L	P		Theory	Practical	T.W.	Orals	Total
1	Applied Operations Research	Mechanical	4	2	3	100	--	50	--	150
2	Operations Planning and control	Mechanical	4	2	3	100	--	50	--	150
3	Computer Methods in Industrial Engineering	Mechanical	4	2	3	100	--	50	--	150
			12	6	--	300	--	150	--	450

**SOC-3.6 M.E. (Industrial Engineering) Semester III**

Sr.No	Subject	Department	Scheme of Instruction		Duration of Paper	Scheme of Examination				
			L	P		Theory	Practical	T.W.	Orals	Total
1	Elective I	Mechanical	4	2	3	100	--	50	--	150
2	Work System Design	Mechanical	4	2	3	100	--	50	--	150
3	Quality & Reliability	Mechanical	4	2	3	100	--	50	--	150
			12	6	--	300	--	150	--	450

**SOC-3.7 M.E. (Industrial Engineering) Semester IV**

Sr.No	Subject	Department	Scheme of Instruction		Duration of Paper	Scheme of Examination				
			L	P		Theory	Practical	T.W.	Orals	Total
1	Elective II	Mechanical	4	2	3	100	--	50	--	150
2	Maintenance Engineering & Management	Mechanical	4	2	3	100	--	50	--	150
3	Seminar	Mechanical	--	--	6	--	--	50	--	50
			8	4	--	200	--	150	--	350

**SOC-3.8 M.E. (Industrial Engineering) Semester V**

Sr.No	Subject	Department	Scheme of Instruction		Duration of Paper	Scheme of Examination				
			L	P		Theory	Practical	T.W.	Orals	Total
1	Project	Mechanical	--	--	--	--	--	--	--	200

**Elective - I**

1. Advanced Operations Research; 2. Information Systems; and 3. Forecasting and Demand Analysis.

**Elective - II**

1. Facility Location and lay out; 2. System simulation; and 3. Computer Integrated Manufacturing Systems.



**SOC-X Scheme of Instruction and Examination**

**SOC-X.1 Master of Engineering in Information Technology (Internet Technology) Semester I**

**SOC-3.11**

Subject Code	Subject	No. of Hrs/ Week		Duration of the Exam in Hours.	Marks for Exam			Total Marks	Credits
		Lect.	Pract		IA**	Theory	Oral		
MIT101	Fundamentals of Computer Science	04	--	3	50	100	--	150	2+4
MIT102	Internet Technologies	04	--	3	50	100	--	150	2+4
MIT103	Communication Networks	04	--	3	50	100	--	150	2+4
MIT104	Information Retrieval	04	--	3	50	100	--	150	2+4
MIT105	Distributed Database Management Systems	04	--	3	50	100	--	150	2+4
MIT106	Internet Laboratory	--	03	--	25	--	50	75	1+2
MIT107	Information Management Laboratory	--	03	--	25	--	50	75	1+2
	Total	20	6	--	--	--	--	--	36

Note: \*\* IA: 50 Marks will be allotted according to the performance in Test / Seminar / Assignment / Orals

**SOC-X.2 Master of Engineering in Information Technology (Internet Technology) Semester II**

**SOC-3.12**

Subject Code	Subject	No. of Hrs/ Week		Duration of the Exam in Hours.	Marks for Exam			Total Marks	Credits
		Lect.	Pract		IA**	Theory	Oral		
MIT201	Computer Mathematics	04	--	03	50	100	--	150	2+4
MIT202	Software Architecture	04	--	03	50	100	--	150	2+4
MIT203	Component Object Technology and Applications	04	--	03	50	100	--	150	2+4
MIT204	Data Mining	04	--	3	50	100	--	150	2+4
MIT205	Elective – I	04	--	3	50	100	--	150	2+4
MIT206	Software Architecture Laboratory	--	03	--	25	--	50	75	1+2
MIT207	Data Mining Laboratory	--	03	--	25	--	50	75	1+2
	Total	20	6	--	--	--	--	--	36

**Elective I :**

MIT 205.1 --> E-Commerce

MIT 205.2 --> Network Economics

MIT 205.3 --> Image Processing

MIT 205.4 --> Advanced Data Communication.

Note:

\*\* IA : 50 Marks will be allotted according to the performance in Test / Seminar / Assignment / Orals.

**SOC-X.3 Master of Engineering in Information Technology (Internet Technology) Semester III**

**SOC-3.13**

Subject Code	Subject	No. of Hrs/ Week		Duration of the Exam in Hours.	Marks for Exam			Total Marks	Credits
		Lect.	Pract		IA**	Theory	Oral		
MIT301	Internet Protocol Design	04	--	3	50	100	--	150	2+4
MIT302	Internet Security	04	--	3	50	100	--	150	2+4
MIT303	Software Quality Assurance	04	--	3	50	100	--	150	2+4
MIT304	Elective II	04	--	3	50	100	--	150	2+4
MIT305	Seminar ***	--	02	--	75	--	--	75	2+0
MIT306	Mini Project*	--	04	--	100	--	--	100	4+0
MIT307	Project	--	04	--	50	--	50	100	2+2
	Total	16	10	--	--	--	--	--	34

**Elective II:**

MIT 304.1 → Multimedia Systems & Applications  
MIT 304.3 → Real Time Systems

MIT 304.2 → Technology Management  
MIT 304.4 → Wireless Mobile Communication.

**Note:**

\* A group of maximum 2 students to do two Mini Projects on the theory subjects in this semester.

\*\* IA : 50 Marks will be allotted according to the performance in Test / Seminar / Assignment.

\*\*\* Each candidate is supposed to deliver at least one seminar this subject head. The recommended topics for seminars are listed in the subject head MIT 305.

**SOC-X.4 Master of Engineering in Information Technology (Internet Technology) Semester IV**

**SOC-3.14**

**MIT 308 Dissertation / Project Work**

**Credits 20**

<b>Thesis</b>	<b>Weightage</b>
<b>Internal Assessment</b>	<b>25%</b>
<b>External Assessment</b>	<b>50%</b>
<b>Viva-Voce / Demonstration</b>	<b>25%</b>

**Schedule OSC-4**

( See OC-16 of Part C)

**SOC-4** (*Effective from June 2018*) Schedules regarding First, Second and Third M.B.B.S. examination

**OSC-4.1** (*Effective from June 2018*) The candidate will be examined in the following pre-clinical subjects:

1) Human Anatomy; 2) Human Physiology including Bio-physics; and 3) Human Biochemistry.

**OSC-4.2** The following shall be the scheme of the First M.B.B.S. Examinations:

**1. Human Anatomy**

(A) Theory Examination:

There will be two papers each of three hours duration. Each paper will be of 50 marks with one compulsory question of 10 marks on applied anatomy. Each paper will be sub-divided into two sections of 25 marks each.

The questions will be the following types :

a) Long answer/essay questions; b) Short answer questions; c) Objective questions; d)

Multiple choice questions; and e) Applied questions (compulsory) in one section of each paper.

i) **Paper-I** (6 questions of which one on applied anatomy) General anatomy; Genetics; Head, Face & Neck; Central Nervous System; and Superior Extremity including applied anatomy, embryology and histology related to the parts - 50 marks.

ii) **Paper-II** (6 questions of which one on applied anatomy) General & Systemic Embryology; Thorax; Abdomen & Pelvis including Perineum; Inferior Extremity; including applied anatomy, embryology and histology related to the parts and General & Systemic Histology. --- 50 marks

iii) **Oral (Viva)** --- 20 marks

iv) **Internal Assessment** --- 20 marks

### **(B) Practical Examination:**

i) The practical examination will carry 40 marks and will be conducted in two sessions.

#### **Session-I:** (Soft parts & bones)

- 1) Head, Face, Neck, Brain, Superior Extremity, with bones related to the parts --10 marks
- 2) Thorax, Abdomen & Pelvis including Perineum, Inferior Extremity, with bones related to the parts -- 10 marks

#### **Session – II:**

- 1) Histology (4 slides) -- 10 marks
- 2) Surface Anatomy & Marking -- 5 marks
- 3) Radiology (X-rays) -- 5 marks
- ii) Internal Assessment -- 20 marks

**Total Marks in Anatomy** -- 200 marks

## **2. Human Physiology**

### **(A). Theory Examination:**

There will be two papers each of three hours duration. Each paper will be of 50 marks with one compulsory question of 10 marks on applied Physiology. Each paper will be sub-divided into two sections of 25 marks each.

The questions will be of the following type:

a. Applied Physiology (case report) with short questions; b) Five statements for which reasons have to be given c) Match the following/calculations d) Cascade of events jumbled up to be put in order/five short questions e) Multiple choice questions.

i) **Paper-I** (6 questions)

Endocrines, Reproduction, Digestive System, Respiratory System, Environmental and Sports Physiology, Excretory System including Bio-physics 50 marks

ii) **Paper-II** (6 questions)

Blood and Body fluids, Cardiovascular system, Physiology of Nerve and muscle, Nervous System and Special Senses including Bio-physics 50 marks

iii) **Orals:** (Viva)

iv) **Internal Assessment.**

**(B) Practicals :**

i) Three practicals of two hours duration (40 marks)	
Q. I. Hematology/Human Physiology Practicals	10 marks
Q. II. Two charts and/or graphs based on demonstrations for interpretation	10 marks
Q.III. Clinical examination with four given questions	20 marks
ii) Internal Assessment	20 marks
Total marks in Physiology including Bio-Physics	200 marks

**3. Human Biochemistry**

**(A) Theory Examination:**

There will be two papers each of three hours duration. Each paper will be of 50 marks with one compulsory question of 10 marks on applied Biochemistry. Each paper will be subdivided into two sections of 25 marks each.

The break up of questions is as follows:

1) Long answer/essay questions; b) Short answer questions; c) Objective questions; d) Multiple choice questions; and e) Applied questions (compulsory) in one section of each paper.

**i) Paper-I :** (6 questions) 50 marks  
Cell and cell membrane, pH, buffers, Chemistry and Metabolism of carbohydrates, Haemoglobin, Enzymes and Co-enzymes, Chemistry and Metabolism of proteins and amino acids, Isoenzymes, Occupational hazards, Function tests - LFT, RFT, GFT.

**ii) Paper-II :** (6 questions) 50 marks  
Nutrition - Vitamins, Minerals, Malnutrition, Chemistry and Metabolism of lipids, Biological oxidation. Chemistry and metabolism of nucleic acids and purines, pyrimidines, Genetics. Acid base balance, Immunoglobulins.

**iii) Orals:** (Viva/Voce). 20 marks

**iv) Internal Assessment:** 20 marks

**(B) Practicals:**

i) Three practicals of two hours duration and carrying 40 marks.	
A. Quantitative	15 marks
B. Qualitative	15 marks
C. (a) Applied	10 marks
(b) Spots	5 marks
ii) Internal Assessment:	20 marks
Total marks in Biochemistry	<b>200 marks</b>

**SOC-4.3 (Effective from June 2018)** *There shall be four examiners in each of the subjects of the First M.B.B.S. Examination. Fifty percent of the examiners shall be External. The senior-most Internal Examiner shall be the Convenor so that uniformity in the assessment of candidates is maintained. The Examiner shall not be below the rank of Associate Professors. In case of appointments of Assistant Professor as Internal Examiner, he shall have not less than 5 year experience as Assistant Professor.*

**SOC-4.4** (Effective from June 2018) **Internal Assessment:** It shall be based on day-to-day assessment (see note), evaluation of student assignment, preparation for seminar, clinical case presentation etc.; (i) regular periodical examinations; (ii) weightage for the internal assessment shall be 20% of the total marks in each subject; and (iii) student must secure a minimum of 35% marks of the total marks fixed for internal assessment in a particular subject to be eligible to appear in final university examination of that subject.

**Note:** The different ways in which students participation in learning is to be evaluated (i) Preparation of subject for students seminar or clinical case for discussion. (ii) Clinical case study/problem solving exercise. (iii) Participation in Project for health care in the community (planning stage to evaluation). (iv) Proficiency in carrying out a practical or a skill in small research project. (v) Multiple choice question (MCQ) test after completion of a system/teaching.

Each item tested shall be objectively assessed and recorded. Some of the items can be assigned as Home Work/Vacation work.

**OSC-4.5 Standard of passing the Examination:**

In each of the subjects, a candidate must obtain 50% in aggregate with a minimum of 50% in Theory including orals and minimum of 50% in Practicals at one and the same sitting.

**OSC-4.6** The following shall be the syllabi of the Pre-clinical subjects.

**Human Anatomy**

The course shall comprise of the following:

- (a) Principles of Human Embryology; (b) Principles of Human Genetics; (c) Histology; and
- (d) Gross Anatomy of the entire Human Body including living anatomy and applied anatomy.

The teaching in the subject of Human Anatomy shall be done in the form of lectures, demonstrations, tutorials; seminars, group discussions, electives, integrated teaching, etc. with special emphasis on the applied aspect of the subject.

### **(a) Principles of Human Embryology:**

#### (i) General Embryology:

Historical background and scope of embryology; Mitosis and meiosis; Male and female reproductive organs; Gametogenesis; Sexual cycle in female and infertility; Fertilisation, implantation and early differentiation of embryo; Establishment of germ layers and organ systems; Foetal membranes and placenta; Multiple pregnancies and teratogenesis; Basis of contraception.

#### (ii) Systemic Embryology:

Alimentary System; Respiratory system; Cardio-vascular system; Urogenital system; Nervous system including special senses; Endocrine glands; Integumentary and musculo-skeletal system.

### **(b) Principles of Human Genetics:**

Concepts of genetics and Mendel's Laws; D.N.A., R.N.A. and genetic code; Chromosomes, karyotyping and sex chromatin; Chromosomal aberrations; Principles of inheritance; Biochemical genetics; Pharmacogenetics; Blood group genetics; Population genetics; Dermatoglyphics; Prenatal diagnosis, genetic counselling; Genetic diseases and genetic engineering.

### **(c) Histology**

#### (i) General Histology:

Cell and its ultra-structure; Epithelia - general characters and types; Connective tissue general characters and types, Cartilage and bone; Muscle tissue -plain, cardiac and skeletal; Nervous tissue - peripheral nerve and ganglia; Blood vessels.

#### (ii) Systemic Histology:

(a) Alimentary system - lip, tooth, tongue, salivary glands, oesophagus, stomach, intestines, appendix, liver, gall bladder, and pancreas; (b) Respiratory system - epiglottis, trachea, bronchii, and lung; (c) Urinary system - kidney, ureter, urinary bladder, and female urethra.; (d) Male genital system - testis, epididymis, vas deferens, seminal vesicle, prostate, and penis; (e) Female genital system and accessory organs - ovary, fallopian tube, uterus, vagina, and mammary gland (f) Endocrine system - pituitary, thyroid, parathyroid, suprarenal, pancreas, pineal gland; (g) Nervous system - spinal cord at various levels, cerebrum, and cerebellum (h) Special senses - skin and its appendages; eyelids, lacrimal gland, cornea, sclero-corneal junction, retina, lens, and internal ear; and (i) Lymphoid tissue - lymph node, tonsil, thymus, and spleen.

#### (d) Gross Anatomy:

1. Introduction - Definition and scope of anatomy, descriptive anatomical terminology, skin, fascia, bone and cartilage, muscles, joints, synovial sheaths and bursae. 2. Regional & Applied Anatomy of Upper Limb - Skeleton and its ossification, pectoral region, axilla, mammary gland, arm, forearm, wrist and hand. Joints of upper limb, brachial plexus, nerves and dermatomes, blood vessels and lymphatics, surface and radiological anatomy. 3. Regional & Applied Anatomy of Lower Limb - Skeleton and its ossification, thigh, gluteal region, popliteal fossa, leg, and foot. Joints of the lower limb, arches of foot, lumbar and sacral plexuses, nerves and dermatomes, blood vessels and lymphatics, surface and radiological anatomy. 4: Regional Anatomy, Embryology & Applied Anatomy of Thorax - Thoracic wall; Skeleton and its ossification, anatomy of intercostal spaces, mechanism of



respiration. Thoracic cavity: serous membranes (pleura and pericardium), trachea, bronchial tree and lungs. Mediastinum, its division and contents; Heart; foetal circulation and changes in it after birth, oesophagus, thoracic duct, blood vessels and lymphatics, nerves and nerve plexuses, surface and radiological anatomy. 5. Regional Anatomy, Embryology & Applied Anatomy, of Abdomen, Pelvis & Perineum - Abdominal wall, umbilicus, inguinal canal, scrotum and its contents, anatomy of hernias. Thoraco-abdominal diaphragm, abdominal cavity, peritoneum, digestive and genito-urinary system, spleen, suprarenals, pelvis and urogenital diaphragms and their roles in parturition, perineum and its pouches (in males and females), osteology and sex differences in pelvis, joints, ischio-rectal fossa, nerves, blood vessels and lymphatics, surface and radiological anatomy. 6. Regional & Applied Anatomy of the Back - Vertebral column and individual vertebrae, vertebral venous plexus, muscles of the back, spinal meninges, spinal cord, cerebro-spinal fluid and lumbar puncture, surface and radiological anatomy. 7. Regional Anatomy, Embryology & Applied Anatomy of Head, Face & Neck - Skeleton of head, face and neck, individual bones, skull at birth and postnatal changes, scalp and muscles of facial expression, cervical fascia and fascial spaces of neck, triangles of neck, root of neck, infra-temporal and submandibular regions, thyroid, parathyroid and salivary glands, temporo-mandibular joint, teeth, tongue, palate, pharynx and larynx, mechanism of mastication, deglutition and phonation, nasal cavity and paranasal air sinuses, nerves and dermatomes, vessels and lymphatics, surface and radiological anatomy. 8. Regional Anatomy, Embryology & Applied Anatomy of Cranial Cavity and its Contents - Cranial fossae, meninges & venous sinuses, emissary veins, brain stem & its cavity, cerebellum, cerebral hemispheres and its cavities, functional areas of cerebral cortex, basal ganglia, thalamus and hypothalamus, gray and white matter of brain, pituitary gland, pineal gland, vascular anatomy of the brain, circulation of C.S.F., surface and radiological anatomy. 9. Anatomy & Embryology of the Orbit and its Contents - Bony orbit and its relations, eyelids, lacrimal apparatus, fascial spaces, contents of the orbit - extra-ocular muscles & movements of eyeball, nerves, blood vessels, and applied anatomy. 10. Anatomy & Embryology of Auditory Apparatus - External ear, middle ear and its ossicles, auditory tube, mastoid antrum and cells, internal ear, and applied anatomy. 11. Anatomy & Embryology of Nervous System – Histogenesis, morphogenesis and development of all parts of nervous system, nerve components in spinal cord, functional neuroanatomy of brain and spinal cord, motor and sensory pathways including auditory, visual and gustatory pathways, cranial nerves, and applied anatomy. 12. Introduction to study of transverse sections of the body, basic ultrasonography, CT Scan and MRI.

### **Practical Teaching:**

The practical teaching in gross anatomy should be done by the students by dissecting the whole human body with demonstrations of dissected parts, bones, models and charts of other parts.

The practical training in histology includes principles of histological techniques but excludes block making, section cutting and staining.

**Note:** Time should be made available from the practical teaching for Community Medicine by reducing the quantum of hours allotted for dissection of the human body.

### **Human Physiology**

**Human Physiology including Bio-Physics** course shall comprise of following:

1. General Physiology: Transport across Cell Membrane; Body fluids including lymph. 2.

Nerve: Bioelectric phenomena in the nerve, RMP, Action potential and its propagation, Neuromuscular transmission, Classification of nerve fibres, Degeneration and regeneration in the nerve 3. Skeleto-Muscular System: Excitation-contraction-coupling and molecular basis of contraction, Energy metabolism of muscles and factors affecting development of tension, E.M.G. and strength-duration curve. 4. Blood: Physiology of plasma proteins-sites of formation, Normal values and functions. Hypoproteinaemia. Physiology of R.B.C., W.B.C. and platelets-formation, fate and functions of these cells and their disorders like Anemias, Leukemias, Thrombocytopenia. ABO and Rh blood group systems, Mismatched blood transfusion and Erythroblastosis fetalis. Coagulation - Anticoagulants and Abnormal conditions. Mononuclear Macrophage system, Immunity-Humoral and Cellular, Disorders, Organ transplant. 5. Cardio-Vascular System: Generation and conduction of cardiac impulses, E.C.G., Cardiac Arrhythmias, Heart rate and its regulation, Cardiac cycle with reference to pressure, volume changes, heart sounds. Sphygmogram and Phlebogram, Cardiac output and its regulation, Haemodynamics. Nervous and Chemical control of blood vessels, B. P. and its regulation. Hypo and Hypertension, Regional Circulation, Cardio-respiratory changes during exercise and cardiac performance during exercise, Classification and patho-physiology of shock with emphasis on Hemorrhagic shock, Common circulatory disorders (Coronary, Cerebral etc.) and Cardiac failure. 6. Respiratory system: Mechanics of respiration, Compliance, ARDS, IRDS, Pulmonary Volumes and Capacities. Pulmonary and Alveolar ventilation, Physical Principles of gaseous exchange, Transport of respiratory gases, Nervous and chemical, Hypoxia and acclimatisation, Cyanosis, Dyspnea, Caisson disease, Asphyxia, Periodic breathing, Pulmonary function tests, Obstructive and Restrictive diseases of lung. 7. Sports -Physiology: Effect of training on various systems. 8. Digestion: Enteric Nervous system, Mechanism of secretion, function and regulation of Salivary, Gastric, Pancreatic, Intestinal and Biliary secretions, Movements of G.I. tract, Absorption in G.I. tract, Physiology of Liver and Gall bladder. Common dysfunctions (jaundice), Assessment of gastro-intestinal functions (Clinical). 9. Kidney: General functions of kidney, Mechanism of formation of Urine, Concentration and dilution of Urine, Acidification of Urine, Physiology of micturition, Endocrine functions of kidney, Kidney function tests (Clearance), Common Renal Disorders. Dialysis. 10. Environmental Physiology: Aviation and space physiology - A consolidated comprehensive and co-ordinated concept only to be given, Hyperbaric environment, Functions of skin and Regulation of body temperature, Hypothermia and Hyperthermia. 11. Endocrines: Mechanism of action of Hormones, Physiology of Pituitary, Thyroid, Parathyroid, Pancreas, Adrenal - Cortex and Medulla, Thymus and Pineal gland, Regulation of Secretion of endocrine glands, Disorders of endocrine glands, Assessment of endocrine activity. 12. Reproduction: Menarche, Puberty and Menopause, Physiology of Testes and Ovaries, Physiology of menstruation: pregnancy and lactation, Physiology of Growth, Physiological basis of contraception. 13. Central Nervous System: Cerebrospinal fluid, Physiology of synapse and receptor organs, Physiology of reflex action and muscle spindle, Sensory and motor tracts, Physiology of pain, Effects of section of Spinal cord at various levels, Regulation of posture and equilibrium, Role of Cerebellum. Basal ganglia and Vestibular apparatus in tone, posture and equilibrium, Physiology of Thalamus, Hypothalamus and Limbic system, Sensory and motor cortices, Physiology of voluntary movements, Reticular formation, Sleep and wakefulness, learning and memory, Alzheimer's disease, Speech and language. 14. Autonomic nervous system-peripheral and central mechanism. 15. Special Senses: Physiology of Taste and Smell, Ear-Conduction of sound waves, Peripheral and Central mechanisms of hearing and auditory pathways, Eye-Refractory media and protective

mechanism in eye, Formation, circulation and functions of aqueous humour, Physiology of optics, Photo-chemistry, colour vision, Visual pathway and effects of lesions at various levels.

### **Practicals**

1. Total and Differential W.B.C. counts, Absolute count, 2. Total R.B.C. count, Hb estimation, P.C.V. and E.S.R. 3. Bleeding, Clotting time and blood group determination. 4. Examination of Alimentary system. 5. Examination of Cardio Vascular system. 5. Recording of BP., Effects of Posture, Exercise and Cold stress on B.P. 6. Cardiac efficiency tests. 7. Examination of respiratory system. 8. Stethography and factors affecting respiration. 9. Spirometry, Expirography. 10. Artificial respiration, CPR principle, Heimlich manoeuver. 11. Examination of Cranial nerves. 12. Examination of reflexes. 13. Examination of Sensory system. 14. Perimetry. 15. Measurement of reaction time to Visual & Auditory stimuli.

### **Demonstrations**

1. Effect of two successive stimuli, Genesis of tetanus. 2. Effect of free and after load, Starling's law and work, done. 3. Fatigue in Amphibian muscle. Human – Ergography and effect of rest pause, Bicycle ergography. 4. Platelet count and reticulocyte count. 5. Effect of drugs acetyl choline, adrenaline and nicotine on heart. 6. Perfusion of mammalian heart and effect of various ions. 7. Volume-pressure curve of Urinary bladder and urinary output in experimental animals. 8. Reaction time in human, study of reflexes in spinal and decerebrate frog. 9. Use of stereotaxic assembly. 10. Mammalian blood pressure and respiration recording and factors influencing them. 11. Strength-Duration curve 12. E.C.G. 13. E.M.G. 14. E.E.G. 15. Pregnancy Test.

### **Electives**

Electives to be conducted in the second term during the practical period (total 30 hours). Meant to inculcate in the students the quest for search and solutions. Simple projects to be worked out by the students in small groups (3 to 4) guided by the teachers. At the end of the period, present the findings and conclusions in the form of a scientific session.

## **Human Biochemistry**

### **Human Biochemistry and General Biochemistry**

(1) Introductory: Historical background and scope of Bio-chemistry, foundation and molecular logic of life. (2) Cell and Cell membrane: Structure and functions of cell and intracellular components, cell membrane and its importance, cell fractionation and marker enzymes. (3) Physical Chemistry: Water and its functions, weak interactions in aqueous system, hydrogen bonding. The pH scale, dissociation constants, titration curves, pK of weak acids. Buffers and its importance. (4) Chemistry of Carbohydrates: General nature, classification, Biological importance and properties, chemistry of monosaccharides, disaccharides and polysaccharides including muco-polysaccharides. (5) Chemistry of Lipids: General nature; classification; biological importance and properties. Classification, biological importance and properties of fatty acids. Chemistry of simple lipids, conjugated lipids and derived lipids e.g. cholesterol and wax etc., Chemistry, functions and properties of prostaglandins and lipoproteins. (6) Chemistry of Proteins: General nature, classification, biological importance of proteins. Amino acids - classification, physico-chemical properties, principle of separation and identification of amino acids. Properties of proteins - Structure,

conformation sequencing of polypeptide chain & its applications. (7) Nucleic acids: General nature, types of nucleic acids and nucleotides and their properties. Structure of DNA and RNA and functions. Biological free nucleotides, genetic code. (8) Haemoglobin: Chemical nature, synthesis, types of normal haemoglobin, functions of Hb: Other Haemoglobin derivatives, abnormal haemoglobins. (9) Enzymes: General nature, classification, measurements, specificity. Mode of enzyme action, Co-enzymes and their roles, factors affecting the enzyme activity. Enzyme inhibition & activators, Iso-enzymes and their diagnostic importance. Co-enzymes - classification and their roles. (10) Vitamins: Chemical nature, structure, metabolic role of vitamins, sources, daily requirement, deficiency. (11) Biological Oxidation: Bioenergetics, biological oxidation, enzymes and co-enzymes of respiratory chain. Inhibitors of respiratory chain. Mechanism of oxidative phosphorylation. Synthesis of ATP and inhibitors. (12) Carbohydrate Metabolism: Digestion, absorption of carbohydrates. Different pathways E.M., H. M. P. Kreb's cycle etc., Glycogenesis, Glycogenolysis, Gluconeogenesis, Uronic acid etc. and their regulation, Energy turnovers. Fructose, galactose and pentose metabolism. Metabolic disorders. Diabetes mellitus - biochemical picture, G.T.T. Inherited disorders. Regulation of blood sugar level. (13) Lipid metabolism: Digestion and absorption of lipids. Fatty acid oxidation and synthesis. Lipoproteins, metabolism. Ketosis, metabolism of conjugated lipids. Cholesterol metabolism, Inherited disorders of metabolism, Prostaglandins metabolism. Metabolism in starvation and diabetes. (14) Protein Metabolism: Digestion and absorption of proteins. Transamination, ammonia transport, urea cycle. Different amino acid metabolism. Nitrogen balance. Inherited disorders of protein and amino acid metabolism. (15) Inter-relationship of metabolism: carbohydrates, lipids and proteins. (16) Metabolism of nucleoproteins: Purine and pyrimidine metabolism, biosynthesis of purine and pyrimidine. (17) Genetics: Genetic engineering, transcription, replication, translation protein biosynthesis, Gene regulation and inherited disorders. (18) Mineral Metabolism: Study of principal elements and trace elements and their importance in the body in brief. (19) Water and electrolyte balance and clinical applications. (20) Acid-base balance and regulation. (21) Function tests: (a) Liver function tests. (b) Kidney function tests: (c) Gastric function tests & Detoxification. (22) Environmental Health Hazards: Carcinogenesis, marker enzymes, Oncogenes, Occupational Hazards. (23) Immune Chemistry : Immunoglobulin - chemistry, functions, and structures. (24) Nutrition: Digestion absorption and assimilation of nutrients RDA, BMR and Dietetics and Malnutrition. (25) Investigation techniques: Chromatography, electrophoresis, ultracentrifugation, radioisotopes and its application in metabolism and clinical importance and recent advances .

## Practicals

1. Monosaccharides: Glucose and Fructose. 2. Disaccharides: Maltose, lactose. Sucrose, polysaccharides. 3. Identification of unknown carbohydrate. 4. Precipitation of proteins and colour reaction. Chemistry of albumin, globulin, gelatin, casein. 5. Chemistry of bread, wheat flour, potato, vitamins. 6. Chemistry of milk, milk products. 7. Chemistry of saliva, action of salivary amylase on starch, action of pepsin and rennin. 8. Chemistry of gastric Juice and bile. 9. General aspects of blood, study of hemoglobin and its derivatives. Spectroscopic examination. 10. Use of photoelectric colorimeter/verification of Beer Lambert Law 11. Estimation of cholesterol, Estimation of Hemoglobin. 12. Estimation of glucose in blood GTT. 13. Estimation of glucose in urine. 14. Estimation of chloride in serum, Estimation of chloride in urine. 15. Estimation of serum calcium. 16. Estimation of serum proteins and A/G ratio. 17. Estimation of urea, Estimation of creatinine. 18.

Estimation of uric acid, Estimation of serum bilirubin. 19. Estimation of serum inorganic phosphorus, Estimation of serum alkaline phosphatase. 20. Composition and properties of some of the constituents of normal urine. 21. Full urine report. (3) samples. 22. Estimation of serum amylase. 23. Estimation of SGOT and SGPT enzymes.

**Demonstrations:**

(1) Electrophoresis (2) Chromatography. (3) Flame photometer. (4) Liver function tests. (5) Renal function tests.

**Community Medicine**

Following is the syllabus in the subject of Community Medicine during the First two Semesters. The minimum period of teaching in the subject of Community Medicine during the Pre-Clinical Phase shall be 60 hours.

(1) History of medicine and historical aspects of public health in India. (2) Concepts in health including definitions, dimensions, determinants of health, indicators of health and progress towards Health for All in terms of its goals and objectives. (3) Health situation in India, Health service philosophies and Health for All. (4) Concepts of disease, epidemiological triad. Natural history of disease, risk factors and risk groups, levels of prevention. (5) Changing pattern of diseases, Public Health, Preventive Medicine, Social Medicine, Community diagnosis and International Classification of Diseases. (6) Health Education including definition, objectives, principles, contents and various methods. (7) Sociology, including concepts of family, socio-economic classification, hospital sociology, social and cultural factors in health and disease, social organisation. (8) General epidemiology including basic measurements, descriptive epidemiology, analytical epidemiology, experimental epidemiology, bias, association and causation, uses of epidemiology, infectious disease epidemiology, immunity, immunising agents, disease prevention and control, Emporiatics, Disinfection, Investigation of an epidemic. (9) Nutrition including dietary constituents, vitamins, minerals, trace elements, nutritional requirements, assessment of nutritional status, nutritional problems in health, Diet and diseases like CVD, Diabetes, Obesity, Cancer etc., Ecology of malnutrition, Food hygiene, Food toxicants, Food adulteration, National Nutrition Programmes in India. (10) Environmental hygiene including water supply, disinfection of water, standards of water quality, air pollution, Noise, radiation hazards, ventilation, meteorological environment, housing, disposal of solid waste, sewage disposal, medical entomology and vector control.

**OSC-4.7** The following shall be the prescribed minimum teaching hours in the subjects covered during First M.B.B.S. course (First and Second Semesters):

Anatomy	650 Hours.
Physiology	480 Hours.
Biochemistry	240 Hours.
Community Medicine	60 Hours.

**OSC-4.8** The candidate will be examined in the following Para-clinical subjects:

(1) Pharmacology (2) Pathology (3) Microbiology (4) Forensic Medicine & Toxicology. There will be no University Examination in the subject of Community Medicine at the end of the Para-clinical course of study.

**OSC-4.9** The following shall be the scheme of the Second M,B.B.S. Examination.

**1. Pharmacology**

**(A) Theory Examination:**

There will be two papers each of three hours duration. Each paper will be of forty marks with one question of 10 marks on clinical Pharmacology. Each paper will be sub-divided into two sections of 20 marks each.

**i) Paper I:** 40 marks.  
General Pharmacology, Autacoids, Blood, Autonomic nervous system, Respiratory system, Cardiovascular system and Kidney.

**ii) Paper II:** 40 marks  
Chemotherapy, Endocrine system, Uterus and Gastrointestinal tract, Central nervous system, Skin, Eye, Vitamins, Poisoning and treatment etc.

**iii) Oral (Viva)** 15 marks

**iv) Internal assessment** 15 marks

**(B) Practicals:**

i) Practical examination shall consist of:

- a) Table work 10 marks
- b) Prescription writing 5 marks
  - i) Composite drug prescription,
  - ii) Single drug prescription
- c) Prescription criticism 5 marks
- d) Dispensing pharmacy 5 marks

**ii) Internal assessment** 15 marks  
Total marks in Pharmacology **150 marks**

**2. Pathology**

**(A) Theory Examination:**

There will be two papers each of three hours duration. Each paper will be of forty marks with one question of 10 marks on clinical Pathology. Each paper will be sub-divided into two sections of 20 marks each.

**i) Paper I:** 40 marks  
General & Systemic pathology, Immunology, Pathological findings autopsy.

**ii) Paper II:** 40 marks  
Systemic pathology, haematology, clinical and chemical pathology.

**iii) Oral (Viva)** 15 marks

**iv) Internal Assessment** 15 marks

**(B) Practical Examination**

i) Practical examination shall consist of:

- a) Identification of sports 10 marks
- b) Two clinical exercises 10 marks

c) Microscopic diagnosis of slides	5 marks
<b>i) Internal Assessment</b>	15 marks
<b>Total marks in Pathology</b>	<b>150 marks</b>

### 3. Microbiology

#### (A) Theory Examination:

There will be two papers each of three hours duration. Each paper will be of forty marks with one question of 10 marks on clinical Microbiology. Each paper will be sub-divided into two sections of 20 marks each.

<b>i) Paper I:</b>	40 marks
General & Systemic bacteriology, laboratory diagnosis, immunology.	
<b>ii) Paper II:</b>	40 marks
Parasitology, Virology, Mycology, General bacteriology.	
<b>iii) Oral (Viva)</b>	15 marks
<b>iv) Internal Assessment</b>	15 marks

#### (B) Practical :

i) Practical examination shall consist of:	
a) Staining	10 marks
b) Stool examination	5 marks
c) Identification of spots	15 marks
ii) Internal Assessment	<b>150 marks</b>
<b>Total marks in Microbiology</b>	

### 4. Forensic Medicine and Toxicology

#### (A) Theory Examination:

There will be one paper of three hours duration. The paper will be of forty marks with one question of 10 marks on clinical Forensic Medicine and Toxicology. Each paper will be sub-divided into two sections of 20 marks each.

<b>i) Section I:</b>	<b>20 marks</b>
Injuries Regional & thermal injuries, Inquest, courts of law, Medico-legal autopsy, Medical jurisprudence & forensic psychiatry, Toxicology.	
<b>ii) Section II:</b>	<b>20 marks</b>
Asphyxial deaths, medico-legal aspects of death and identification, Sexual offences, Abortion, infanticide, Virginity, Pregnancy and delivery, Toxicology, Blood stains, Seminal stains, Hair.	
<b>iii) Oral (Viva)</b>	10 marks
<b>iv) Internal Assessment</b>	10 marks

#### (B) Practical Examination:

i) Practical examination shall consist of:	
a) Spots of wet/dry specimens, poisons, photographs, X-rays, slides, weapons.	10 marks
b) Certification of one of the following:	10 marks

- i) Death; (ii) Hurt; (iii) Illness; (iv) Potency; (v) Age; (vi) Victim/accused of rape  
(vii) Alcoholic intoxication
- c) Examination of anyone: 10 marks
- ii) Skeletal remains
- iii) Viscera and other exhibits (collection, preservation, despatch)

**ii) Internal Assessment**

10 marks

**Total marks in Forensic Medicine and Toxicology**

**100 marks**

**SOC-4.10 (Effective from June 2018)** *There shall be four examiners in each of the subjects of the Second M.B.B.S. Examination. Fifty percent of the examiners shall be External. The senior-most Internal Examiner shall be the Convenor so that uniformity in the assessment of candidates is maintained. The Examiner shall not be below the rank of Associate Professors. In case of appointments of Assistant Professor as Internal Examiner, he shall have not less than 5 years experience as Assistant Professor.*

**SOC-4.11 (Effective from June 2018) Internal Assessment:** *It shall be based on (i) day to-day assessment (see note), evaluation of student assignment, preparation for seminar, clinical case presentation etc.; (ii) regular periodical examinations; (iii) weightage for the internal assessment shall be 20% of the total marks in each subject; and (iv) student must secure a minimum of 35% marks of the total marks fixed for internal assessment in a particular subject to be eligible to appear in final university examination of that subject*

**Note:** *The different ways in which students participation in learning is to be evaluated (i) Preparation of subject for students seminar or clinical case for discussion; (ii) Clinical case study/problem solving exercise; (ii) Participation in Project for health care in the community (planning stage to evaluation) (iii) Proficiency in carrying out a practical or a skill in small research project; and (iv) Multiple choice Question (MCQ) test after completion of a system/teaching.*

*Each item tested shall be objectively assessed and recorded. Some of the items can be assigned as Home Work/Vacation work.*

**OSC-4.12 Standard of passing the Examination:**

In each of the subjects, a candidate must obtain 50% in aggregate with a minimum of 50% in Theory including orals and minimum of 50% in Practicals at one and the same sitting.

**OSC-4.13** Following shall be the syllabi of the Para-clinical subjects.

**1. Pharmacology**

**A. Theory**

1. General Pharmacology: History, definition, Routes of administration of drugs, Pharmacokinetics, Pharmacodynamics, Factors influencing dosage, Bioassay, Standardisation, Drug interactions, Therapeutic drug monitoring.
2. Drugs acting on Central and Peripheral nervous system; Autonomic nervous system; Cardiovascular system; Blood; Alimentary system; Respiratory system; Endocrines; Urinary system; Reproductive system.
3. Study of Chemotherapy of infections, infestations and malignancy; Immuno-therapy;



Locally acting drugs; Diagnostic agents; Autacoids; Heavy metals and their antagonists.

4. Essential drugs, cost benefit/risk ratio, common poisonings, Addiction, Environmental and Occupational pollutants, Individualisation of drug therapy, Rational drug therapy, Drug development etc.

## **B. Practicals**

Experiments and demonstrations will be selected out of those listed below to emphasize certain broad principles and important facts in Pharmacology.

i) Experimental Pharmacology.

1. Identification of active principles of vegetable origin; 2. Action of drugs on cell function e.g. ciliary movements; 3. Local anaesthetics (frog, rabbit, guinea pig) 4. Miotics and mydriatics (rabbit eye); 5. Analgesics (mice, rats); 6. Drugs acting on isolated heart (frog/guinea pig); 7. Bioassay (guinea pig ileum/frog rectus); 8. Drug antagonism (Pharmacological, chemical); 9. Action of drugs on Blood pressure and respiration (cat/dog).

ii) Clinical/Applied Pharmacology

1. Routes of administration, dosage forms and biopharmaceutics. 2. Estimation of drug levels in blood. 3. Evaluation of promotional literature on drugs. 4. Cost-risk-benefit aspects of prescribing. 5. Rational drug prescribing. 6. Effects of drugs on human volunteers. 7. Drug prescription for common ailments. 8. Criticism of prescriptions (recognition of adverse reactions, contraindications and drug interactions). 9. Evaluation of common pharmaceutical preparations and formulations.

iii) Practical Pharmacy

(1) Metrology. (2) Simple mixtures. (3) Suspensions. (4) Emulsions. (5) Lotions. (6) Liniments. (7) Ointments.

## **2. Pathology**

### **A. Theory**

#### **i) General Pathology**

(1) Introduction & scope of pathology: Normal cell. (2) Etiology of Disease - Genetically determined and acquired. (3) Cell Injury and cell death. (a) Degeneration: Cloudy Swelling, Hydropic degeneration, Fatty change, Mucoid degeneration, Hyaline change. (b) Necrosis and Types: Coagulation necrosis, Liquefaction Necrosis, Fat-Necrosis, Caseous necrosis, gangrenous necrosis, Fibrinoid necrosis. (c) Intracellular accumulation of Protein. Glycogen, Lipid, Carbohydrates. (d) Calcification: Dystrophic and Metastatic calcification. (e) Autolysis and Post mortem changes. (4) Inflammation (Acute & Chronic). (5) Healing and Repair. (6) Fluid and Hemodynamic derangements. (a) Hyperemia & congestion. (b) Edema (c) Thrombosis. (d) Embolism. (e) Infarction. (f) Shock. (7) Growth and its disorders: Atrophy, Hypertrophy, Hyperplasia, Metaplasia, Dysplasia, Hypoplasia, Aplasia and Agenesis. (8) Neoplasia I: General aspects. (a) Characteristics of Neoplasia. (b) Carcinogenesis (c) Spread of Neoplasm. (d) Neoplasm and classification. Neoplasia II: Specific tumours (benign and malignant) Lipoma. Chondroma, Squamous cell papilloma, Myxoma, Leiomyoma, Capillary haemangioma, cavernous Haemangioma, basal cell carcinoma, etc. (9) Basic Immunology: Antigen, Antibody, cells of immune response, Humoral immunity, Cell-Mediated immunity, Tumour immunity, Transplantation and Graft Rejection. (10) Disorders of Immune System. (a) Hypersensitivity reactions. (b) Autoimmune Diseases. (c) Immunologic Deficiency Syndromes, AIDS. (11) Nutritional

Diseases. (a) Protein - Calorie malnutrition. (b) Deficiency of vitamins (Fat-soluble & water soluble). (c) Mineral. (d) Nutritional excesses and aberrations. (12) Pigments and Pigmentation and its disorders. (13) Systemic Diseases: Diabetes mellitus, Amyloidosis. (14) Environmental Pathology. (a) Air Pollution Pneumoconiosis. (b) Chemical & drug Injury (c) Physical injuries. (d) Effects of Radiation. (15) Cytology : Exfoliative Cytology, Fine needle aspiration cytology.

## **ii) Systemic Pathology**

(1) Cardiovascular system: Congenital heart diseases, Ischemic heart disease, Rheumatic heart disease, Infective Endocarditis, Syphilitic heart disease, Pericardial disease, Myocardial disease, Endocardial and valvular disease. (2) Blood vessels: Atherosclerosis, Monckeberg's arteriosclerosis, Aneurisms, Tumours of Blood vessels (Hemangiomas) (3) Respiratory System: Lobar Pneumonia, Bronchopneumonia, Pulmonary tuberculosis, Lung abscess, Bronchiectasis, Pneumoconiosis, pleurisy, Tumours of lung, pleura, Larynx. (4) Gastrointestinal System: Peptic Ulcer, Typhoid fever, Tuberculosis, Amoebic intestinal disease, Crohn's disease, Ulcerative colitis; Appendicitis, Tumours of mouth, Salivary glands, Oesophagus, Stomach, Small and Large Intestine. (5) Liver and the Biliary tract: Pathophysiology of Jaundice, Hepatic Failure, Chronic Passive venous congestion, Types of Necrosis in liver, Viral Hepatitis, Cirrhosis, Tumours of liver: Primary and metastatic, Cholecystitis (Acute & Chronic), Tumours of gall bladder. (6) Pancreas: pancreatitis (Acute & Chronic), Diabetes Mellitus. (7) Urinary system: Kidney: Congenital anomalies, Renal Failure, glomerular disease, Diseases of Tubules, Tubulointerstitial diseases, Diseases of Blood vessels, Urinary tract obstruction, Renal Calculi, Ureter, Bladder & Urethra.

Tumours of kidney, Ureter, Bladder and Urethra. (1) Male Genital System - Pathology of testes and epididymis, Scrotum, penis and prostate. (2) Female Genital System: Pathology of cervix, Uterus, Fallopian tube, Ovary and placenta. (3) Breast: Inflammations, Mammary dysplasia, Tumours of Breast, Gynaecomastia. (4) Endocrine System: Pathology of thyroid, Pituitary & Adrenals. (5) Disease of Skin: Precancerous lesions and tumours (Squamous cell Carcinoma, Basal cell Carcinoma, Malignant Melanoma). (6) Lymphoreticular System: Lymph Nodes, Inflammations, Malignant Lymphomas (Hodgkin's & Non Hodgkin's), Spleen - Hypersplenism, Splenic Infarct, Amyloidosis of Spleen. (7) Musculoskeletal System: Muscle - Myositis, Muscular dystrophies, tumours. Bones & Joints Infections (Osteomyelitis), Fractures, Osteoporosis & Osteomalacia, Tumours of Bone. (8) Central Nervous System: Cerebral edema, Hydrocephalus, Infections - Pyogenic Infections, Tuberculous Infections, Viral diseases. Tumours of Nervous System.

## **iii) Haematology**

Introduction and scope of Haematology. (1) Anemias: Definition, Classification, Iron deficiency anemia, Myeloplasic anemias, Aplastic anemia, Sideroblastic anemia, Macrocytic anemia, Pure red cell aplasia. Haemolytic anemia (intracorpuscular and extracorpuscular). Hypersplenism. Haemolytic Disease of Newborn. (2) Leukocytosis: Neutrophilia; eosinophilia, basophilia, monocytosis, lymphocytosis (absolute & relative). Infectious mononucleosis. (3) Leukopenia: Neutropenia, eosinopenia, lymphopenia, agranulocytosis. (4) Myeloproliferative Disorders: Definition, classification; Polycythemia, myeloid metaplasia syndrome, thrombocytosis, myelofibrosis. (5) Leukaemias : Definition, Etiology, Classification, Clinical and Haematological pictures, other laboratory investigations. Cytochemical staining (6) Leukaemoid Reactions - Classification & types. (7) Myelodysplastic Syndromes: Synonyms, definition, classifications, haematological

findings, prognosis. (8) Bleeding Disorders: Extravascular, vascular and intravascular causes. Coagulation disorders, Platelets disorders, Disseminated intravascular coagulation, Fibrinolysis. (9) Blood Groups: Blood groups, Grouping and cross matching, Transfusion reactions, Laboratory investigations in a case of mismatched blood transfusion. (10) Fractions of blood: Preparation, preservation, Indications, blood banking. (11) Bone marrow. Examination: Bone marrow grafting.

#### **iv) Clinical Pathology**

(1) Kidney functions tests: Examination of urine. (2) Gastric analysis. (3) Liver function tests. (4) Examination of CSF and other puncture fluids. (5) Laboratory investigations in various types of diabetes and prediabetic state. (6) Intestinal Function Tests : Malabsorption. (7) Study of Fertility & Infertility: Semen analysis, Pregnancy tests. (8) Adrenal Function Tests.

### **B. Practicals**

#### **i) General Pathology:**

(1) Tissue processing and routine staining with Haematoxyline-Eosin (H.E.) Use of special stains (e.g. Van Gieson's stain, Masson trichrome, Mallory, Reticulin, (PAS) in pathology. (2) Cell Injury and Cell death: (a) Slides and specimens showing cloudy swelling of tubules in kidney, Fatty change in liver, Hyaline change in kidney. (b) Necrosis: Types of necrosis (slides and specimens) Coagulative necrosis- Myocardial Infarct, kidney. Infarct, Caseation necrosis, Tuberculous Lymphadenitis, Fat necrosis in breast and pancreas. Slides showing distribution of necrosis in liver (Focal, Zonal, Diffuse). (c) Dystrophic calcification, Monckeberg's sclerosis. (3) Acute inflammation - slides and specimens of acute appendicitis, Pyogenic meningitis, skin abscess. (4) Chronic inflammation - slides and specimens of Nasal Polyp, Tuberculous Lymphadenitis, Foreign body granuloma, Actinomycosis, Syphilitic Gumma. (5) Healing and Repair: Slides and Specimens of Granulation tissue, Chronic Peptic Ulcer. (6) Fluid and Hemodynamic derangements (Slides and specimens): (a) Congestion - C P V C of Ling, nutmeg liver. (b) Thrombus - Recent and old thrombus. (c) Infarct - Myocardial infarct. (7) Neoplasia (Specimens and Slides): (a) Squamous Cell Papilloma. (b) Squamous Cell Carcinoma. (c) Basal Cell Carcinoma. (d) Malignant Melanoma. (e) Adenocarcinoma (f) Myxoma - various sarcomas - Metastases in lymph nodes. (8) Pigments (Specimens and Slides) : Bilirubin pigment in liver, Melanin pigment in Nevus, malignant melanomas, Anthracotic pigment in lung, Hemosiderin pigment in CPVC. (9) Systemic Diseases (Specimens and Slides) Amyloidosis of kidney, spleen.

#### **ii) Systemic Pathology:**

(1) Cardiovascular System (Specimens and Slides): Rheumatic heart disease (Valvular lesions and Aschoff's nodule) Infective endocarditis Syphilitic heart disease Myocardial infarct Pericarditis. (2) Blood Vessels (Specimens and Slides): Atherosclerosis, Syphilitic aortitis, Monckeberg's sclerosis, Capillary Hemangioma, Cavernous haemangioma. (3) Respiratory System (Specimens and Slides): Lobar Pneumonia, Bronchopneumonia, Tuberculosis of lung Bronchogenic Carcinoma. (4) Gastrointestinal System (Specimens and Slides): Benign gastric ulcer, Typhoid intestine, Tuberculosis of intestine, amoebic intestinal disease, Ulcerative Colitis, Chrohn's disease, Acute appendicitis, Appendix with pin worm, Linitis plastica, Tumours - Malignant Gastric Ulcer, Benign Polyp. Colon, Adenocarcinoma of Colon, Carcinoid. (5) Liver and Biliary Tract (Specimens and Slides): Chronic Passive

venous congestion in liver. Fatty change in liver viral hepatitis. Chronic active hepatitis. Hydatid cyst. Amoebic abscess. Pyogenic abscess. Cirrhosis of liver. Hepato-cellular Carcinoma. Metastasis in liver. Chronic Cholecystitis. (6) Pancreas (Specimens and Slides): Fat necrosis; Acute pancreatitis; Chronic pancreatitis. (7) Urinary System (Specimens and Slides): Kidney: Infarction kidney, Acute glomerulonephritis, Rapidly progressive glomerulonephritis. Chronic glomerulonephritis. Calculi in kidney, Hydronephrosis, Amyloidosis of kidney, Nephrosclerosis Hypernephroma, Wilms Tumour. (8) Bladder - Transitional Cell Carcinoma. (9) Male Genital System (Specimens and Slides): Seminoma of testis, Teratoma; Teratocarcinoma, Embryonal carcinoma; Benign hyperplasia of prostate; Prostatitis; Carcinoma of prostate. (10) Female Genital System (Specimens and Slides) : Proliferative & Secretory endometrium; Products of Conception; Leiomyoma of Uterus; Adenomyosis; Endometriosis; Serous Cystadenoma; Mucinous cystadenoma; Benign cystic teratoma; Ovarian carcinoma. (11) Breast (Specimens and Slides) : Fibroadenoma of Breast, Infiltrating duct carcinoma. (12) Endocrine System (Specimens and Slides): Colloid Adenomatous Goitre, Adenomas, Papillary and follicular carcinoma. (13) Skin (Specimens and Slides) : Nervus (Intradermal & Junctional). Papilloma, Squamous Cell Carcinoma, Malignant melanoma. (14) Lymphoreticular System (Specimens and Slides): Hodgkin's lymphoma, Non-Hodgkin's lymphoma, Amyloidosis of Spleen, Gaucher's disease. (15) Musculoskeletal System (Specimens and Slides): Osteomyelitis - Acute and Chronic. Osteoclastoma, Osteogenic Sarcoma. Chondroma. Chondrosarcoma. (16) Central Nervous System (Specimens and Slides) : Pyogenic Meningitis, Tuberculous Meningitis, Astrocytoma, Meningioma.

### **iii) Haematology:**

(1) Use of Anticoagulants, their action. (2) Haemoglobin estimation. (3) Red Blood Cell Count. (4) Total leucocyte count. (5) Peripheral smear. (6) Packed cell volume & E.S.R. estimation. (7) Red blood cell osmotic fragility. (8) Bone marrow examination. (9) Slides of Leukemia (AML, CML, ALL, CLL). (10) Bleeding time, clotting time, platelet count, & morphology. (11) Blood grouping.

### **iv) Clinical Pathology:**

(1) Urine analysis. (2) Practical procedure & uses of various needles (indications and contraindications): Liver biopsy needle, Lumbar puncture needle, Bone marrow aspiration needle. (3) C S F examination. (4) Semen examination. (5) Investigations in diabetes. (6) Gastric analysis. (7) Pregnancy tests.

### **v) Autopsy:**

Study of Autopsy techniques and morbid anatomy of various organs. Compulsory attendance of 10 autopsies and respective description.

## **3. Microbiology**

### **A. Theory**

i) **General Microbiology:** Introduction, history & scope. Morphology and Ultrastructure of Bacteria. Physiology and Metabolism of Bacteria, Cultivation of Bacteria. Methods of sterilisation. Host Parasite relationship. Common Bacterial infections, Nosocomial infection, General considerations including the collection of material for Microbiological examination and antibiotic sensitivity testing.

ii) **Immunology:** Introduction to Immunity, Antigens, Immunoglobulins. Antigen-antibody

reactions, structure and function of immuno system, Immunopropnylaxis. Hypersensitivity. Immediate & delayed, auto immunity, graft rejection and immunological tolerance, immuno deficiency diseases.

**iii) Systemic and Clinical Bacteriology:** Gram positive cocci: Staphylococci. Streptococci. Pneumococci. Phyogenic infections and Post-Streptococci diseases. Neisseriae : Gonorrhoea and meningitidis. Corynebacterium diphtheriae. Aerobic spore bearers Anthrax. Anaerobic spore bearers. Tetanus and gas gangrene etc. Non spore bearing anaerobes-bacteroides. Mycobacteria: Tuberculosis & Leprosy. Atypical mycobacteria. Enterobacteriaceae Escherichia coli. Klebsielleae, Proteus, Pseudomonas. Water milk and Environmental bacteriology. Salmonella : Enteric fever. Shigella – Baccillary dysentery; Vibrios: V. Cholerae (Diarrhoeal diseases). Pasteurella: Plague Brucella. Zoonotic infections. Haemophilus & other miscellaneous gram negative rods. Spirochaetes: Treponemes, Borrelia, Leptospira, Syphilis. Rickettsia, Mycoplasma, Chlamydia, Actinomycetes and Nocardia. Emerging new Pathogens.

**iv) Mycology:** Superficial mycosis, subcutaneous, deep and opportunistic mycosis.

**v) General Virology:** General characters of viruses, Diagnosis of viral diseases, bacteriophage.

**vi) Systemic Virology:** Herpes virus, adenovirus, myxoviruses, rhabdoviruses, picorna viruses, HIV/AIDS & new viruses, Arboviruses-Hepatitis and Miscellaneous viruses, AIDS and oncogenic viruses.

**vii) Parasitology:** Introduction to Parasitology. Protozoa, Entamoeba histolytica, Giardia, Trichomonas, Trypanosoma, Leishmania, Plasmodium, Toxoplasma, Balantidium coli.

**viii) Helminths:** Cestodes (Taenia, saginata, T.Solium, Echinococcus granulosus, Diphylobothrium latum), Trematodes, Intestinal nematodes, Tissue nematodes, Vectors.

**ix) Laboratory diagnosis of common infective syndromes:**

(a) Diarrhoeal diseases. (b) Diphtheria and other respiratory infections. (c) Pyrexia of unknown origin (Enteric fever). (d) Meningitis. (e) Urinary tract infections. (f) Other infections e.g. Pyogenic infections etc.

## **B. Practicals**

(1) Microscope. (2) Morphological studies of Bacteria. (3) Staining methods. (4) Media. (5) Sterilization procedure. (6) Serological tests for diagnosis of bacterial diseases. (7) Gram positive cocci. (8) Gram negative cocci. (9) Corynebacterium diphtheriae & other gram positive bacilli. (10) Enteric gram negative bacilli. (11) Other gram negative bacilli. (12) Vibrio cholerae & other vibrio like organisms. (13) Pasteurella & Hemophilus. (14) Spore bearers (Aerobic & Anerobic). (15) Mycobacteria. (16) Spirochaetes. (17) Fungi & actinomycetes. (18) Rickettsial and viral diseases. (19) Serological tests for diagnosis of viral infection. (20) Medical Parasitology: protozoa, trypanosoma, Leishmania, Giardia, E. histolytica, Plasmodia, Helminths-Taenia saginata: & T.Solium, Echinococcus granulosus. D. Latum, Schistosomes, Ankylostoma duodenale, Ascaris lumbricoides, Trichuris trichura, Wuchereria bancrofti, Dracunculus medinensis, Collection & transportation of clinical materials for investigations.

## **4. Forensic Medicine including Toxicology**

## **A. Theory**

### **i) Forensic Medicine:**

- 1) Introduction: Definition and scope of Forensic Medicine.
- 2) Legal Procedures: (a) Criminal courts and their powers. (b) Legal procedure at an inquest types of inquest with their merits and demerits. (c) Legal procedure in Courts. (d) Medical evidence - documentary, Oral and Other types.
- 3) Identification: (a) Personal Identity: Living, dead, decomposed, mutilated and skeletal remains. (b) Methods of establishing Identity. (c) Age estimation and medico-legal importance.
- 4) Death: (a) Mode of death. (b) Cause and manner of death. (c) Causes of sudden death. (d) Signs of death. (e) Death in relation to organ/tissues transplantation. (f) Changes occurring after death. (g) Estimation of time of death. (h) Presumption of death and survivorship.
- 5) Post-mortem examination: (a) Procedure and formalities of medico-legal and pathological autopsies. (b) Objectives, procedure of medico-legal autopsy. (c) Exhumation. (d) Procedure for collection, preservation and despatch of material in cases of poisons. (e) Post-mortem artefacts. (f) Negative or obscure autopsies.
- 6) Mechanical injuries/wounds and their medico-legal Aspects: (a) Classification of injuries - Abrasion, contusion. Laceration, incised wounds, stab wounds, firearm wounds. (b) Modes of causation, appearance and their recognition. (c) Medico-legal aspects of injuries/wounds. (d) Hurt - simple and grievous hurt, dangerous injury and hurt certificate. (e) Relation of trauma with diseases. (f) Characteristic of injuries in traffic accidents.
- 7) Cold, heat, electricity, lightning and radiation injuries.
- 8) Death due to starvation.
- 9) Mechanical Asphyxia: (a) Hanging, strangulation, suffocation and drowning deaths etc. (b) Traumatic asphyxia.
- 10) Medico-legal aspects of sex: (a) Virginity and defloration. (b) Impotence and sterility. (c) Natural and unnatural sexual offences and perversions. (d) Pregnancy and delivery. (e) legitimacy.
- 11) Abortion: (a) Types of abortions, methods, complication and medical examination and duties in cases of abortions. (b) Laws in relation to abortion including M.T.P. Act of 1971.
- 12) Infant deaths: (a) Signs of live birth, still born and dead born child. (b) Infanticide. (c) Battered baby. (d) Cot deaths.
- 13) Blood, seminal stains and hair:
- 14) Law in relation to Medical Practices: (a) Regulations of medical professions - Indian and State Medical Council and their functions. (b) Rights and duties of Medical Practitioner. (c) Doctor-patient relationship. (d) Medical Negligence. (e) Professional secrecy and Privileged communication. (f) Doctors indemnity insurance. (g) Consumers' Protection Act.
- 15) Insanity: (a) Role of medical practitioner in case of Insane persons. (b) Civil and criminal responsibilities of Insane.

### **ii) Toxicology:**

- 1) General considerations: (a) Law in relation to poisons. (b) Manners of poisoning. (c) Classification of poisons. (d) Route of administration, mode of action and elimination of poisons. (e) Diagnosis and general principles of treatment of poisons. (f) Duties of medical practitioner in cases of poisoning -living and dead.
- 2) Specific poisons: (a) Corrosive poison: Acids - Sulphuric, Nitric, Hydrochloric, Oxalic and carbolic. Alkalies - Ammonia, potassium and sodium hydroxide. (b) Metallic poisons:

(1) Arsenic; (2) Lead; (3) Copper; (c) Inorganic poison – Phosphorous; (d) Vegetable organic poisons - castor, croton, abrus precatorius, calatropis, marking nut, cleander plaths etc. (e) Animal poisons - Scorpion, snakes, cantharides. (f) Mechanical poisons :- Diamond dust and grass powder. (g) Neurotic poisons - (1) Opium and its alkaloids and barbiturate. (2) Alcohol-ethyl and methyl alcohol. (3) Datura. (4) Cannabis. (5) Nux Vomica. (6) Hydrocynic acid. (7) Aconite. (8) Carbon monoxide. (9) Food poisoning.

- 3) Insecticidal Poisons: (a) Organo phosphorous. (b) Chlorinated hydrocarbon.
- 4) Drug Dependence with Alcohol, morphine, barbiturates, L.S.D., Amphetamine and cocaine etc.
- 5) Occupational and environmental poisoning & Workmen's Compensation Act.

## 5. Community Medicine

The teaching in the subject of Community Medicine shall continue throughout the para-clinical phase and shall include 8 weeks of Community posting. The teaching in Community Medicine shall be of 200 hours during this phase.

### A. Theory:

1. Screening for disease: Concept of screening, uses of screening, criteria for screening, sensitivity and specificity, problems of the borderline.

2. Epidemiology of Communicable disease: (a) Respiratory infections: Chickenpox, Measles, Rubella, Mumps, Influenza, Diphtheria, Whooping cough, Meningococcal meningitis, Acute respiratory infections, Tuberculosis. (b) Intestinal infections: Poliomyelitis, Viral hepatitis, Cholera, Acute diarrhoeal diseases; Typhoid fever, Food poisoning, Amoebiasis, Ascariasis, Hookworm infection, Dracunculiasis. (c) Arthropod-borne infections: Dengue syndrome, Malaria, Filariasis. (d) Zoonoses: (i) Viral: Rabies, Yellow fever, Japanese encephalitis, KFD. (ii) Bacterial: Brucellosis, Plague, Human salmonellosis. (iii) Rickettsial disease: Rickettsial Zoonoses, Scrub typhus; Murine typhus, Tick typhus, Q Fever.

(iv) Parasitic Zoonoses: Taeniasis, Hydatid disease, Leishmaniasis. (e) Surface infections: Trachoma, Tetanus, Leprosy, STD, Yaws, AIDS. (f) Emerging and reemerging infectious diseases.

3. Epidemiology of Chronic non-communicable diseases and conditions: Coronary heart disease, Hypertension, Stroke, Rheumatic heart disease, Cancer, Diabetes, Obesity, Blindness, Accidents.

4. Preventive Medicine in Obstetrics, Paediatrics and Geriatrics and Family Welfare: Social Paediatrics, MCH problems, Antenatal care, Intranatal care, Postnatal care, Breast feeding, Neonatal care, Low birth weight, Feeding of infants, Growth and development, Growth chart, Care of the pre-school child, Child health problems. Under-Fives Clinic, National Policy for children. Delivering MCH services, indicators of MCH care, Maternal Mortality. Mortality in childhood. Perinatal mortality. Infant Mortality. Congenital Malformations, School health. Services. Handicapped Children. Juvenile Delinquency. Social Welfare Programmes for Women and Children. Health problems of the aged. Definition and Scope of Family Planning. Population Policy, National Demographic goals, Contraceptive methods, Abortion and MTP Act 1971. Sterilisation, Delivery system of Family Welfare Programme, Post-Partum Programme, Evaluation of Family Planning.

5. Demography & Basic Medical Statistics: Demographic Cycle, Demographic trends, Population Pyramid, Fertility related statistics. Birth and death rates, census, Health

information system. Elementary statistical methods. Presentation of data, Charts and diagrams. Measures of central tendency, measures of dispersion, Normal distribution, sampling, tests of significance, correlation and Regression.

6. Occupational Health: Definition and scope of Occupational Health, Ergonomics, Occupational Hazards, Occupational diseases, Pneumoconiosis, Occupational Cancers, Occupational dermatitis, Lead Poisoning, Radiation hazards. Occupational hazards of Agricultural workers, Accidents in industry, Sickness absenteeism, Health problems due to Industrialisation. Majors for health protection of workers, Prevention of occupational diseases, the Factories Act, the Employees State Insurance Act, Occupational health in India.

### **B. Practical/Demonstration:**

(1) Age/Sex distribution. (2) Birth rate/Death rate (3) Mortality rates. (4) Standardised death rates (5) Incidence/Prevalence. (6) Measures of fertility. (7) Horrock's Apparatus. (8) Insecticides (9) Mosquitoes (10) Housefly. (11) Louse. (12) Ticks & Mites (13) Cyclops. (14) Malarial Parasite (15) Filarial Parasite. (16) AFB. (17) Taenia Saginata/Solium. (18) Nutritive value of common food items (19) Growth car. (20) Vaccines. (21) Family Planning methods (22) Death Certificate (23) Nutrition exercises. (24) Exercises on Environment & Health (25) Epidemiological exercises.

### **C. Community Postings**

The students will be posted in the community for a period of 4 weeks each in the Third and Fourth Semester of the course. Each student will be assigned three families and the student will follow these families during the entire course of their Community Postings. They will also maintain a record of these families. For the purpose of teaching Community Medicine in the field set up the services of faculty members of other departments of Goa Medical College will be utilized.

**OSC-4.14** The following shall be the prescribed minimum teaching hours in the subjects covered during Second M.B.B.S. course (Third, Fourth and Fifth Semesters).

Pathology ... ..	300 Hours
Pharmacology ... ..	300 Hours
Microbiology ... ..	250 Hours
Forensic Medicine ... ..	100 Hours
Community Medicine (including 8 weeks Community posting of 3 hours each)	200 Hours

**OSC-4.15** The candidates will be examined in the following Clinical subject for Third M.B.B.S. Part-I Examination:

1. Oto-Rhino-laryngology (ENT)
2. Ophthalmology
3. Community Medicine.

**OSC-4.16** The following shall be the scheme of the Third M.B.B.S. Part-I Examination.

#### **1. Oto-Rhino-Laryngology**

##### **(A) Theory Examination:**

There will be one paper of three hours duration carrying 40 marks. The paper will have one



compulsory question on pre- and para-clinical aspects of E.N.T. The paper will have two sections of 20 marks each.

**i) Section I:** **20 marks**  
Pre and para clinical aspects of E.N.T., Diseases of Nose, Paranasal Sinuses including surgical procedures and diseases of Pharynx and throat.

**ii) Section II:** **20 marks**  
Diseases of Larynx, Ear including hearing and equilibrium, Oesophagus including Dysphagia, recent advances in E.N.T.

**iii) Oral (Viva-Voce)** 10 marks

**iv) Internal Assessment** 10 marks

**(B) Practical Examination:**

i) Practical (Clinical 2 case each of 10 marks) 20 marks

ii) Table work (instruments, drugs and X-rays) 10 marks

**iii) Internal Assessment** 10 marks

**Total marks in Oto-Rhino-Laryngology** **100 marks**

## **2. Ophthalmology**

**(A) Theory Examination:**

There will be one paper of three hours duration carrying 40 marks. The paper will one compulsory questions on basic sciences related to Ophthalmology. The paper will have two sections of 20 marks each.

**i) Section I:** **20 marks**

Basic Sciences related to Ophthalmology, Neurology of vision, Ophthalmology optics, Diseases of conjunctiva, cornea, sclera and uveal tract, Errors of refraction.

**ii) Section II:** **20 marks**

Ocular therapeutics, Diseases of lens, Vitreous of Retina and optic nerve, and Ocular adnexa, Glaucoma, Ocular turnouts, Intra-Ocular tumours. Disorders of Ocular Motility, Eye in systemic diseases, Preventive and Community Ophthalmology.

**iii) Oral (Viva-Voce)** 10 marks

**iv) Internal Assessment** 10 marks

**(B) Practical Examination:**

i) Practical (Clinical 2 cases each of 10 marks) 20 marks

ii) Table work (Instruments, drugs and X-rays) 10 marks

**iii) Internal Assessment** 10 marks

**Total Marks in Ophthalmology** **100 marks**

## **3. Community Medicine**

**(A) Theory Examination:**

There will be two papers each of three hours duration. Each paper will be of 60 marks and will be subdivided into two sections of 30 marks each.

i) **Paper-I** 60 marks  
Concepts in community Health. General Epidemiology, Screening for Disease. Health information and Medical Statistics. Communicable and Non-communicable Diseases. Occupational Health. Mental Health, Medical Sociology, Geriatrics.

ii) **Paper-II** 60 marks  
Maternal and Child Health, Environment and Health, Nutrition and Health. Family Welfare Planning and Demography Geriatrics. National Health Programmes. Health Planning and Management. Health Economics, Health Care of the Community. Health Education and Communication. International Health.

iii) **Oral (Viva)** 10 marks

iv) **Internal Assessment** 20 marks

**(B) Practicals**

i) Practical examination shall consist of:

- a) Clinical Case 10 marks
- b) Statistical exercises 10 marks
- c) Spots 5 marks
- d) Epidemiology/Nutrition exercises 5 marks

ii) **Internal assessment** 20 marks

**Total Marks in Community Medicine** 200 marks

**OSC-4.17** There shall be four examiners in each of the subjects of the Third M.B.B.S. Part-I Examination of which not less than 50% shall be External Examiners. The senior-most Internla Examiner shall be the Convenor. The Examiner shall not be below the rank of Associate Professors. In case of appointments of Assistantt Professor as Internal Examiner, he shall have not less than 5 years experience as Assistant Professor.

**SOC-4.18 (Effective from June 2018) Internal Assesment :** *It shall be based on:*

- (i) Day-to-day assessment (see note), evaluation of student assignment, preparation for seminar, clinical case presentation etc.*
- (ii) regular periodical examinations.*
- (iii) Weightage for the internal assessment shall be 20% of the total marks in each subject.*
- (iv) student must secure a minimum of 35% marks of the total marks fixed for internal assessment in a particular subject to be eligible to appear in final university examination of that subject.*

**Note:** *The different ways in which students participation in learning is to be evaluated –*

- (i) Preparation of subject for students seminar or clinical case for discussion.*
- (ii) Clinical case study/problem solving exercise.*
- (iii) Participation in Project for health care in the community (planning stage to evaluation)*
- (iv) Proficiency in carrying out a practical or a skill in small research project.*
- (v) Multiple choice question (MCQ) test after completion of a system/teaching.*

*Each item tested shall be objectively assessed and recorded. Some of the items can be assigned as Home Work/Vacation work.*

**OSC-4.19 Standard of Passing the Examination:**

In each of the subjects, a candidate must obtain 50% in aggregate with a minimum of 50% in Theory including orals and minimum of 50% in Practicals at one and the same sitting.

**OSC-4.20** Following shall be the syllabi of Third M.B.B.S. Part-I Clinical Subjects:

### **1. Oto-Rhino-Laryngology**

The course shall comprise of the following:

1. Pharynx and Larynx: (a) Anatomy and development of oral cavity, pharynx including physiology (b) Anatomy, physiology of diseases of tonsil and adenoids. (c) Tonsillectomy and Adenoidectomy operations. (d) Anatomy of pharyngeal spaces and infections: Peritonsillar abscess, Retropharyngeal abscess, Parapharyngeal abscess. (e) Anatomy of Neck Spaces (f) Nasopharyngeal angiofibroma. (g) Faucial Diphtheria: Vincent's angina, Infectious Mononucleosis. (h) Anatomy, Physiology and functions of larynx and laryngopharynx. (i) Stridor, Definition, classification and management (j) Acute Pharyngitis Chronic Pharyngitis, (k) Acute laryngitis: Acute epiglottitis, Acute Laryngo-tracheo-bronchitis, Acute Laryngeal diphtheria. (l) Foreign Bodies in the Tracheo-bronchial Tree. (m) Hoarseness of voice and management: Vocal Cord Nodules, Tuberculous Larynx, Leukoplakia of vocal cords. (n) Tumours of larynx, Laryngectomy: Tracheostomy, Paralysis of Larynx Penendoscopy (Rigid and Flexible). Dysphagia etiology and treatment.

II. Nose: (a) Anatomy and physiology of nose including development. (b) Paranasal sinuses. (c) Deviated Nasal Septum Management. (d) Nasal Polyposis. (e) Sinusitis. (f) Epistaxis (g) Atrophic rhinitis, Management. (h) Foreign Bodies in the Nose and Management. (i) Septal perforation. (j) Nasal allergy. (k) Tumours of nose classification and Management (l) Nasal trauma Medical Surgical Management. (m) Functional Endoscopic Sinus Surgery – (Basic).

III. Ear: (a) Anatomy of Ear. (b) Physiology of ear. (c) Diseases of external ear. (d) Wax: Furunculosis, Malignant otitis externa. (e) Otitis externa, Ramsay Hunt Syndrome. (f) Acute and Chronic suppurative Otitis media: definition, types, clinical features, Pathology. Management of Otitis media with emphasis on cholesteatoma and its various complications. (g) Secretory Otitis media/adhesive otitis media & otitic barotraumas. (h) Otosclerosis signs, Symptoms and Management. (i) Menier's disease. (j) Ototoxicity including Tinnitus. (k) Facial nerve: Surgical anatomy, Management of Facial paralysis. (l) Cryosurgery, Lasers, C. T. Scan, Radiotherapy as applied in E.N.T. (m) Deafness, types, Investigation and Management. (n) Neurosciences, Ophthalmology, General Surgery and Therapeutics as applied to E.N.T. for undergraduates.

### **2. Ophthalmology:**

The Course shall comprise of the following:

1. Basic Anatomy of the eye and orbit including applied anatomy. 2. Physiology of the Eye & Optic. 3. Refractive errors & their correction 4. Ocular Pharmacology & drug reaction. 5. Diseases of the eye lids & orbits 6. Disorders of lacrimal apparatus. 7. Diseases of conjunctiva 8. Diseases of cornea & Sclera. 9. Clinical glaucoma. 10. Diseases of Uveal tract. 11. Diseases of the lens & vitreous 12. Disorders of ocular motility (squint) 13. Diseases of the retina. 14. Diseases of the optic Nerve. 15. Ocular emergencies & Injuries. 16. Community Ophthalmology 17. Ocular manifestation of systemic diseases.

### **3. Community Medicine**

There shall be teaching of minimum 200 hours including four weeks of community posting. The students shall make a project report during their Community postings which will be

evaluated for internal assessment. Field visits shall be arranged during the period of Community postings.

### **A. Theory**

1. Genetics and Health. Laws of Inheritance, Chromosomal disorders Mendelian diseases, Multifactorial disorders, Molecular Genetics, Population Genetics, Eugenics, Euthenics, Genetic counseling, Preventive aspects of genetic disorders.
2. Family planning including scope, methods, M.T.P. Act of 1971. National Family Welfare Programme and All India hospital post-partum programme. Following is the curriculum in Family Welfare in the subject of community Medicine. (1) The need for Family Welfare Planning. (2) Organisation of Family Welfare Planning Services. (3) Health Education in relation to Family Welfare Planning. (4) Nutrition. (5) Psychological needs of the mother, the child and the family. (6) Demography and Vital Statistics. Questions on Family Welfare Planning shall be introduced in the theory, practical and oral examination during the course. The Department of Preventive & Social Medicine (Community Medicine) will be associated with related Clinical Departments associated in imparting instruction relating to the problem arising for want of Family Welfare Planning and the advantages to society and the individual which will be gained adopting the measures suggested.
3. Mental health: types of mental illness, cause of mental ill health, mental health services, Mental health programme, alcoholism and Drug dependence.
4. Health planning including planning cycle, management methods and techniques: Behavioural and quantitative methods, National health policy, Health planning in India: Planning Committees., Health planning process in India. Five Year Plans. Health system in India, Rural development, Evaluation of health services. History of public health in India, Health economics: Cost benefit and cost effectiveness analysis.
5. Health Care of Community: concept of health care, levels of health care, Primary Health Care, Health for All, Health status and health problems, Resources, Health Care Delivery system. Primary health centre, functions of Health workers, Male & Female, Health assistants, Village health guide, Health insurance, voluntary health agencies, indigenous systems of medicine.
6. National Health Programmes in India, National Malaria Eradication Programme, National Filaria Control Programme, National Leprosy Eradication Programme, National Tuberculosis Programme, Revised National Tuberculosis control Programme, Diarrhoeal Diseases Control Programme, Acute Respiratory Disease Control programme, National AIDS Control Programme, Guinea-Worm Eradication Programme, Kala-Azar Control Programme, Japanese Encephalitis Control, Iodine Deficiency Disorders (IDD) Programme, National Programme for Control of Blindness, National Cancer Control Programme, National Mental Health Programme, National Diabetes Control Programme, Child Survival and Safe Motherhood Programme, Universal Immunisation Programme, national Family Welfare Programme, National Water Supply and Sanitation Programme, Accelerated Rural Water Supply Programme, Minimum Needs Programme, 20 point programme.
7. International health, including World Health Organisation, UNICEF, FAO, ILO etc.
8. Recent concepts and advances as applicable.

### **B. Practicals/Demonstrations and Field Visits:**

- (1) Field Visits: (1) Rural Health Centre. (2) Milk Dairy. (3) Opa Water Works. (4) Sewage Treatment Plant. (5) Institute of Occupational Health, Safety and Environment. (6) Waste treatment plant of a chemical industry. (7) Sub-centre. (8) ICDS Anganwadi.

(2) Community Postings: The students are required to undergo Community Posting for a period of 4 weeks during which they shall attend the field visits and prepare a Project Report on the given topic.

**OSC-4.21** The following shall be the prescribed minimum teaching hours for lectures, demonstrations, tutorials, seminars etc. in the subjects of III M.B.B.S. Part I Examination in addition to the clinical postings shown in OC-16.7.

Oto-Rhino-Laryngology	70 hours
Ophthalmology	100 hours
Community Medicine *	50 hours

For the examination in the subject of Surgery including Orthopaedics, one of the examiners shall be an Orthopaedic Surgeon who will set Section – II of Paper –I. He shall also be the examiner in the Practical examination. The Orthopaedic Surgeon will be the internal examiner for one term and external examiner for subsequent term. The internal examiner from General Surgery shall be the Convenor. During term when the Orthopaedic Surgeon is an external examiner, both internal examiners shall be from General Surgery and the senior most examiner shall be the Convenor.

**SOC-4.22 (Effective from June 2018)** The candidates will be examined in the following subjects of Third M.B.B.S. Part – II Examination .

1. General Medicine
2. Paediatrics
3. General Surgery
4. Obstetrics and Gynaecology

**SOC-4.23 (Effective from June, 2018)** The following shall be the scheme of the Third M.B.B.S. part – II Examination:-

### 1. General Medicine, Therapeutics, Applied Pathology and Allied Subjects

#### (A) Theory Examination:

There will be two papers each of three hours duration and sixty marks. Each paper will contain one question on General Medicine. Each paper will have two sections each of 30 marks.

#### i) Paper 1: 60 marks

General Medicine (General topics), CNS, Cardiovascular system, Gastrointestinal system, Haematology, Connective Tissue Disorders and Therapeutics.

#### ii) Paper II: 60marks

Infectious and tropical diseases, Nutrition and Endocrinology, Genitourinary system, poisoning, Psychiatry, Dermatology and S.T.D., Chest Diseases.

#### iii) (Effective from June 2018) Oral (Viva): Interpretation of X' ray, ECG etc 20 Marks.

#### iv) (Effective from June 2018) Internal Assessment 30 marks

General Medicine	15 Marks
Psychiatry	5 Marks
Dermatology & S.T.D.	5 Marks
Chest Diseases	5 Marks

#### (B) Practical Examination:

#### i) Clinical: (Beside) 100 marks

- Total number of hours for lectures/demonstration/tutorials etc. in Community Medicine shall be 310 hours spread over 1<sup>st</sup> to 7<sup>th</sup> semesters.

<b>ii) (Effective from June 2018) (ii) Internal Assessment</b>	<b>30 marks</b>
<i>General Medicine</i>	<i>15 Marks</i>
<i>Psychiatry</i>	<i>5 Marks</i>
<i>Dermatology &amp; S.T.D.</i>	<i>5 Marks</i>
<i>Chest Diseases</i>	<i>5 Marks</i>
<b>iii) Internal Assessment:</b>	<b>30 marks</b>
General Medicine 15, Psychiatry 5, Dermatology and S.T.D. 5 And Chest Diseases 5 (Total 30 marks).	
<b>Total marks in Medicine</b>	<b>300 marks</b>

## **2. (Effective from June 2018) Paediatrics including Neonatology**

### **(A) Theory Examination:**

There shall be one theory paper of 40 marks and of three hours duration. The paper shall contain one question in basic sciences and allied subjects. The paper will have two sections each of 20 marks.

- i) Theory:** one paper (Short answer type question) 40 marks  
 Section I : Growth and Development, Nutrition, Preventive Paediatrics, infectious Diseases etc.  
 Section II : Neonatology, Emergencies, Disease of Children etc.

**ii) (Effective from June 2018) (ii) Oral: (Viva) Assessment** 10 Marks

**(B) Practical:**

- i) (Effective from June 2018) i) Clinical Examination** 30 Marks  
     *Long case, Short Case spots*
- ii) (Effective from June 2018) Internal Assessment** 10 Marks  
     *Total marks in Paediatrics including Neonatology* 100 marks
- iii) Internal Assessment:** 10 marks
- Total Marks in Paediatrics including Neonatology** 100 marks

## **3. Surgery including Orthopaedics**

### **(A) Theory Examination:**

There will be two papers each of three hours duration and 60 marks. Each paper will contain one question in basic sciences and allied subjects. Each paper will have two section each of 30 marks

- i) Paper 1:** 60 marks  
     Section I : General Surgery.  
     Section II: Orthopaedics.
- ii) Paper II:** 60 marks  
     Section I : General Surgery including Anaesthesiology.  
     Section II : General Surgery, Dental Diseases & Radiology.
- iii) (Effective from June 2018) Oral (Viva) Interpretation of investigative data** 20 Marks  
     *(X ray -5 Marks, Pathology specimen - 5 Marks, Operative - 5 Marks, Instrumnet - 5 Marks)*
- iv) (Effective from June 2018) Internal Assessment** 30 marks

**(B) Practical:**

- i) (Effective from June 2018) Clinical (Bedside) Long case** - 40, 3 short cases – 60  
 100 marks
- ii) (Effective from June 2018) Internal Assessment** 30 Marks

**Total marks in Surgery**

**300 marks**

**Internal Assessment**

Theory 30 marks : Surgery 15, Orthopaedics 5, Radiology 5, Anaesthesiology 5.

Practical 30 marks : Surgery 15, Orthopaedics 5, Radiology 5, Anaesthesiology 5.

**4. Obstetrics, Gynaecology, Family Planning & Family Welfare.**

**(A) Theory Examination:**

There shall be two theory papers each of three hours duration of 40 marks each. Each paper will have Two section and each section should be answered in a separate answer book.

**i) Paper – I :** Obstetrics including social Obstetrics & Newborn. 40 marks  
Normal pregnancy, labour and Puerperim, Haemorrhages in Pregnancy and Labour.  
Abnormal pregnancy, Abnormal labour and puerperium, Newborn & perinatal mortality.

**ii) Paper – II :** Gynaecology, family welfare, Demography. 40 marks  
Common Gynaecological conditions, Benign & malignant gynaecological condition, Gynaecological diseases and their management, Basic sciences and allied subjects, Family Planning & MTP.

**iii) Orals including Journal** 30 marks

**iv Internal assessment:** 20 marks

**(B) Practical Examination:**

**i) Clinical Examination** (1) Obstetrics case 15 marks  
(2) Gynaecology case 15 marks

**ii) Practical Examination :** (1) Obstetrics including dummy, pelvis and drugs 10 marks  
(2) Gynaecology including family planning 10 marks

**iii) Internal Assessment:** 20 marks

**Total marks in Obstetrics and Gynaecology** 200 marks

**SOC-4.24 (Effective from June 2018)** *There shall be four examiners in each of the subjects of the Third M.B.B.S. Part – II Examination of which not less than 50 % shall be External Examiner. The senior-most Internal Examiner shall be the Convenor. The Examiner shall not be below the rank of Associate Professors. In case of appointments of Assistant Professor as Internal Examiner, he shall have not less than 5 years experience as Assistant Professor.*

*For the examination in the subject of Surgery including Orthopaedics, one of the examiners shall be an Orthopaedic Surgeon who will set Section – II of Paper –I. He shall also be the examiner in the Practical examination. The Orthopaedic Surgeon will be the internal examiner for one term and external examiner for subsequent term. The internal examiner from General Surgery shall be the Convenor. During term when the Orthopaedic Surgeon is an external examiner, both internal examiners shall be from General Surgery and the senior most examiner shall be the Convenor.*

**SOC-4.25 (Effective from June 2018) Internal Assessment:** *It shall be based on (i) Day to day assessment (see note), evaluation of student assignment, preparation for seminar, clinical case presentation etc.*

- (ii) regular periodical examination;
- (iii) weightage for the internal assessment shall be 20% of the total marks in each subject and
- (iv) Student must secure 35% marks of the total marks fixed for internal assessment in a particular subject to be eligible to appear in final University Examination of that subject.

*Note: The different ways in which students participation in learning is to be evaluated*

*(i) Preparation of subject for students seminar or clinical case for discussion; (ii) Clinical case study/problem solving exercise; (iii) Participation in Project for health care in the community (planning stage to evaluation); (iv) Proficiency in carrying out a practical or a skill in small research project; (v) Multiple choice question (MCQ) test after completion of a system/teaching.*

*Each item tested shall be objectively assessed and recorded. Some of the items can be assigned as Home Work/Vacation work.*

#### **SOC-4.26 Standard of Passing the Examination:**

In each of the subjects, a candidate must obtain 50% in aggregate with a minimum of 50% in Theory including orals and minimum of 50% in Practicals at one and the same sitting.

**OSC-4.27** Following shall be the syllabi of the clinical subjects for Third M.B.B.S. Part II Examination.

#### **1. General Medicine, Therapeutics, Applied Pathology and Allied Subjects.**

A. Infectious and Tropical Diseases: Enteric Fever, Malaria, Tetanus, Cholera, Diphtheria, Whooping cough, Tuberculosis, Rabies, Amoebiasis, Kala-azar, Filariasis, Influenza, Helminthiasis.

B. Cardiovascular Diseases: Congenital heart diseases (e.g. ASD, VSD, PDA, FT, Eisenmenger's syndrome), Rheumatic Fever and Rheumatic Heart Diseases, Bacterial endocarditis, Hypertension, Ischemic Heart Diseases, Arrhythmias, Cardiac failure, shock, Pericarditis, Pulmonary embolism, Syphilitic heart diseases, Cor pulmonale.

C. Respiratory Diseases: Pneumonia, Pleural effusion, Pneumothorax, Chronic obstructive lung diseases, Lung abscess, Carcinoma of lung, Interstitial lung diseases, Bronchial obstruction and lung collapse, Pulmonary eosinophilia and Pulmonary Tuberculosis.

D. Gastrointestinal and Hepatobiliary Diseases: Dysphagia, Stomatitis, Glossitis, Achalasia cardia and Hiatus hernia, Acid peptic diseases, Malabsorption syndrome, Abdominal tuberculosis, Constipation and diarrhea, Ulcerative Colitis, Amoebic and bacterial dysenteries, Viral hepatitis, Chronic hepatitis, Cirrhosis and portal hypertension, Alcoholic liver disease, Pancreatitis.

E. Central Nervous System: Trigeminal neuralgia, Bell's palsy, Speech disorders, CNS infections, Cerebrovascular accidents, Epilepsy, Intracranial space occupying lesions, Neurosyphilis, Paraplegia, Ataxia, Motor Neuron diseases, Demyelinating disorders, Extrapyramidal disorders, Polyneuropathy, Myasthenia gravis, Myopathies.

F. Hematology: Anaemias, Leukemias, Agranulocytosis, Lymphomas, Myeloproliferative disorders, Platelet disorders, Normal coagulation and clotting disorders, Blood transfusion and its complications.

G. Renal Disorders: Assessment of Renal function, Glomerulonephritis, Acute and chronic



renal failure, Infection of urinary tract, dialysis and renal transplantation, Obstructive Uropathy, Nephrotic syndrome.

H. Endocrine Disorders: Disorders of Hypothalamus and Pituitary, Diseases of adrenal cortex and medulla, Hyperthyroidism, Hypothyroidism, disorders of parathyroid gland and calcium metabolism, Diabetes Mellitus, Corticosteroid therapy.

I. Arthritis and Collagen Diseases: Rheumatoid arthritis, Ankylosing spondylitis, Osteoarthritis, SLE, Gout.

J. Nutritional diseases: Normal Nutritional requirement, Avitaminosis, Malnutrition, Obesity, Diet in therapy.

K. Others: Poisoning-Barbiturate, Organophosphorus, Salicylates, Antidepressants. Opiates, Corrosives, Snake bite, Alcoholism, Smoking and its effects, Radiosotope in Medicine.

L. Recent advances and latest drugs.

### **Tuberculosis and Respiratory Diseases:**

(1) Tuberculosis: (a) History aetiopathogenesis & pathology. (b) clinical features, diagnosis differential diagnosis; (c) Disseminated Tuberculosis. (d) Management & control (NTP).

(2) Respiratory Diseases: (a) Chronic bronchitis and emphysema. (b) Occupation related lung diseases. (c) Parasitic diseases of the lung. (d) Actinomycotic and fungal diseases of the lung (e) Pneumonias. (f) lung cancer. (g) Lung Abscess & other suppurative diseases of the lung. (h) Bronchial asthma. (i) Diseases of the pleura: Pleura effusion, Pneumothorax, Hydropneumothorax, Empyema. (j) Mechanism and management of respiratory failure. (k) Bedside procedures: Thoracocentesis, Intercostal tube drainage, Lung biopsy, Pleural biopsy, Lung FNAC, Pulmonary function tests, Bronchoscopy.

### **Dermatology, Venereology & Leprology:**

(a) Anatomy, Physiology of Skin and its appendages. (2) Morphology of Skin lesions and fundamentals of diagnosis. (3) Infections: Bacterial, Fungal, Viral and Parasitic infections. (4) Populosquamous disorders (5) Vesiculobullous disorders of skin. (6) Eczema (7) Drug eruptions: Urticaria. (8) Deficiency dermatoses. (9) Leprosy. (10) Sexually Transmitted Diseases: Syphilis, Chancroid, gonorrhoea, granuloma inguinale, l. lymphogranuloma venereum, condyloma accuminata and AIDS. (11) Systemic and topical Therapy.

### **Psychiatry:**

(1) Introduction, History classification of Mental disorders. (2) Normal & Abnormal Human behaviour. (3) Learning Motivation, Memory, Personality & Intelligence. (4) Symptomatology of various Psychiatric disorders. (5) Schizophrenia. (6) Affective disorders. (7) Organic Mental disorders. (8) Neurotic disorders. (9) Mental subnormality. (10) Personality disorders. (11) Sexual deviations, HIV and its Neuropsychiatric manifestations. (12) Psychiatric emergencies. (13) Treatments in Psychiatry – Non pharmacological. (14) Community Psychiatry. (15) Psychosomatic disorders. (16) Alcoholism. (17) Drug Dependence. (18) Psychological Problems of children & adolescents. (19) Forensic Psychiatry.

### **1. Paediatrics (including Neonatology).**

Neonatology: (1) Examination of the newborn, Care of newly born, resuscitation of newborn, perinatal assessment, management of a high risk infant.

(2) Prevention and management of common foetal and neonatal infections.

(3) Neonatal jaundice (4) Common respiratory problems in the neonate (5) Management of low birth weight infants (both preterm and small for dates) (6) Causation and management of neonatal convulsions. (7) Clinical features, management and prevention of birth injuries.

### **Paediatrics:**

(1) Infectious Diseases. (a) Human Immunodeficiency Virus and AIDS. (b) Malaria. (c) Leprosy. (d) Tuberculosis. (e) Pertussis. (f) Diphtheria. (g) Tetanus. (h) Poliomyelitis. (i) Measles. (j) Typhoid fever. (k) Hepatitis. (l) Syphilis (congenital). (m) Common worm infestations. (n) Mumps. (o) Rubella. (p) Varicella. (q) Common skin infections and infestations. (r) Cholera. (s) Filariasis. (2) Respiratory System: (a) Upper Respiratory infections. (b) Otitis Media. (c) The croup syndrome. (d) Acute Bronchiolitis. (e) Pneumonia, empyema and Pneumothorax. (3) Gastro Intestinal System: (a) Diarrhoeal Disease. (b) Cirrhosis in childhood. (c) Portal hypertension. (d) Causes and management of abdominal pain in child. (e) Obstructive cholangiopathy in children. (4) Hemopoietic System: (a) iron deficiency anemia. (b) Thalassemia. (c) Bleeding disorders. (d) Indication and complications of blood transfusion. (5) Cardio Vascular System: (a) Acute Rheumatic fever. (b) Bacterial Endocarditis. (c) Common congenital heart diseases. (d) Acute Myocarditis. (e) Hypertension. (f) Congestive Cardiac failure. (6) Central Nervous System: (a) Febrile fits. (b) Convulsive disorders. (c) Common infections of CNS. (d) Cerebral Palsy. (e) Mental Retardation. (7). Urinary System: (a) Acute glomerulonephritis. (b) Nephrotic syndrome. (c) Acute and chronic renal failure. (d) Urinary tract infections. (8). Oncology: (a) Leukemia. (b) Neuroblastoma. (c) Wilm tumour. (d) Lymphoma. (9) Endocrine System: (a) Hypothyroidism. (b) Short stature. (c) Juvenile Diabetes Mellitus. (d) Ambiguous Genitalia. (10) Child Psychiatry: (a) Common behaviour problems. (b) Child abuse. (c) Drug abuse. (11) Accidents and Poisoning: Prevention and management of common accidents and poisonings (including scorpion sting and snake bites). (12) Allergy: (a) Bronchial Asthma. (b) Anaphylaxis and insect sting allergy. (c) Urticaria and angio-edema. (d) Atopic Dermatitis. (e) Food and drug allergy. (13) Handicapped Children: Recognition of and the principles of management of handicapped children. (14) Community Paediatrics: (a) Child oriented programs in India. (b) National family welfare programmes. (c) Primary health care. (d) Breast feeding, food taboos and other cultural factors influencing child health. (e) Health education pertaining to children. (f) Morbidity and mortality pattern of children in India.

### **3. General Surgery including Orthopaedics**

#### **General Surgery:**

1. Trauma: (a) Healing & management of wounds. (b) Healing by first intention (c) Healing by second intention. (d) Biological Process of Healing. (e) Factors affecting wound healings. (f) Scars. (g) Incisions. (h) Practical management of severely injured. 2. Accident & Emergency Surgery: (a) Civil injuries. (b) Mechanism of injuries (c) Disaster planning. (d) Trauma severity scores. (e) Pre-hospital management. (f) Hospital Care (g) Warfare injuries. (h) Missile injuries & their management (i) Blast injuries & their management. (j) Replantation & revascularization. 3. Haemorrhage: types of Physiological and Pathological changes, and management of haemorrhage. 4. Shock: types, physiology, Clinical features, diagnostic, difficulties, treatment of shock. (a) Crush syndrome. (b) Blood transfusion, indications & complications. (c) Post operative analgesia. 5. Fluid & Electrolytes Balance: (a) Normal intake & output of water. (b) Sodium shut down in trauma. (c) Sodium depletion. (d) Sodium excess. (e) Potassium – Augmented potassium excretion of trauma. (f) Hypokalemia. (g) Increased K<sup>\*</sup> loss of Alkalosis. (h) Hyperkalemia (i) Alkalosis (j)

Acidosis. 6. Nutrition: (a) Assessment & Management. (b) Methods of feeding. (c) Rehabilitation (d) Chronic pain relief. 7. Burns. (a) Classification. (b) Physiological changes after burns. (c) Treatment of burns – general, local, role of surgery – skin grafting. (d) Special types of burns & their management.

8. Skin: (a) Infection-boils, carbuncle, cellulitis, etc. (b) Callosity, corn, wart. (c) Different types of skin cysts. (d) Benign skin tumours. (e) Pre malignant conditions of skin. (f) Malignant disease of the skin – Basal cell carcinoma, squamous cell carcinoma, malignant melanoma. 9. Face: (a) Development of face. (b) Congenital abnormalities – cleft lip, cleft palate (c) Lesions of palate. (d) Lesions of the lips. (e) Neoplasms of the lip 10. Head: (a) The scalp-anatomy. (b) Wounds of the scalp. (c) Swellings over scalp. (d) New Growth over the skull. 11. Neck: (a) The branchial apparatus & its abnormalities – Branchial cyst, Branchial fistula. (b) Cystic hygroma. (c) Sternomastoid tumour. (d) Cervical rib/scalene syndrome. (e) Cervical lymphadenitis-Acute, Chronic, nonspecific, Tuberculous. (f) Primary malignant tumours of the neck. 12. Oral Cavity: (a) Stomatitis & ulcers in oral cavity. (b) Ranula, lingual & sub lingual dermoids. (c) Tumours of the cheek and the floor of the mouth. (d) Carcinoma of the cheek. (e) Developmental anomalies of the tongue: (f) Laceration of the tongue. (g) Inflammation of the tongue. (h) Hyperkeratosis and leukoplakia of the tongue. (i) Benign neoplasm of the tongue. (j) Carcinoma of the tongue.

13. Salivary glands: (a) Surgical anatomy of the parotid salivary gland. (b) Surgical anatomy of the submandibular gland. (c) Sialography. (d) Acute parotitis. (e) Obstruction to the duct of a major salivary gland. (f) Neoplasms-Pleomorphic adenomas. Adenolymphoma or Warthin's tumour, mucoepidermoid & other tumours/carcinomas. (g) The auriculotemporal syndrome (Frey's syndrome). 14. Infection: (a) Infection & sepsis, (b) Hospital acquired infection. (c) Spread of infection. (d) Preventing infection. (e) Principles of antimicrobial therapy. (f) Specific Infections – Tetanus, gas gangrene, tuberculosis, leprosy, treponemal infections, actinomycosis, anthrax. 15. Cysts: (a) Types of cyst & their management 16. Ulcers: (a) Clinical examinations of ulcer, specific ulcers & their management. 17. Sinuses & Fistula: (a) Examination of sinuses & fistula (b) Persistence of sinus or fistula. 18. Tumours: (a) Definition, (b) Causation, (c) Types – Benign & malignant. (d) Characteristics of malignancy. (e) Methods of spread of malignant tumour. (f) Broder's grading of malignant tumour. (g) Description of individual tumours & their management. 19. Basic Immunology. (a) The nature of immune response. (b) Organ transplant – Kidney transplant. (c) Peritoneal dialysis. (d) Complications of renal transplant. (e) Results of kidney transplant. (f) Liver transplant. (g) Pancreas transplant. (h) Heart and heart & lung transplant. (i) Bone marrow transplant. 20. Diseases of Arteries: (a) Effects of impaired circulation to the limb. (b) signs & symptoms of ischaemia (lower limb). (c) investigations of arterial stenosis or occlusion. (d) Management of arterial stenosis or occlusion. (f) Acute arterial occlusion operation for arterial stenosis or occlusion. (g) Gangrene – varieties, clinical features & treatment of gangrene. (h) Physical & chemical causes of gangrene. (i) Amputation – Aneurysms, Arteritis – Buerger's disease, Vaso-spastic conditions. 21. Diseases of veins: (a) Functional & Surgical anatomy of veins of lower limb. (b) Investigations of venous disease. (c) Venous-thrombosis. (d) Venous haemorrhage. (e) Varicose veins. 22. Diseases of lymphatics & lymph nodes: (a) Acute lymphangitis. (b) Lymphangiography. (c) Lymphoedema. (d) Filariasis. (e) Lymphangioma. (f) Acute Lymphadenitis. (g) Chronic lymphadenitis – Tuberculosis. (h) Lymphoma – Hodgkin's, Non-Hodgkin's 23. Affections of nerves: (a) Injuries of peripheral nerve. (b) Neuropraxia. (c) Axonotomesis (d) Neurotomesis. (e) secondary changes after nerve injury. (f) Surgical treatment of nerve injury. (g) Injuries of individual nerves with special reference to – Brachial plexus, Radial nerve, Median Nerve, Ulnar Nerve, Sciatic Nerve, Cranial Nerves.

(h) Tumours of peripheral Nerves. 24. Stomach & Duodenum: (a) Surgical Anatomy & Physiology. (b) Tests of gastric secretion (c) Hypertrophic pyloric stenosis of infants. (d) Peptic Ulcer: Ca Duodenal Ulcer Clinical, gastric Ulcer features investigation & treatment with special reference to surgical treatment. (e) Perforated peptic ulcer. (f) Haematemesis, malaena. (g) Chronic complications of peptic ulcer. (h) Gastric neoplasms – Benign, Malignant, Carcinoma of stomach, clinical feature, investigations & treatment. 25. Liver: (a) Surgical anatomy & Physiology. (b) Functions of the liver (c) Hepato-cellular failure. (d) Special methods of investigating the Liver, (e) Injuries of liver. (f) Hepatomegaly. (g) Amoebic liver abscess. (h) Hydatid disease of the liver. (i) Cirrhosis of the liver – Portal hypertension. (j) Neoplasms of liver – Benign, Malignant –Primary, Secondaries. 26. Spleen : (a) Structure & functions of spleen. (b) Investigations of the spleen. (c) Rupture of spleen. (d) Enlargement of the spleen. (e) Surgical conditions affecting splenomegaly. (f) Splenectomy. 27. Gall Bladder: (a) Surgical anatomy & physiology. (b) Investigations of biliary tract. (c) Congenital abnormalities of gall bladder & bile ducts. (d) Gall stones. (e) Chronic calculus cholecystitis. (f) Acute calculus cholecystitis. (g) Acalculous cholecystitis. (h) Cholecystectomy – cholecystostomy. (i) Stones in the bile duct. (j) Management of biliary obstruction due to stone. (k) Carcinoma of the gall bladder. 28. The Pancreas: (a) Surgical anatomy. (b) Congenital anomalies. (c) Injuries of the pancreas. (d) Acute pancreatitis – Clinical features, investigations, management & complications. (e) Pseudocyst of Pancreas (f) Chronic pancreatitis. (g) Carcinoma of the pancreas. 29. Urology: (a) Urinary symptoms. (b) Investigations of urinary tract – Anuria. (c) The Kidneys & Ureters, (d) Congenital abnormalities of the Kidneys. (e) Renal pelvis & Ureter. (f) Injuries to the kidney. (g) Hydronephrosis. (h) Renal Calculus. (i) Infections of the Kidney – Pyelonephritis, Pyonephrosis, Carbuncle of the kidney, Perinephric abscess, Renal tuberculosis. (j) Neoplasms of kidney – Nephroblastoma, Hypernephroma, Transitional cell Carcinoma, Squamous cell carcinoma. Exposure & removal of kidney. 30. Urinary Bladder: (a) Surgical Anatomy. (b) Ectopia vesicae (c) Rupture of the bladder. (d) Retention of urine. (e) Incontinence of urine. (f) Vesical calculus. (g) Diverticulum of the bladder. (h) Urinary fistulas. (i) Cystitis. (j) Neoplasm of the bladder. (k) Carcinoma of the bladder. (l) Urinary diversion. 31. Urethra: (a) Congenital anomalies of urethra. (b) Hypospadias. (c) Epispadias (d) Injuries of the Urethra. (e) Extravasation of urine. (f) Inflammations of urethra. (g) Urethritis. (h) Urethral structure. (i) Periurethral abscess. 32. Penis: (a) Circumcision, phimosis, Paraphimosis. (b) Strangulation by rings. (c) Balanitis. (d) Condyloma – acuminata. (e) Peyronie's disease, priapism, Fourmer's gangrene. (f) Carcinoma of the penis. 33. Peritoneum: (a) Surgical physiology. (b) Acute peritonitis. (c) Pelvic abscess. (d) Sub phrenic abscess. (e) Post operative peritonitis. (f) Bile peritonitis. (g) Meconium peritonitis pneumococcal peritonitis. (h) Tuberculous peritonitis. (i) Ascites. (j) Neoplasms of peritoneum. (k) Laparoscopy (Peritonitis). 34. Greater Omentum : (a) Torsion of omentum (b) Omentum cyst. 35. Mesentery: (a) Injuries. (b) Acute non specific ileocaecal. (c) Mesenteric adenitis. (d) Tuberculosis of mesenteric lymphnodes. (e) Mesenteric cyst. (f) Neoplasms of the mesentery. 36. Retroperitoneal Space: (a) Retroperitoneal cyst. (b) Primary retroperitoneal neoplasms arising from connective tissue. 37. Small & large Intestine: (a) Congenital malformations of the intestine. (b) Primary megacolon, Hirschsprung's disease (c) Acquired megacolon. (d) Vascular anomalies. (e) Traumatic rupture of the intestine. (f) Blind loop syndrome. (g) Diverticula of small intestine – Meckel's diverticulum. (h) Diverticular diseases of colon. (i) Ulcerative colitis. (j) Intestinal amoebiasis (k) Surgical complications of typhoid & paratyphoid. (l) Tuberculosis of intestine. (m) Tumours of large intestine – Benign, Malignant. (n) Caecum & colon. (o) Faecal fistula. (p) Colostomy. 38. Intestinal Obstruction: (a) Dynamic obstruction. (b)

Adynamic obstruction. (c) Pathology of intestinal obstruction. (d) Strangulation – Clinical feature, investigations & treatment. (e) Acute intestinal obstruction of newborn. (f) Small intestinal obstruction. (g) Paralytic Ileus. (h) Chronic intestinal obstruction. (i) Pseudo obstruction. 39. Vermiform appendix: (a) Surgical Anatomy. (b) Acute appendicitis. (c) The differential diagnosis of acute appendicitis. (d) Appendicular mass – management (e) Treatment of Acute appendicitis. (f) Complications of appendectomy (g) Neoplasms of the appendix. 40. Rectum: (a) Surgical Anatomy. (b) Injuries. (c) Prolapse of Rectum. (d) Proctitis. (e) Benign tumours of the rectum. (f) Carcinoma of the rectum. 41. Anus & Anal Canal: (a) Surgical anatomy (b) Examination of anus. (c) Congenital abnormalities. (d) Pilonidal sinus. (e) Anal incontinence. (f) Anal fissure. (g) Haemorrhoids. (h) Pruritis ani. (i) Ano rectal abscess. (j) Fistula in ano. (k) Malignant tumours of of Anus & Anal canal. 42. Hernia: (a) General features common to all hernias. (b) Classification. (c) Individual features of hernia. (d) Inguinal hernia – Direct, indirect. (e) Treatment of Inguinal hernia. (f) Sliding hernia. (g) Femoral hernia. (h) Umbilical hernia. (i) Para Umbilical hernia. (j) Epigastric hernia. (k) Rare external hernia. 43. Umbilicus: (a) Inflammation of umbilicus, (b) Umbilical fistula. (c) Neoplasms of umbilicus. (d) Umbilical adenoma. (e) Endometrioma. (f) Secondary carcinoma. 44. Abdominal Wall: (a) Burst abdomen. (b) Incisional hernia. (c) Tear of inferior epigastric artery. (d) Progressive postoperative bacterial synergistic gangrene. (e) Neoplasm of abdominal musculature Desmoid tumour. Testes & Scrotum: (a) Development of testis. (b) Undescended & maldescended testis. Torsion of testis. (d) Epididymo-orchitis-Acute, Chronic. (e) Hydrocele. (f) Haematocele (g) Varicocele (h) Male infertility. (i) Testicular tumours. 46. Thyroid: (a) Anatomy – Physiology – thyroid function tests (b) Congenital disorders (c) Ectopic thyroid. (d) Goitre – Multinodular, Solitary thyroid nodule, Thyrotoxicosis, Thyroiditis, Thyroid tumours. Parathyroid: (a) Anatomy & Physiology, (b) Hyperthyroidism – Primary, Secondary (c) Hypo parathyroidism. Adrenal : (a) Acute adrenal insufficiency (b) Chronic adrenal insufficiency (c) Hypercortisolism (d) Tumours of adrenal medulla (e) Pheochromocytoma. (f) Neuroblastoma. (g) Ganglioneuroma. 49. Pituitary gland: (a) Surgical Anatomy. (b) Tumours of pituitary gland. 50. Breast: (a) Development & congenital anomalies (b) Surgical anatomy – Abnormal discharge from nipple. (c) Acute & Sub Acute infection – Breast abscess. (d) Chronic infection – tuberculosis. (e) Breast cysts – mammary duct Ectasia. (f) Mammary: ANDI (Aberations of Normal Development & Involution) dysplasia or Tumours – Benign – fibro-adenomas. (g) Carcinoma. (h) Carcinoma of Breast : - Causative factors, Pathology of Ca breast spread, Clinical presentation with classification TNM, Phenomenon resulting from lymphatic obstruction, Investigation & treatment – Role of surgery, Management of advanced carcinoma, screening for breast cancer. 51. Chest Wall: (a) Injury to the chest. (b) Cold abscess (c) empyema – necessitatis. (d) Tumours of the rib. 52. Pleura: (a) Pneumothorax. (b) Haemothorax. (c) Pleural effusion. (d) Empyema & its management. 53. Bronchi & Lung: (a) Foreign body in lungs/bronchus. (b) Bronchiectasis. (c) Carcinoma of the bronchus. (d) Lung cysts. (e) Pulmonary edema. (f) Surgical treatment of pulmonary tuberculosis. (g) Post operative pulmonary complications. 54. Diaphragm: (a) The diaphragmatic hernia. 55. The Mediastinum: (a) Mediastinal tumour. (b) Retrosternal goitre. (c) Thymus. 56. Heart & Pericardium: (a) Special methods of investigations. (b) Cardio-respiratory resuscitation. (c) Cardiac tamponade. (d) Congenital heart disease. (e) Acquired heart diseases. (f) Cardiac transplant. 57. Oesophagus: (a) Surgical methods of investigations. (b) Congenital abnormalities – atresia of oesophagus with tracheo-oesophageal fistula. (c) Foreign bodies in oesophagus. (d) Injuries. (e) Spontaneous rupture of oesophagus. (f) Oesophagitis. (g) Hiatus hernia & Achalasia of the oesophagus. (h) Ca of the oesophagus. 58. Neurosurgery – Cranio-cerebral

injuries, Acute extradural hematoma, Acute subdural hematoma. Clinical diagnosis & cerebral injuries, Acute extradural hematoma, Acute subdural hematoma, Clinical diagnosis & management, Late effects of head injury, Intracranial infections, abscess and tumours, and Hydrocephalus.

### **Orthopaedics:**

#### **(a) Traumatology**

1. Injuries to bones and joints. 2. Compound (open) fractures. 3. Injuries of the arm and forearm. (a) Dislocation of shoulder joint. (b) Injuries of the elbow. (c) Injuries of the forearm. (d) Injuries around the wrist. (4) Injuries of the hand (5) Injuries of the lower extremity. (6) Nerve injuries. 7. Vascular injuries. 8. Injuries of spine and pelvis. 9. Amputations and limb fitting. 9. Miscellaneous in traumatology. (a) Plaster of paris techniques. (b) Application of skin traction using Thomas split.

#### **(b) Orthopaedics (General)**

1. General orthopaedics: History, emblem, Acquired deformities. 2. Clinical examination, Gait, splinting, Traction. 3. Congenital deformities. 4. Development disorders of bone. 5. Infections of bones and joints. 6. Bone and joints tuberculosis. 7. Diseases of bones. 8. Diseases of joints. 9. Neurological and muscular disorders. 10. Regional conditions. 11. Tumours or bone. 12. Physical medicine and Rehabilitation in orthopaedics. 13. Miscellaneous-bone grafting metastatis orthopaedics, orthopaedics instruments and equipments.

### **Anaesthesiology:**

1. History and development of anaesthesia. 2. Anaesthesia definition and classification 3. Duties and responsibilities of anesthesiologists. 4. Preoperative preparation and medication. 5. Anaesthetic equipment and machine. 6. Principles and techniques of general, spinal, epidural and local anaesthesia. 7. Complications of general, regional and local Anaesthesia, and their management. 8. Principles of management of cardiac resuscitation. 9. Principles of I.C.U. 10. Principles of induced hypothermia, induced hypotension and other recent advances.

### **Radio-Diagnosis & Radiotherapy:**

(1) Basis of X-ray production, its properties & hazards. (2) Radiographic Anatomy of Bones & joints, fractures, infections, metabolic bone diseases etc. (3) Identification and diagnose various radiological changes in disease conditions of chest & Mediastinum, skeletal system, Gastro-intestinal tract, Biliary tract, Genito Urinary tract, Central nervous system & spine, musculo-skeletal system. (4) Imaging system: Ultrasonography, Computed tomography, M.R.I., D.S.A. Isotopes. (5) Barium-meal, Barium-enema. IVP, angiography, Venography, PTC procedures. (6) Symptoms & signs of various Cancers and methods of investigations and management. (7) Effects of radiation therapy on human body and basic principles involved in it. (8) Radio-active Isotopes & their physical properties. (9) Advances in radiotherapy in Cancer management.

## **4. Obstetrics, Gynaecology, Family Planning, Neonatology.**

### **Gynaecology:**

1. Normal menstruation & Applied anatomy of genital tract including histology (a) Dysmenorrhoeas. (b) Amenorrhoeas. (c) Dysfunctional uterine bleeding. (d) Menopause and its disorders. 2. Development & anomalies of genital tract. 3. Chromosomal abnormalities

and intersex. 4. Sterility: (a) General concepts. (b) Male factor. (c) Anovulation. (d) Tubal factor. (e) Gross pelvic causes. (f) Cervical factor. (g) Investigations in a couple. 5. Inflammations and Infections. (a) General diseases including AIDS. (b) Genital tuberculosis. (c) Vaginitis and Leucorrhoeas. (d) Chronic cervicitis and erosion. (e) Salpingitis. (f) Chronic pelvic inflammatory disease, pelvic abscess, pelvic cellulites, pelvic peritonitis. 6. Benign and Malignant tumours. (a) Fibroids. (b) Endometriosis. (c) Carcinoma cervix: (i) Incidence, etiology, pathology, spread and staging. (ii) Signs, symptoms, early diagnosis. (iii) Investigations, treatment (d) Benign and malignant lesions of vulva and differential diagnosis of pruritus vulvae. (e) Carcinoma endometrium and chorio-carcinoma. (f) Ovarian tumours (i) Histological components of ovary and classification of ovarian tumours. (ii) Clinicopathology, peculiarities of individual ovarian tumours, including staging. (iii) Clinical features (general), Complications and treatment. 7. Displacements and Miscellaneous: (a) Genital prolapse. (b) Retroversion and backache. (c) C.C.F. (d) Injuries to genital tract. (e) Miscellaneous – Hormones in gynaecology, Radiotherapy in gynaecology & chemotherapy in gynaecology.

### **Obstetrics:**

(1) Applied anatomy of female genital tract. (2) Implantation and early development of human embryo. (3) Physiology of conception. (4) Structure and function and anomalies of human placenta. (5) Physiology of pregnancy. (6) Diagnosis of pregnancy. (7) Antenatal care including nutrition in pregnancy. (8) Normal labour – Maternal changes and forces. Mechanism and clinical course. Management. (9) Oral contraceptives. (10) Sterilisation. (11) M.T.P. Act and Procedures for 1<sup>st</sup> and II<sup>nd</sup> trimester. (12) National Health Programme.

### **Neonatology/Newborn**

(1) Physiology and management of the newborn. (2) Asphyxia. (3) Birth injuries. (4) Infections in the newborn. (5) Prematurity. (6) Postmaturity. (7) Dysmaturity.

### **Family Planning:**

(a) Anatomy of reproductive system. (b) Menstrual Cycle. (c) Spermatogenesis & oogenesis. (d) Fertilisation. (e) Physiology & endocrinology of reproduction. (f) Demonstration of Female sterilization. (g) Demonstration of insertion of Intra-uterine Devices. (h) Male contraception. (i) Medical Termination of pregnancy: (i) Interpretation of various clauses of Medical Termination of Pregnancy Act 1971. (ii) Medicolegal aspects of the Act. (iii) Techniques of medical termination of the pregnancy.

**Note:** The students shall be posted as per OC-16.7 in Maternity and Gynaecological Wards during which period, the candidate should attend: Antenatal Clinics, Post natal clinics, Well Baby clinics, Family Planning clinics, Gynaecological clinics, etc. in the out patient department. He shall record examination of 20 Ante natal cases. During this period, candidates shall be resident pupils in the hospital. The candidate will maintain a regular record of the above ante natal cases which will be produced at the time of examination. The candidates shall also witness/assist in (a) Puerperal sterilization – 5. (b) Interval Sterilisation – 3. (c) Intra-Uterine Device insertion – 3. (d) Menstrual Regulation procedure – 3. (e) First Trimester Medical Termination of Pregnancy – 3.

**SOC-4.28** Following minimum teaching hours are prescribed in the subjects of Third M.B.B.S. Part-II Examination.

1. Medicine and Allied	
a. General Medicine	300 hours
b. TB and Chest Diseases	20 hours
c. Psychiatry	20 hours
d. Skin and STD	30 hours
2. Paediatrics	100 hours
3. General Surgery and Allied	
a. General Surgery	300 hours
b. Orthopaedics	100 hours
c. Radiology	20 hours
d. Anaesthesiology	20 hours
e. Dentistry	10 hours
4. Obstetrics and Gynaecology	300 hours

**SOC-4.29 (Effective from June 2018) The following regulations shall govern the Internship Training Program:**

**A. General Information:**

*(i) All parts of the Internship shall be done as far as possible in institutions of India. In case of any difficulties, the matter may be referred to the Medical Council of India to be considered on individual merit.*

*(ii) Every candidate will be required after passing the final MBBS examination to undergo compulsory rotational internship for a period of 12 months in the manner prescribed in OC-16.36 to the satisfaction of the College authorities and Goa University for being eligible for the award of the degree of Bachelor of Medicine and Bachelor of Surgery (M.B.B.S) and full registration within the Indian/State Medical Council. The University shall issue a provisional M.B.B.S pass certificate to the candidate on passing the Third M.B.B.S. Part II examination.*

*(iii) The Indian/State Medical Council will grant provisional registration to the candidate on production of the provision M.B.B.S pass certificate. The provisional registration will be for a period of one year. In the event of shortage or unsatisfactory work, the period of provisional registration and the compulsory rotating internship may be suitable extended by the appropriate authorities. The intern shall be entrusted with clinical responsibilities under direct supervision of Unit In-charge during Urban internship and Medical Officer In-charge of Rural Health Centre during Rural internship. They shall, however, not be working independently.*

*(iv) Interns will not issue a medical certificate or a death certificate or a medicolegal document under their signature. In the recognition of the importance of hands-on experience, full responsibility of patient care and skill acquisition, internship shall be scheduled to utilize clinical facilities available in Hospital/Rural Health Centre recognized by the Medical Council of India for the purpose of internship in addition to the training at the teaching hospital. A critical element of internship will be the acquisition of specific experiences and skill as listed in major areas.*

*Provided that where an intern is posted to District/Sub Divisional Hospital for training there shall be a committee consisting of representatives of the College/University, the State Government and the District administration, who shall regulate the training of such intern.*



*Provided further that for such intern, a certificate of satisfactory completion of internship training shall be issued by the relevant administrative authorities duly countersigned by the Principal/Dean of the College.*

*(v) Adjustment shall be made to enable a candidate to obtain training in elective clinical subjects.*

*(vi) One year's approved service in the Armed Forces Medical Services, after passing the final MBBS examination shall be considered as equivalent to the pre-registration training detailed above, such training shall, as far as possible, be at the Base/General Hospital.*

## **B. (Effective from June 20180) Objectives of Internship Training Programme**

### **(1) General Objectives:**

*Internship is a phase of training wherein a graduate is expected to conduct actual practice of medical and health care and acquire skills under supervision so that s/he may become capable of functioning independently.*

*(2) Specific Objectives: At the end of the internship training, the student shall be able to (a) diagnose clinical common disease conditions encountered in practice and make timely decision for referral to higher level; (b) use discreetly the essential drugs, infusions, blood or its substitutes and laboratory services; (c) manage all types of emergencies medical, surgical obstetric, neonatal and paediatric, by rendering first level care; (d) demonstrate skills in monitoring of the National Health Programmes and schemes, oriented to provide preventive and promotive health care services to the community. (e) develop leadership qualities to function effectively as a leader of the health team organized to deliver the health and family welfare service in existing socio-economic; political and cultural environment; (f) render services to chronically sick and disabled (both physical and mental) and to communicate effectively with patient and the community.*

## **SOC-4.30 (Effective from June 2018) Assessment of Internship**

*(i) The intern shall maintain a record of work which is to be verified and certified by the Unit In-charge/Medical Officer under whom the intern shall be posted for training. Apart from scrutiny of the record of work, assessment and evaluation of training shall be undertaken by an objective approach using situation tests in knowledge, skills and attitude during and at the end of training. Based on the record of work and date of evaluation, the Dean shall issue certificate of satisfactory completion of internship training on acceptance of which the University shall declare the intern eligible for the award of the M.B.B.S. degree.*

*(ii) Satisfactory completion shall be determined on the basis of the following:*

- 1. Proficiency of knowledge required for each case* *SCORE 0-5*
- 2. The competency in skills expected to manage each case:*
  - a) Competency for performance of self performance,*
  - b) of having assisted in procedures.*
  - c) of having observed* *SCORE 0-5*
- 3. Responsibility, punctuality, work up of case, involvement in treatment, follow up reports.* *SCORE 0-5*
- 4. Capacity to work in a team (Behaviour with colleagues Nursing staff and relationship with paramedicals).* *SCORE 0-5*
- 5. Initiative, participation in discussions, research aptitude* *SCORE 0-5.*

### **Guidelines for Evaluation:**

*The performance of the intern shall be rated as :*

Poor / Fair / Below Average / Average / above average / excellent  
0 1 2 3 4 5

*A score of less than 3 in any of the above items will represent unsatisfactory completion of internship.*

**SOC-4.31 (Effective from June 2018)** *Full registration shall only be given by the Goa Medical Council/Medical Council of India on the award of the M.B.B.S degree by the University or on the declaration that the candidate is eligible for it.*

**SOC-4.32 (Effective from June 2018)**

*The following guidelines will be observed in the implementation of the internship programme.*

**(1) Internship in Community Medicine**

*Interns during their internship in Community Medicine shall acquire skills to deal effectively with an individual and the community in the context of primary health care. This is to be achieved by hands on experience in the Rural Hospital and Rural Health Centre. The details of training are as under:*

**(A) Rural Health Centre**

- 1. During this period of internship an intern must acquire.  
(a) Clinical competence for diagnosis of common ailments, use of bed side investigation and primary care techniques; (b) gain information on Essential drugs and their usage; (c) recognize medical emergencies, resuscitate and institute initial treatment and refer to suitable institution;*
- 2. Undergo specific Government of India/Ministry of Health and Family Welfare approved training using Government of India prescribed training manual of medical officers in all National Health Programmes (e.g. Child Survival and State Mother hood – EPC, CDD, ARI, FP, ANC, safe delivery, Tuberculosis, Leprosy and others as recommended by Ministry of Health and Welfare : (a) gain full expertise in immunization against infectious diseases; (b) participate in programmes in prevention and control of locally prevalent endemic diseases including nutritional disorders; (c) learn skills first hand in family welfare planning procedures; (d) learn the management of National Health Programmes;*
- 3. Be capable of conducting a survey and employ its findings as a measure towards arriving at a community diagnosis.*
- 4. (a) conduct programmes on health education.  
(b) gain capabilities to use Audiovisual aids; (c) acquire capability of utilisation of scientific information for promotion of community health.*
- 5. Be capable of establishing linkages with other agencies as water supply food distribution and other environment/social agencies.*
- 6. Acquire quality of being professional with dedication, resourcefulness and leadership.*
- 7. Acquire managerial skills, delegation of duties to paramedical staff and other health professionals.*

**(B) (Effective from June 2018) Rural Health Centre Hospital**

*Besides clinical skill, in evaluation of patient in the environment and initiation of primary care an intern shall:*

- 1. effectively participate with other members of the health team with qualities of leadership;*

2. make a community diagnosis in specific situation such as epidemics and institute relevant control measures for communicable diseases;
3. develop capability for analysis of hospital based morbidity and mortality statistics;
4. use of essential drugs in the community with awareness of availability, cost and side effects;
5. provide health education to an individual/community on : (a) tuberculosis; (b) small family, spacing, use of appropriate contraceptives; (c) applied nutrition and care of mothers and children; (d) immunization; (e) participation in school health programme.

**(C) (Effective from June 2018) Primary Health Centre**

1. Initiate or participate in family composite health care (birth to death), Inventory of events;
2. Participation in all of the modules on field practice for community health e.g. safe motherhood, nutrition surveillance and rehabilitation, diarrhea disorders etc.
3. Acquire competence in diagnosis and management of common ailments e.g. malaria, tuberculosis, enteric fever, congestive heart failure, hepatitis, meningitis acute renal failure etc.;
4. Acquire proficiency for Family Welfare Programmes (ante natal care, normal delivery, contraception care etc.)
5. A village attachment of atleast one week to understand issues of community health along with exposure to village health centres, ASHA Sub Centres

**(2)(Effective from June 2018) Internship in General Medicine:**

(I) Interns shall acquire following training during their term:

1. acquire competence for clinical diagnosis based on history, physical examination and relevant laboratory investigation and institute appropriate line of management;
2. this would include diseases common in tropics (parasitic, bacterial or viral infections, nutritional disorders, including dehydration and electrolyte disturbances) and system illnesses.

(II) The intern shall have assisted as a care team in intensive care of cardiac, respiratory, hepatic, neurological and metabolic emergencies.

(III) The intern shall be able to conduct the following laboratory investigations:

- (a) Blood: (Routine hematology smear and blood groups); (b) Urine: (Routine chemical and microscopic); (c) Stool: (For ova/cyst and occult blood); (d) Sputum and throat swab for gram stain or acid fast stain and (e) Cerebro Spinal Fluid (CSF) for smear.

(IV) Conduct following diagnostic procedure:

- (a) Urethral catheterization: protoscopy; Ophthalmoscopy/Otoscopy; Indirect laryngoscopy; (b) therapeutic procedures: Insertion of Ryles Tube; Pleural, ascetic tap, Cerebro Spinal Fluid (CSF) tap, installing of air way tube, Oxygen administration etc.

(V) Biopsy Procedures: Liver, Kidney, Skin, Nerve, Lymph-node, and muscle biopsy, Bone marrow aspiration, Biopsy of malignant lesions on surface, Nasal/nerve/skin smear for leprosy.

(VI)(a) Familiarity with usage of life saving procedures: including use of aspirator, respirator and defibrillator. (b) Competence in interpretation of different monitoring devices such as cardiac monitor, blood gas analysis etc.

(VII) Participate as a team member in total health care of an individual including appropriate follow-up and social rehabilitation.

(VIII) Other competencies as indicated in general objectives.

**(3) (Effective from June 2018) (3) Internship in Paediatrics:**

*The details of the skills that an intern shall acquire during her/his tenure in the department of Paediatrics are as follows:*

*The intern shall be able to :*

- 1. diagnose and manage common childhood disorders including neonatal disorders and acute emergencies (enquiry from parents of sick children), examining a sick child and record information;*
- 2. carry out activities related to patient care such as laboratory/investigative procedures and use of special equipments. (a) diagnostic techniques Blood (including from femoral vein and umbilical cord), abscess, cerebrospinal fluids, urine, pleura and peritoneum and common tissue biopsy techniques; (b) techniques related to patient care: immunization, perfusion techniques, feeding procedures, tuberculin testing & breast feeding counseling; (c) use of equipment: viral monitoring, temperature monitoring, resuscitation at birth and care of children receiving intensive care;*
- 3. screening of new born babies and those with objective risk factors for any anomalies and steps for prevention in future;*
- 4. plan in collaboration with parents and individual, collective surveillance of growth and development of new born babies, infants and children so that s/he is able to (a) recognize growth abnormalities; (b) recognize anomalies of psychomotor development; (c) detect congenital abnormalities;*
- 5. assess nutritional and dietary status of infants and children and organize prevention, detection and follow up of deficiency disorders both at individual and community level such as: (a) protein energy malnutrition; (b) deficiencies of vitamins especially A, B, C and D; (c) Iron deficiency;*
- 6. Institute early management of common childhood disorders with special reference to paediatric dosage and oral re-hydration therapy.*
- 7. participate actively in public health programme oriented towards children in the community.*

#### ***(4) (Effective from June 2018) Internship in General Surgery:***

*An intern is expected to acquire following skills during her/his posting:*

- 1. Diagnose with reasonable accuracy all surgical illnesses, including emergencies.*
- 2. (a) resuscitate a critically injured patient and a severe burns patient; (b) control surface bleeding and manage open wounds;*
- 3. (a) monitor patients of head, spine, chest, abdominal and pelvic injury; (b) institute first line management of acute abdomen; (c) perform tracheostomy and endotracheal intubation; (d) catheterize patients with acute retention or perform trocar cystostomy. (e) drain superficial abscesses, (f) Suturing of wound, (g) perform circumcision, (h) biopsy of surface tumours. (i) perform vasectomy.*

#### ***(5) (Effective from June 2018) Internship in Casualty:***

*The intern after training in Casualty must be able to :*

- 1. identify acute emergencies in various disciplines of medical practice; (a) manage acute anaphylactic shock; (b) manage peripheral vascular failure and shock; (c) manage acute pulmonary oedema and Left Ventricular Failure (L.V.F.); (d) undertake emergency management of drowning poisoning and seizures; (e) undertake emergency management of bronchial asthma and status asthmaticus; (f) undertake emergency management of hyperpyrexia; (g) undertake emergency management of comatose patients regarding airways positioning, prevention of aspiration and injuries; (h) assess and administer emergency management of burns; (i) assess and do emergency management of various trauma victims;*
- 2. identify medico legal cases and learn filling up forms as well as complete other medico*

*legal formalities in cases of injury, poisoning, sexual offences, intoxication and other unnatural conditions.*

**(6) (Effective from June 2018) ) Internship in Obstetrics and Gynaecology:**

*Technical skills that interns are expected to learn:*

- 1. diagnosis of early pregnancy and provision of antenatal care;*
- 2. diagnosis of pathology of pregnancy related to (a) abortions; (b) ectopic pregnancy; (c) tumours complicating pregnancy; (d) acute abdomen in early pregnancy; (e) hyperemesis gravidarum;*
- 3. detection of high risk pregnancy cases and suitable advise e.g. PIH; hydramanios, antepartum haemorrhage, multiple pregnancies, abnormal presentation and intra-uterine growth retardation.*
- 4. antenatal pelvic assessment and detection of cephalo-pelvic disproportion;*
- 5. induction of labour and amniotomy under supervision;*
- 6. management of normal labour, detection of abnormalities, postpartum hemorrhage and repair of perineal tears;*
- 7. assist in forceps delivery;*
- 8. assist in caesarean section and postoperative care thereof;*
- 9. detection and management of abnormalities of lactation;*
- 10. perform non stress test during pregnancy;*
- 11. per speculum per vaginum and per rectal examination for detection of common congenital, inflammatory, neo-plastic and traumatic conditions of vulva, vagina, uterus and ovaries;*
- 12. medico legal examination in Gynaecology and Obstetrics;*
- 13. to perform the following procedures: (a) dilation and curettage and fractional curettage; (b) endometrial biopsy; (c) endometrial aspiration; (d) pap smear collection; (e) Intra Uterine Contraceptive Device (IUCD) insertion; (f) minilap ligation; (g) suture removal in postoperative cases; (h) abdominal and vaginal surgery cases in Obstetrics and Gynaecology;*
- 14. to assist in follow up postoperative cases of obstetrics and gynaecology such as (a) Colposcopy; (b) Second trimester Medical Termination of Pregnancy (MTP) procedures e.g. Emcredyl/Prostaglandin instillations;*
- 15. to evaluate and prescribe oral contraceptive.*

**(7) (Effective from June 2018) Internship in Oto-Rhino-Laryngology (E.N.T.):**

- 1. Interns shall acquire ability for a comprehensive diagnosis of common Ear, Nose and Throat (ENT) diseases including the emergencies and malignant neoplasma of the head and neck;*
- 2. S/he shall acquire skills in the use of head mirror, otoscope and indirect laryngoscopy and first line of management of common Ear, Nose and Throat (ENT) problems;*
- 3. S/he shall be able to carry out minor surgical procedures such as (a) earsyringing, antrum puncture and packing of the nose for epistaxis, (b) nasal douching and packing of the external canal (c) remove the foreign bodies from the nose and ear, (d) observed or assisted in various endoscopic procedures and tracheostomy;*
- 4. An intern shall have participated as a team member in the community diagnosis e.g. Chronic Suppurative Otitis Media (CSOM) and be aware of national programme on prevention of deafness;*
- 5. S/he shall possess knowledge of various ENT rehabilitative programmes.*

**(8) (Effective from June 2018) Internship in Ophthalmology:**

*An intern shall acquire following skills:*

- 1.S/he shall be able to diagnose and manage common ophthalmological conditions such as: Trauma. Acute conjunctivitis, xerosis, entropion, corneal ulcer, iridocyclitis, myopia, hypermetropia, cataract, glaucoma, ocular injury and sudden loss of vision;
- 2.S/he shall be able to carry out assessment of refractive errors and advise its correction;
- 3.S/he shall be able to diagnose ocular changes in common systemic disorders;
- 4.S/he shall be able to perform investigative procedures such as Tonometry, syringing, direct ophthalmoscopy, subject refraction and fluorescein staining of cornea
- 5.S/he shall have carried out or assisted the following procedures: (a) Subconjunctival injection; (b) Ocular bandaging; (c) Removal of concretions; (d) Epilation and electrolysis; (e) Corneal foreign body removal; (f) Cauterization of corneal ulcers; (g) Chalazion removal; (h) Entropion correction; (i) Suturing conjunctival tears; (j) Lids repair: (k) Glaucoma surgery (assisted); (l) Enucleation of eye in cadaver;
- 6.S/he shall have full knowledge on available method for rehabilitation of the blind.

**(9) (Effective from June 2018) Internship in Orthopaedics:**

1. The intern must be able to diagnose and treat common ailments and suspect presence of fracture, dislocation, acute osteomyelitis, acute polyomyelitis and common congenital deformities such as Congenital Talipes Equinovarus (CTEV) and dislocation of hip (CDH). (a) Splinting (plaster slab) for the purpose of emergency splintage, definitive splintage and post operative splintage and application of Thomas splint; (b) Manual reduction of common fractures- phalangeal, metacarpal, metatarsal and Colles's fracture; (c) Manual reduction of common dislocations-interphalangeal, metacarpophalangeal, elbow and shoulder dislocation. (d) Plaster cast application for undisplaced fractures of arm, forearm, leg and ankle; (e) Emergency care of multiple injury patient; (f) Precautions about transport and bed care of spinal cord injury patients.
2. Skill that an intern should be able to perform under supervision: (a) Advice about prognosis of polyomyelitis, cerebral palsy, CTEV and CDH; (b) Advice about rehabilitation of amputees and mutilating traumatic and leprosy deformities of hand.
3. An intern must have observed or preferably assisted at the following operations: (a) drainage for acute osteomyelitis; (b) sequestrectomy in chronic osteomyelitis; (c) application of external fixation; (d) internal fixation of fractures of long bones

**(10) (Effective from June 2018) Internship in Dermatology and Sexually Transmitted Diseases:**

An intern must be able to:

1. Conduct proper clinical examination, elicit and interpret physical findings, and diagnose common disorders and emergencies.
2. Perform simple, routine investigative procedures for making bedside diagnosis, specially the examination of scrapings for fungus, preparation of slit smears and staining for AFB for leprosy patient and for STD cases.
3. Take a skin biopsy for diagnostic purpose.
4. Manage common diseases recognising the need for referral for specialised care of inappropriateness of therapeutic response.

**(11) (Effective from June 2018) Internship in Psychiatry:**

An intern must be able to:

1. Diagnose and manage common psychiatric disorders;
2. Identify and manage psychological reactions and psychiatric disorders in medical and surgical patients in clinical practice and community setting.

**(12) (Effective from June 2018) Internship in Tuberculosis and Respiratory**

**Diseases:**

An intern after training must be able to:

1. Conduct proper clinical examination elicit and interpret clinical findings and diagnose common respiratory disorders and emergencies;
2. Perform simple, routine investigative procedures required for making bed side diagnosis specially sputum collection, examination for etiological organism like AFB, interpretation of chest X-rays and respiratory function tests;
3. Interpret and manage various blood gases and pH abnormalities in various respiratory diseases;
4. Manage common diseases recognising need for referral for specialised care in case of inappropriateness of therapeutic response;
5. Perform common procedures like laryngoscopy, pleural aspiration, respiratory physiotherapy, laryngeal intubation and pneuma-thoracic drainage aspiration.

**(13) (Effective from June 2018) Internship in Anaesthesia:**

After the internship in the department of anaesthesiology an intern shall acquire knowledge, skill and attitude to:

1. Perform pre-anaesthetic check up, and prescribe preanesthetic medication
2. Perform venepuncture and set up intravenous drip and prepare Emergency Trolley
3. Perform laryngoscopy and endotracheal intubation
4. Perform lumbar puncture, spinal anaesthesia and simple nerve blocks
5. Conduct simple general anaesthetic procedures under supervision
6. Monitor patients during anaesthesia and post operative period
7. Recognise and treat complications in the post operative period
8. Maintain anaesthetic records
9. Recognition and treat complication in post operative period
10. Perform Cardio pulmonary Brain Resuscitation (C.P.B.R.) correctly including recognition of cardiac arrest.

**(14) (Effective from June 2018) Internship in Radio-Diagnosis:**

An intern after training must be able to identify and diagnose:

1. all aspects of 'Emergency Room' Radiology like:- (a) all acute abdominal conditions; (b) all acute traumatic condition with emphasis on head injuries; (c) differentiation between Medical and surgical radiological emergencies;
2. Basic hazards and precautions in Radio-diagnostic practices.

**(15) (Effective from June 2018) Internship in Physical Medicine and Rehabilitation:**

An intern is expected to acquire the following skills during his/her internship:

1. Competence for clinical diagnosis based on detailed history and assessment of common disabling conditions like poliomyelitis, cerebral palsy, hampiegia, paraplegia, amputations etc.;
2. Participation as a team member in total rehabilitation including appropriate follow up of common disabling conditions;
3. Principles and procedures of fabrication and repair of artificial limbs and appliances;
4. Various therapeutic modalities;
5. Use of self help devices and splints and mobility aids;
6. Familiarity with accessibility problems and home making for the disabled;
7. Ability to demonstrate simple exercise therapy in common conditions like prevention of deformity in polio, stump exercise in an amputee etc;

**(16) (Effective from June 2018) Internship in Forensic Medicine and Toxicology:**

The intern is to be posted in the casualty department of the hospital while attached under Forensic Medicine Department with the following objectives.

1. To identify medico-legal problems in a hospital and general practice;
2. To identify and learn medico-legal responsibilities of a medical man in various hospital situations;
3. To be able to diagnose and learn management of basic poisoning conditions in the community;
4. To learn how to handle cases of sexual assault;
5. To be able to prepare medico-legal postmortem procedures and formalities during its performance by police.

### List of Books for First M.B.B.S. subjects

#### 1. (Effective from June 2018) List of Books for First M.B.B.S. subjects

The standard Text Books and Reference Books shall be as given below and as recommended by the respective Board of Studies and approved by the Academic Council from time to time.

##### 1. Human Anatomy

###### Gross Anatomy:

Standard text books: (1) G. J. Romanes: Cunnigham's Manual of Practical Anatomy, Vol. I, II & III (2) Chaurasia: Human Anatomy, Vol. I, II & III.

###### Reference books:

(1) Warwick & Williams: Gray's Anatomy (2) J. V. Basmajan: Grant's Method of Anatomy (3) Richard Snell: Clinical Anatomy for Medical Students (4) R. M. H. McMinn: Last's Anatomy, Regional and Applied (5) DuPlessis: Synopsis of Surgical Anatomy (6) J. O. Robinson: Rawling's Land Mark & Surface Marking of Human Body.

###### Histology:

Standard text books:

(1) Leeson & Leeson & Paparo: Text Book of Histology.

###### Reference:

(1) Di Fiore: Atlas of Histology with Functional Correlations (2) H. George Burkitt, Barbara, Young & John W. Heath: Wheatle's Function Histology - A Text & Colour Atlas

###### Genetics:

Standard text books:

(1) M. Kothari: Bhatnagar & L. Mehta: Essentials of Human Genetics.

###### Reference:

(1) J. A. Frazer Roberts: An Introduction to Medical Genetics (2) Alan E. H. Emery, Robert F. Maeller: Elements of Medical Genetics.

###### Embryology:

Standard text books:

(1) Inder bin Sing: Human Embryology (2) Manu Kothari, Bhatnagar & Lopa Mehta: Essentials of Human Embryology.

###### Reference books:

(1) Hamilton, Boyd and Mossman: Human Embryology

##### 2. Human Physiology including Bio-Physics

Standard text books:

(1) W. F. Ganong: Review of Medical Physiology (2) Guyton & Hall: Text book of Medical Physiology (3) Cyril A. Keel, Eric Neil and Normal Joels: Samson Wright's Applied Physiology (4) Donald Enslie - Smith, Colin Paterson: Textbook of Physiology BDS (5) Ewald E. Selhurt:



*Physiology* (6) Rodney A. Rhoades and George A. Tanner: *Medical Physiology* (7) Berne & Levy: *Medical Physiology* (8) Robert F. Schmidt and Gerhard Thoms: *Human Physiology*. (9) John R. Brobeck: *Best & Taylor's Physiology Basis of Medical Practice*.

*Reference books:* (1) Vander, Sherman, Luciano: *Human Physiology* (2) Nunn's *Applied Respiratory Physiology* (3) Lees, Boggs, Bithell, Foerster, Altreus & Lukeus: *Wintrobe's clinical Hematology* (4) Julius H. Comroa: *Physiology of Respiration* (5) H. W. Smith: *The Kidney* (6) William: *Textbook of Endocrinology* (7) John T. Shepherd: *The Human cardiovascular system* (8) Micheal Armstrong: *Electrocardiogram* (9) H. Davson: *A Textbook of General Physiology* (10) J. A. Chusic: *Correlative Neuroanatomy and Functional Neurology* (11) *Handbooks of Physiology published by American Physiological Society on Neurophysiology Vol. I, II & III, Circulation Vol. I, III, Alimentary canal Vol. I, II, III.*

*Practicals in Physiology:* (1) Harris: *Experimental Physiology* (2) F. E. D'Amour & FR Blood: *Mammalian Physiology* (3) Noble Chamberlain: *Symptoms & Signs in Clinical Medicine* (4) V. G. Ranade: *Practical Physiology* (5) M. Swash & S. Masan: *Hutchison's Clinical Methods* (6) Proudfit & Robinson: *Normal & Therapeutic Nutrition* (7) R. Passmore: *Human Nutrition and Dietetics* (8) William I. Gay: *Methods of Animal Experimentation Vols. I, II & III.*

### **3. Human Biochemistry**

*Standard text books:* (1) Harper: *Biochemistry* (2) Rana Schinde: *Biochemistry* (3) Pattabiraman: *Biochemistry* (4) Ottaway & Apps: *Biochemistry*. (5) Ramakrishnan: *Medical Biochemistry*

*Reference books:* (1) Stryer: *Biochemistry* (2) Lehninger: *Biochemistry* (3) Talwar: *Biochemistry* (4) White Handler: *Biochemistry Smith Clinical* (5) Harold Varley: *Biochemistry*.

## **(Effective from June 2018) List of Books for Second M.B.B.S. subjects**

### **1. Pharmacology.**

*Standard text books:*

(1) R. S. Bhandarkar, R. S. Satoskar, S. S. Aina pure: *Pharmacology & Pharmacotherapy*, Revised 15<sup>th</sup> Edition 1997, Popular Prakashan, Mumbai.

1. K. D. Tripathi: *Essentials of Medical Pharmacology*, 3<sup>rd</sup> Edition Reprint 1995 July, Jaypee.

(2) Goodman & Gilman: *The Pharmacological Basis of Therapeutics*, 9<sup>th</sup> Edition 1996, McGraw-Hill International Edition.

*Reference books:*

(1) H. P. Rang, M. M. Dale, J. M. Ritter: *Pharmacology*, 3<sup>rd</sup> Edition 1995, ISE. Churchill Livingstone. (2) D. R. Lawrence, P. N. Bennett: *Clinical Pharmacology*, 7<sup>th</sup> Edition, Reprinted 1993, ELBS Churchill Livingstone.

### **2. Pathology**

*Standard text books:*

(1) Robbins: *Basic Pathology* (2) De Gruchy: *Clinical Haematology in Medical practice*

*Reference books :*

(1) Robbins, Cotran and Kumar: *Pathological Basis of Disease* (2) Ackerman: *Surgical Pathology*.

### **3. Microbiology**

*Standard text books:*

(1) Anantnarayan: Text Book of Microbiology 4<sup>th</sup> Ed. (2) Panikar: Text Book of Medical Parasitology 3<sup>d</sup> Ed.

Reference books:

(1) Greenwood et al: Medical Microbiology: A Guide to Microbial infections Vol. 1, 14<sup>th</sup> Edition, 1992. (2) Colle et al: Mackie & Mackartney Practical Medical Microbiology 13<sup>th</sup> Edition 1989.

#### **4. Forensic Medicine and Toxicology**

Standard text books:

(1) Dr. K. S. Narayan Reddy: The essentials of Forensic Medicine & Toxicology (2) Dr. C. A. Franklin: Modi's Medical Jurisprudence and Toxicology (3) Dr. C. K. Parikh: Parikh's textbook of Medical Jurisprudence & Toxicology (4) Dr. A. Nandy: Principles of Forensic Medicine (5) Dr. P. V. Guharj: Forensic Medicine.

Reference books:

(1) Dr. J. B. Mukherjee: Forensic Medicine & Toxicology, Volume I & II (2) Dr. Bernard Knight: Forensic Pathology (3) Dr. Bernard Knight: Medical Jurisprudence & Toxicology (4) Spitz and Fisher: Medico-legal Investigation of Death (5) Dimaio & Dimaio: Forensic Pathology

1. R.B.H. Gradwohl: Legal Medicine.

#### **(Effective from June 2018) List of Books for Third M.B.B.S. Part - I Subjects**

##### **1. OTO-RHINO-LARYNGOLOGY (E.N.T.)**

Standard text books (1) Logan Turner: Text book of ENT (2) J. C. Ballyntyne: Synopsis of Otolaryngology.

Reference books:

(1) R. J. Last: Text book of Anatomy (2) Cunningham's Manual of Anatomy - Head & Neck Volume (3) Scott-Brown - Text Book of ENT 6 vol. (4) Katz: Text book of Audiology.

##### **2. OPHTHALMOLOGY**

Standard Text Books:

(1) J. J. Miller: Parson's Diseases of the eye 18<sup>th</sup> edition.

Reference books:

(1) Wolfe: Anatomy of the Eye & Orbit (2) Edler: Physiology of the Eye (3) Kanski: Clinical Ophthalmology.

##### **3. COMMUNITY MEDICINE**

Standard Text Books:

(1) Park's textbook of Preventive and Social Medicine. Ed. K. Park. 15<sup>th</sup> Edition. Publ. Banarasidas Bhanot, 1997. (2) Textbook of Preventive and Social Medicine. Mahajan B. K. and Gupta M. C. Second Edition. Publ. Jayee Brothers Medical Publishers (P) Ltd. 1995. (3) An Introduction to Biostatistics. A Manual for Students in Health Sciences. P.S.S. Sundar Rao and J. Richard Third Edition 1997 Prentice Hall of India. (4) Foundations of Epidemiology, 3<sup>d</sup> Edition 1995. Ed. Lilienfeld and Lilienfeld.

Reference books:

(1) *Epidemiology and Health Management for Health Care For All*. Sathe P. V. and Sathe A. P. Second Edition Popular Prakashan. (2) Maxcy-Rosenau-Last "Public Health and Preventive Medicine" John M. Last, R. B. Wallace 13th Edition 1992. Appleton and Lange. (3) *Oxford Textbook of Public Health 3<sup>rd</sup> Edition* 1997. Ed. Detels, Holland and Knox. Oxford University Press.

## **(Effective from June 2018) 1. GENERAL MEDICINE AND ALLIED SUBJECTS**

### **A. General Medicine:**

Standard text books:

(1) Davidson: *Principles and Practice of Medicine* (2) Golwala: *Physical Diagnosis in Medicine* (3) Association of Physicians of India *Text book of Medicine* (4) Hutchinson: *Clinical Methods* (5) P. J. Mehta & Palia: *Practical Medicine for students and Practitioners* (6) Harison's *Principles of Internal Medicine Vol. I & II*.

### **B. Dermatology, Venereology and Leprology:**

Standard text books:

(1) Roxburg: *Common Skin Diseases 12<sup>th</sup> Ed.* (2) Sulzberger: *Dermatology-Diagnosis & Treatment - 2nd Ed.* (3) Korting: *Differential Diagnosis in Dermatology*.

Reference books:

(1) Rook: *Text Book of Dermatology Vol. 1, 2, 3, 4 Fifth Edition* (2) Moschella: *Dermatology Vol. 1, 2 Second Edition* (3) K. K. Koticha: *Leprosy - A Concise Text 1<sup>st</sup> Ed.* 1990 Oct. (4) B. R. Chatterjee: *A Window on Leprosy* (5) P. R. Dasgupta: *Simplified STD Treatment Guidelines (Prepared by the NACO)* (6) Cronin: *Contact Dermatitis, Dermatology Monographs* (7) Willcox: *Textbook of Venereal Diseases & Treponematoses 2<sup>nd</sup> Ed.* (8) King: *Venereal Diseases - 3<sup>rd</sup> Ed.* (9) Schofield: *Sexually Transmitted Diseases - 2<sup>nd</sup> Ed.* (10) Cochrane: *Leprosy in Theory & Practice* (11) Dharmendra: *Leprosy in Theory & Practice Vol. 1* (12) R. H. Thangraj & S. J. Yawalkar: *Leprosy*.

### **C. Tuberculosis and Chest Diseases:**

Standard text books:

(1) Youmans: *Tuberculosis* (2) M. Corwin Hinshaw: *Diseases of the Chest* (3) Fraser & Douce: *Diagnosis of Diseases of the Chest Vol. I, II & III* (4) Dr. K. N. Rao: *Textbook of Tuberculosis* (5) Alfred P. Fishman: *Pulmonary Diseases and Disorders Vol. I, II & III*.

Reference books:

(1) M. D. Deshmukh: *Pulmonary Tuberculosis and Common Chest Diseases* (2) Coleman B. Rabin: *Radiology of the Chest* (3) Conrad: *Pulmonary Function Testing, Principles & Practice* (4) K. M. A. Perry, Sir Thomas Sellers: *Chest Diseases Vol. I & II* (5) A. A. Liebow, D. E. Smith: *The Lung* (6) P. M. A. Calverley & N. B. Pride: *Chronic Obstructive Pulmonary Diseases*.

## **2. PAEDIATRICS**

Standard text books:

(1) O. P. Ghai: *Essential Paediatrics, Interping Publisher 4<sup>th</sup> Edition* 1996 (2) Paget Stanfield et al: *Diseases of Children in The Subtropic & Tropics 4<sup>th</sup> Ed.* ELBS 1991

Reference books:

(1) Nelson *Text Book of Paediatrics Behrman, Kliegman & Arvin 15<sup>th</sup> Edition* 1996, W. B. Saunders Company (2) Frank Oski: *Principles & Practise of Paediatrics, 2<sup>nd</sup> Edition* 1994, J.



Soft parts	25 marks
Bones	<u>25 marks</u>
	<u>75 marks</u>

\*(iii) Sessional work carrying 25 marks for theory and 25 marks for practical work to be added to the marks of papers and practical respectively.

## 2. General Physiology and Biochemistry:

(i) One paper of 3 hours duration carrying 60 marks and viva-voce carrying 15 marks.

(ii) (a) A Practical examination in Experimental Physiology of one hour duration carrying 40 marks.

Long experiment - 25 marks

Short experiment - 15 marks

(b) A Practical examination in Experimental Biochemistry of one hour duration carrying 35 marks.

One long experiment - 20 marks and One Short experiment - 15 marks.

\*(iii) Sessional work carrying 25 marks for theory and 25 marks for practical work to be added to the marks of papers and practical respectively by Professor of Physiology.

## 3. Dental Materials Science

One paper of 3 hours duration carrying 60 marks and viva voce carrying 15 marks.

Practical Examination - Practical examination carrying 75 marks.

\*Sessional work carrying 25 marks for theory and 25 marks for practical work to be added to the marks of theory paper of practical respectively.

In case of a candidate who has failed previously in the examination a new credit list should be prepared on the basis of the previous sessional work as well as on the basis of the performance in the term preceding reappearance in the examination.

Of the 25 marks for sessional work under each head of theory and practical 15 marks are to be awarded towards performance of the Candidate at the different examinations in Theory and practical conducted by the College and 10 marks for day to day performance and journals in these subjects.

### Guidelines for award of Sessional Marks

Maximum 25 marks for theory and 25 marks for each practical in the subject to be split into 15 and 10 marks as follows:

I. For College Tests (Max. 15 marks)

1. Two minor test in each theory and practical to be taken in the mid period of I and II term
2. Two major tests to be taken in each theory and practical vi. Terminal and Preliminary

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\* Marks for sessional work will be based on the assessment of the Candidate's day to day work and/or performance at the various periodic tests. These marks shall be sent directly to the University or the Dean/Principal of the College at the end of the course along with the applications for admission to the end of the course along with the applications for admission to the Examination. Examiners in Theory or Practical shall have no access to the sessional marks but these shall be added to the marks obtained in Theory and Practical Examinations respectively by the University authority. Utmost secrecy shall be maintained regarding the marks for sessional work.

- near the end of each term period. 3. Maximum marks for the above test shall be out of 100.  
 4. Average of the marks of all four tests to be calculated by adding all the dividing by four.  
 5. For assigning sessional marks correctly, recalculate the average marks by considering 15 marks as 100% e.g. 60 out of 100 and 9 out of 15 are both 60%. 6. Round off fraction of 0.50 or more to next higher number and to previous if less.

II For day to day performance and attendance (Max. 10 marks)

1. (a) In theory-assignment for lectures and seminars on best presentation including Oral tests (Max. 5 marks to be given as pre grades mentioned in 2(a) in practical).

(b) Attendance- As below at 2(b) in practical (Max.-5 marks) \*2. (a) In practical i.e Laboratory work including journal, technical work in Dental laboratory and Clinical work on patients. (Max. - 5 marks).

A grade = (81- 100%) performance - Marks as per percentage -- 5 Marks as 100%

B grade = (61- 80%) performance - Marks as per percentage -- 5 Marks as 100%

C grade = (51- 60%) performance - Marks as per percentage -- 5 Marks as 100%

D grade = (41 - 50%) performance - Marks as per percentage -- 5 Marks as 100%

E grade = (35 - 40%) performance - Marks as per percentage -- 5 Marks as 100%

Less than 35% performance NIL

(b) Attendance	81 - 100%	5 Marks
	76 - 80%	4 Marks
	75%	3 Marks
	70 - 74%	2 Marks
	65 - 70%	1 Mark
	Less than 65%	NIL

Modified Guidelines for award of Sessional Marks.

Maximum 25 marks for theory and 25 marks for each practical in the subject to be split into 15 and 10 marks as follows:

I. For College Tests (Max. 15 marks for each Theory and each Practical Separately)

1. Two minor tests in each theory and practical to be taken in the mid period of I and II term
2. Two major tests to be taken in each theory and practical viz. Terminal and Preliminary near the end of each term period.
3. Maximum marks for each of the above test shall be out of 100 i.e for four tests 400 marks.
4. Average of the marks of all four test to be calculated by adding all and dividing by four. Round of fraction as at six below.
5. For assigning sessional marks correctly, recalculate the average marks by considering 15 marks as 100 e.g. 60 out of 100 and 9 out of 15 are both 60% (Table A) e.g.  $60 \times 15 / 100 = 9$ .
6. Round off fraction of 0.50 or more to next higher number and to previous if less. (See table "A" on page No. 2) e.g. 52 to be rounded off to 9 and 8.32 to 7.

(d) For day to day performance and attendance

**(a) Theory**

1. Assignment for lectures, Seminars, Oral tests, Library dissertation etc. - Maximum 5 marks to be awarded as per table "B".
2. For attendance in theory classes - Maximum 5 marks to be awarded as per table "C".

**(b) Practicals**

1. Laboratory technique, Clinical work on patients, Journal etc. - Maximum 5 marks to be

awarded as per table “B”.

2. For attendance in practical classes - Maximum 5 marks to be awarded as per table “C”.

<b>Table B</b> (For day to day performance in both theory and Practical separately)	<b>Table C</b> (For attendance in both Theory and Practical separately)
A grade = (90-100%)—Performance - 5 Marks (As 100%)	81-100%                      5 Marks
B grade = (89-70%)-- Performance - 4 Marks	76 - 80%                      4 Marks
C grade = (69-50%)-- Performance - 3 Marks	75%                              3 Marks
D grade = (49-30%)-- Performance - 2 Marks	70 - 74%                      2 Marks
E grade = (29-20% )_- Performance - 1 Mark	65 - 70%                      1 Mark
Less then 20%--Performance-NIL.	Less than 65%                NIL

Attendance for sessional marks-10 marks for attendance day to day performance and journals in the subjects.

**N.B:-**(a) Where there is no practical examination sessional marks are to be awarded in theory only (Oral examination is part of theory examination for award of marks).

(b) Where there are two practical examination e.g. Prosthetic Dentistry at Final B.D.S. each practical carries maximum 25 sessional marks.

(c) The report of the sessional marks must be signed by Head of the Department, Reader in the subject and Head of the Institution.

+ For practical and Clinical work in Dental subjects it is necessary to fix a quota of different types of work and to grade every practical assigned in a special record book meant for the purpose. Sessional marks should then be assigned on the average of grades obtained.

**Table A**

Marks obtained out of maximum 100	Corresponding marks obtained out of maximum 15 after rounding off fraction 0.50 or more to next higher number and less to pictures
(1) 97 to 100	15
(2) 90 to 96	14
(3) 84 to 89	13
(4) 77 to 83	12
(5) 70 to 76	11
(6) 64 to 69	10
(7) 57 to 63	9
(8) 50 to 56	8
(9) 44 to 49	7
(10) 37 to 43	6
(11) 30 to 36	5
(12) 24 to 29	4
(13) 17 to 23	3

(14)	10 to 16	2
(15)	7 to 9	1
(16)	Less than 7	NIL

- N.B.- (a) Where there is no practical examination sessional marks are to be awarded in theory only (Oral examination is part of theory examination for award of marks).  
 (b) Where there are two practical examinations e.g. Prosthetic Dentistry at Final B.D.S. each practical carries maximum 25 sessional marks.

\*For practicals and Clinical work in Dental subjects it is necessary to fix a quota of different types of work and to grade every practical assigned in a special record book meant for the purpose. Sessional marks should then be assigned on the average of grades obtained.

**SOC-5.2** The following are the syllabus and the practical and oral courses in the various subjects of the examination:

### **I-A Human Anatomy and Histology**

A course of forty-five lectures and demonstrations extending over one academic year and covering the following:

#### **Lectures**

1. Introduction;
2. Detailed anatomy and Osteology of head and neck excluding brain;
3. Gross anatomy of brain, thorax and abdomen sufficient for understanding physiologic processes;
4. Embryology of head, neck and face; vascular lumphatic and G.I system;
5. Genetics Fundamentals; and
6. General principals of Anthropology.

#### **Practicals**

1. Dissection of the head and neck excluding eye, ear and brain and
2. Study of Skull together with demonstrations of the main parts of the dissected abdomen, thorax and brain.

### **1-B Histology**

A course of 45 lectures and demonstrations extending over one academic year covering the following:-

1. All basic tissues of the human body - various types of epithelia and connective tissues.
2. Endocrine glands.
3. Lung, Kidney, Spleon, Liver, Thymus and Pancreas.
4. Salivary glands.
5. Oral tissues.

#### **Practicals**

1. All basic tissues of the human body;
2. Endocrine glands;
3. Salivary glands;
4. Oral tissues.

Minimum number of hours in Human Anatomy and Histology including lectures, demonstrations and practicals - 320 hours.

## **2. Human Physiology and Bio-Chemistry**

### **(a) Physiology**

#### **Lectures**

A course of 30 hours of lectures extending over two academic terms covering an elementary knowledge of the working of the human body as a whole with special reference to the application of physiology to Dentistry and comprising the following:



## 1. Introduction:

2. Blood and lymph: Composition and function of Blood; Plasma Proteins; R.B.C. Morphology, Formation and functions; W.B.C. - Types; Blood coagulation, Blood groups. Platelets, Anaemia, E.S.R., Lymph-Formation, composition functions, Oedema and Immunity - basic concept. 3. Cardio vascular system : General organisation of cardiovascular system and Hemodynamics, Conduction of Cardiac impulse, Cardiac cycle, Heart sounds, pulse, Normal electrocardiogram., Regulation-Nervous, chemical and Hormonal, Blood pressure regulation, Pathophysiology of shock, syncopes (Coronary circulation) 4. Respiratory system: General organisation of respiratory system, Ventilation, diffusion, Carriage of respiratory gases, Nervous and chemical regulation, Asphyxia, Hypoxia, Cyanosis and Artificial respiration. 5. Digestive System: Movements of digestive tract including chewing and deglutition, Mechanism and control of digestive secretion, Digestion and absorption, Liver and gall bladder-Functions, Bile-Jaundice and Salivary secretion, in detail. 6. Excretion: Structure and functions of kidney, Formation of Urine-Filtration, re-absorption and secretion, Water and salt regulation and Physiology of Micturation. 7. Skin: Structure and functions 8. Temperature regulation: Fever, Heat stroke and Heat exhaustion. 9. Endocrines: General organisation and regulation. Secretions and functions of (a) Anterior and Posterior Pituitary, (b) Thyroid, (c) Adrenal Cortex and Medulla, (d) Para thyroid and (e) Insulin and glucagon-Islets of Langerhans. 10. Reproductive System: (a) Male reproductive System - Testosterone and (b) Female reproductive System-Menstruation, Pregnancy. Family planning - physiological basis of family planning methods. 11. Nervous System: General organisation of nervous system, General concepts of Receptors and sensation, Motor control, Reflexes and their clinical use, Functions of spinal cord, cerebellum, Basal ganglia, Hypothalamus, Neocortex-important centers and their function, General concept of higher functions and Autonomic nervous system. 12. Special senses: General concept of structure and functions. 1. Eye and refractive errors, 2. Hearing, 3. Taste and smell. 13. Nutrition: General Metabolism, principles of colorimetry. Basal Metabolic rate, metabolism of proteins, fats and carbohydrates. Vitamins sources requirement and actions. Basic principles of dietetics. Enzymes PH regulation, Calcium, Iron and Water metabolism.

### **(1) Practicals**

Practical Course of 70 hours in Experimental Physiology extending over two academic terms and consisting of work done by students and of demonstrations as follows:

1. Enumeration of Red blood cells; 2. Enumeration of White blood cells and Differential count; 3. Determination of haemoglobin; 4. Determination of blood groups; 5. Determination of pulse and blood pressure; 6. Determination of bleeding time and clotting time; 7. E.S.R.; 8. Artificial respiration and 9. Lung volumes.

### **(2) Demonstrations**

1. Determination of packed cell volume; 2. Clinical examination of chest; 3. Properties of excitable tissue; 4. Activity of frog's heart and effects of vagus stimulation and of atropine and adrenaline; 5. Perfusion of frog's heart-effects of Na, Ca and K ions; 6. Demonstration of deep and superficial reflexes; 7. E.C.G. and 8. B.M.R.

### **(b) Bio-Chemistry**

A Course of 20 (hours) lectures in Bio-Chemistry comprising the following:

1. Elementary Chemistry of Carbohydrates, lipoids and proteins; 2. Enzymes and biological oxidations-elementary considerations; 3. Simple foods and their nutritional value; 4. Vitamins, fats and whole soluble vitamins; 5. Digestions-Salivary, gastric and intestinal; 6. Tissue Chemistry, Blood and bone; 7. Simple considerations of the metabolism of carbohydrates, lipoids and proteins; and 8. Urine: Physical characteristics-normal composition and abnormal constituents like glucose albumin, ketone bodies, and blood and bile 9. Hormones.

A course of 20 practical classes (30 hours) on the following:

1. Test for mono, di and polysaccharides and preparation of osazones; 2. Simple tests for fat and proteins; 3. Proteins and Carbohydrate reactions; 4. Chemistry of Saliva; 5. Chemistry of bread, wheat, flour and milk; 6. Chemistry of Bile; 7. Spectra of oxy Hb and Carboxy Hb and Reduced Hb; 8. Urine Report; 9. Salivary digestion of starch; 10. Test for vitamin A, vitamin C, Hydrochloric acid, lactic acid; and 11. Quantitative estimations of the following in urine:

Glucose, Chloride, Urea, Acidity and Ammonia

Minimum number of hours including lectures, demonstration and practicals in Physiology and Bio-Chemistry-150 hours.

### **(3) Dental Materials Science.**

Lectures

A course of 35 hours lectures and 30 hours demonstrations extending over two terms:

1. Introduction: Aims and scope of the science of dental materials; 2. Structure and behavior of Matter. 3. Important physical properties applicable to Dental Materials including their biological considerations; 4. Gypsum products used in dentistry including casting investment materials with or without gypsum binder; 5. Impression materials used in dentistry including duplicating materials; 6. Synthetic resins used in dentistry (a) General properties and physical characteristics (b) Resins as denture base materials, repair and reline materials, soft liners, tissue conditioners (c) Resins as restorative materials: unfilled and filled resin restorative materials, tissue sealant. (d) Direct-bonding cement materials 7. Metals and alloys: Their structure and behavior, some important physical properties. (a) Dental amalgam alloys: (b) gold foil: (c) Dental casting gold alloys (d) Stainless steel, chrome-cobalt wax. 8. Dental waxes including inlay casting wax 9. Gold inlay casting procedures: Preparation of the die-wax pattern, spring, investing-control of shrinkage compensation. Wax elimination-casting machines, casting, defects in castings. 10. Welding and soldering-materials used. 11. Dental Cements: Classifications composition, manipulation, properties and uses:- Zinc cements, Copper cements, Zinc-oxide eugenol cements, silicate cements, cavity liners, cavity vanishers, Resin cements, Composite, glass ionomer cements and ionomer. 12. Dental porcelain including porcelain fused to metal. Porcelain Furnace and fusing. 13. Mechanics of tooth cutting. Burs and points. 14. Abrasives and polishing agents. 15. Die and counter die materials including electroforming and Electropolishing. 16. Any new material included in the text book.

### **Standard for Passing the Examination**

**SOC-5.3** (a) To pass the examination the candidate shall obtain in each subject (i) 50 percent

of the full marks in the written including sessional work and oral test including sessional work taken together and (ii) 50 percent of the full marks in the practical tests including sessional work separately. (b) Those of the successful candidates who pass the examination at their first attempt and obtain 70 per cent or more of the total marks will be declared to have passed the examination in the First Class, and those obtaining 60 per cent in the Second Class and those obtaining 50 per cent in the Pass Class. (c) Those of the successful candidates who pass the examination in the First Class and obtain 75 per cent marks in any subject or subjects will be declared to have passed with Distinction in the subject or subjects. (d) All successful candidates other than those who pass the examination in the First Class or Second Class will be placed in the Pass Class.

**SOC-5.4** A candidate who has passed in any of the subjects of the examination in accordance with the provisions of Regulation 2150 may at his option, be excused from appearing in that subject on a subsequent occasion and will be declared to have passed the examination in Pass Class when he passes in the other subject of the examination in accordance with the provisions of SOC-5.50. Candidates passing the examination in this manner in compartments will not be eligible for a Class or for any Prize or Scholarship to be awarded at the Examination.

**SOC-5.5** Candidates will be examined in the following subjects:

Written

1. General and Dental Pharmacology. 2. General Pathology, Microbiology and Parasitology. 3. Oral Anatomy, Physiology, Histology and Embryology.

**SOC-5.6** The Examination will consist of:

1. General and Dental Pharmacology - (i) One paper of 3 hours duration carrying 60 marks and a viva-voce carrying 15 marks (ii) Practical of 2 hours duration carrying 75 marks.

(A) Dispensing Exercises:- (a) Exercises in Pharmacy -18 marks (b) Exercise in Pharmacy - 19 marks.

(B) Prescription Exercises:- (a) Medical Prescriptions - 19 marks  
(b) Dental Prescriptions - 19 marks

\*(iii) Sessional work carrying 25 marks for theory and 25 marks for practical work to be added to the marks of papers and practicals respectively.

2. General Pathology, Microbiology and Parasitology.

(i) One paper with a section on Pathology and another on Microbiology of 3 hours duration, carrying 60 marks, and viva-voce carrying 15 marks.

(ii) Practical of 2 hours duration, carrying 75 marks. The distribution of marks for Practical Examination will be as follows:

(a) Spots-Identification of Histology, -- 30 marks

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\* Marks for sessional work will be based on the assessment of the Candidate's day to day work and/or performance at the various periodic tests. These marks shall be sent directly to the university or the Dean/Principal of the College at the end of the course along with the applications for admission to the Examination. Examiners in Theory of practical shall have no access to the sessional marks but these shall be added to the marks obtained in Theory and practical Examination respectively by the University authority. Utmost secrecy shall be maintained regarding the marks for sessional work.

	Microbiology slides and specimen with reasoning	30 minutes duration
Table work exercise 1½ hours	(b) Clinical Pathology exercise	15 marks
	(c) Staining and identification of microbesmear with reasoning	15 marks
	(d) Histology-Identification-drawing and description with reasoning.	15 marks
		1 ½ hours duration (b, c & d)

\*(iii) Sessional work carrying 25 marks for theory and 25 marks for practical work to be added to the marks of papers and practicals respectively.

### 3. Oral Anatomy, Physiology, Histology and Embryology.

(i) One paper of 3 hours duration carrying 60 marks and a viva-voce carrying 15 marks. (ii) Practical, identification of teeth including carving, 3 hours duration carrying 75 marks

- |     |                  |          |
|-----|------------------|----------|
| (a) | Tooth Carving    | 30 marks |
| (b) | Histology slides | 20 marks |
| (c) | Identification   | 20 marks |

\*(iii) Sessional work carrying 25 marks for theory and 25 marks for practical work to be added to the marks of papers and practicals respectively.

In case of a candidate who has failed previously in the examination a new credit list should be prepared on the basis of the previous sessional work as well as on the basis of the performance in the term preceding reappearance in the examination.

Of the 25 marks for sessional work under each head of theory and practical 15 marks are to be awarded towards performance of the Candidate at the different examinations in Theory and practical conducted by the College and 10 marks for day to day performance and journals in these subjects.

**SOC-5.7** The following are the syllabus in the various subjects of the Examination:

#### (I) General and Dental Pharmacology

A course of 64 lectures, demonstration and practicals extending over the academic year and covering the following:

(1) History, sources, definition and preparation of drugs (2) Routes of administration of drugs (3) Absorption, distribution and secretion of drugs (4.) Manifestation, types and mechanisms of drugs. (5) Dose-response relation and factors modifying drugs actions. (6) Drug toxicity, Poisons (7) Drug assay, standardization and formulation. (8) Drug Prescription.

#### Central Nervous System

(9) General principles and Hypnotics (10.) Hypnotics (11) Analgesics (12) General anaesthesia and Local anaesthesia. (13) Tranquilisers. C.N.S. Stimulants and mood elevator.

#### Autonomic Nervous System

14. Adrenergic drugs and adrenergic blocking agents. 15. Cholinergic drugs and cholinergic blocking agents. 16. Anti choline esterages.

## **G.I. Tract**

17. Anti-emetics, drugs and treatment of Peptic Ulcer, diarrhoea and constipation. 18. Antnaalmenthics.

## **Cardio Vascular System and Blood**

19. Hypertension. 20. Coronary dilator and treatment of angina. 21. Coagulants, anti-coagulants and Hoematinics. 22. Drug therapy of shock. 23. Histamine, anti-histamines and treatment of allergy.

## **Chemotherapy**

24. Local antiseptics 25. Sulphanomides. 26. Penicillin. 27. Streptomycin and antibiotics. 28. Drug therapy of T.B. and Veneral disease. 29. Principles of antibiotics therapy. 30. Hormone, Vitamins. 31. Cortieosteriods. 32. Insulin and Oral antidiabeties 33. Vitamins: A, B, K, C Complex and factors and Vitamin C. 34. Calcium, Vit. D, and Parathyroid 35. Vaccines and Sera. 36. Any new drugs useful in Dentistry included in Text Book.

## **Dental Pharmacology and Therapeutics**

1. Astringents, obeundents, mummifying agents, bleaching agents, styptic, disclosing agents, dentifrices and mouth washes. 2. Treatment of common oral conditions.

## **Practicals**

A course of instruction in practical pharmacy including practical knowledge of making the preparation commonly used in dentistry:

(a) Prescription writing and preparations (b) Posology of Pharmacological preparations. (c) Weights and measures (d) Mixtures (e) Emulsions (f) Suspensions (g) Powders (h) Gargles including percentage solutions (i) Gum paints (j) Dental pastes (k) Tooth powders

## **Demonstrations**

(a) Tooth paste (b) Pills (c) Ointments (d) Plasters

Minimum number of hours in General and Dental Materials Medica including lectures, demonstrations and practicals - 64 hours.

2. General Pathology Microbiology and Parasitology.

A course of 64 hours of lectures emphasizing the fundamental principles in General Pathology, Microbiology an elementary knowledge or Parasitology, comprising the following:

## **I. General Pathology**

Methods of study of tissues and cells, Degenerative processes and disturbances of metabolism, Cloudy Swelling, Fatty changes, Amyloidosis, Hyaline degeneration, Pigmentation, Calcification, Necrosis, Gangrene, Post-mortem changes, Circulatory Disturbances, Hyperaemia, Venous congestion, Ischaemia, Infraction, Hemorrhage, Thrombosis, Embolism, Oedema, Shock, Inflammation. Response of soft and hard tissues to injuries, Acute inflammation, Chronic inflammation, Repair, Infection, Resistance and Allergy, Staphylococcal infections, Streptococcal infections, Typhoid infection, Tuberculosis, Leprosy, Syphilis, Actinomycosis, Growth and its Disorders, Metaplasia, Atrophy, Hyperplasids, Hypertrophy, Elementary knowledge of Malformations and maldevelopment.

Tumours: Classification, Characters of malignant and Benign Tumours, Carcinogenesis, Methods of spread, Diagnostic methods in Cancer, Vitamin deficiencies, Scurvy, Rickets, Blood dyscrasias, Bleeding disorders and their laboratory investigations, Metabolic Disorders.: Diabetes.

## **II. Microbiology and Parasitology**

1. Introduction with reference to Medical and Dental microbiology including public health and preventive aspects of infections. 2. Methods and principles of sterilization. 3. Pyaemia, septicemia and toxemia 4. Immunity and Immunizing agents 5. Auto-immunity-emphasis on practical application. 6. Morphology, Laboratory diagnosis, Physiology, Characteristics, Pathogenicity, and classification of microorganisms and Particularly the following:- (a) Gram positive and negative cocci and bacilli in dental and general infections (b) Spirochetal oral infections (c) Normal Oral microbial flora (d) Organisms causing specific infections such as meningitis, diphtheria, tetanus, gas gangrene tuberculosis syphilis (e) Organisms related to dental caries. 7. Methods of taking swabs and smears from various Oral regions and their staining. 8. Elementary knowledge of virology and mycology with examples of Oro-facial lesions. 9. Common parasites and parasitic diseases such as amoebiasis, malaria, helminthic infections.

### **Practicals and Demonstrations**

A practical course of 96 hours extending over a period of two academic terms comprising the subjects mentioned above and including a course in Clinical Pathology consisting of:- (i) Hemoglobinometry and Hemocytometry. Total erythrocytes and leucocyte. (ii) Preparation of blood smears and staining them for differential count. (iii) Demonstration of Bleeding time, Coagulation time. (iv) Examination of Urine (v) Gram's Staining and (vi) Ziehl-Neelsen's Staining.

Minimum number of hours in General Pathology, Microbiology and Parasitology including lectures, demonstrations and practicals - 160 hours.

### **(3) Oral Anatomy Physiology, Histology and Embryology**

A course 230 lectures and practicals including demonstrations and tooth curbing extending over a period of two academic years viz. I and II year B.D.S.

#### **Lectures**

1. Development including mineralization, histology, applied anatomy, age changes, functions and stress on Clinical Significance from the view point of histology and embryology, etc. of the following:

Structures of teeth (ENAMEL, DENTINE, CEMENTUM & PULP) and Periodontal ligament Jaws including T.M. Joint and Maxillary Sinuses FACE Oral mucosa and salivary glands.

2. Active and Passive eruption of teeth and shedding of Primary teeth 3. Preparation of hard/soft tissue sections for histological examination. 4. Applied Anatomy of : (a) Blood and Nerve supply with lymphatic drainage of Oral tissue. (b) Muscles of Mastication and Facial expressions. 5. Detailed Morphology, Chronology, Occlusion (including its

controlling factors) of primary and permanent dentition. Differences between primary and permanent dentition. 6. Physiology of mastication, deglutition, speech and sensation with their relevance to Oral structures. 7. Composition and Physiology of Saliva and their influencing factors. 8. Chemical composition and physical properties of enamel, dentine, cementum and bone.

### **Practicals**

1. Various methods of preparation of ground and decalcified sections of teeth and jaws. 2. Microscopic study by drawings in journal normal oral and dental tissues. 3. Identification of teeth. 4. Carvings of permanent teeth including drawing in journal. Elective-Presentation on a specific topic Number of minimum hours in Oral Anatomy, Physiology, Histology and Embryology including lectures, demonstrations and practical 230 hours spread over I and II year.

### **Standard of Passing the Examination**

**SOC-5.8** (a) To pass the examination the candidate shall obtain in each subject (i) 50 percent of the full marks in the written including sessional work and oral test including sessional work taken together and (ii) 50 percent of the full marks in the practical tests including sessional work separately.

(b) Those of the successful candidates who pass the examination at their first attempt and obtain 70 per cent or more of the total marks will be declared to have passed the examination in the First Class, and those obtaining 60 per cent in the Second Class and those obtaining 50 per cent in the Pass Class.

(c) Those of the successful candidates who pass the examination in the First Class and obtain 75 per cent marks in any subject or subjects will be declared to have passed with Distinction in the subject or subjects.

(d) All successful candidates other than those who pass the examination in the First Class or Second Class will be placed in the Pass Class.

**SOC-5.9** A candidate who has passed in any of the subjects of the examination in accordance with the provisions of Regulation 8 may at his option, be excused from appearing in that subject on a subsequent occasion and will be declared to have passed the examination in Pass Class when he passes in the other subject of the examination in accordance with the provisions of R.8. Candidates passing the examination in this manner in compartments will not be eligible for a Class or for any Prize or Scholarship to be awarded at the Examination.

**SOC-5.10** Candidates will be examined in the following subjects:

1. General Medicine 2. General Surgery 3. Oral Pathology and Microbiology

**SOC-5.11** The examination will consist of:

1. General Medicine -

(i) One paper of 3 hours duration carrying 60 marks and a viva-voce carrying 15 marks.

(ii) A Clinical of 3 hours duration carrying 75 marks. A long case 40 marks (b) Short case 35 marks (iii) Sessional work carrying 25 marks for theory and 25 marks for practical work to be added to the marks of papers and practicals respectively.

2. General Surgery -

(i) One paper of 3 hours duration carrying 60 marks and a viva-voce carrying 15 marks.

(ii) A Clinical of 3 hours duration carrying 75 marks. (a) long case 40 marks (b) Short case

35 marks.

\*(iii) Sessional work carrying 25 marks for theory and 25 marks for practical work to be added to the marks of papers and practicals respectively.

### 3. Oral Pathology and Microbiology

(i) One paper of 3 hours duration carrying 60 marks and a viva-voce carrying 15 marks.

(ii) Practical of 3 hours duration carrying 75 marks.

(a) Identification of Slides 8 Nos - 40 marks

(b) Identification of Specimens 7 nos - 35 marks.

\*(iii) Sessional work carrying 25 marks for Theory and 25 marks for practical work to be added to the marks of papers and practicals respectively.

In case of a candidate who has failed previously in the examination a new credit list should be prepared on the basis of the previous sessional work as well as on the basis of the performance in the term preceding reappearance in the examination.

(2) Of the 25 marks for sessional work under each head of theory and practical 15 marks are to be awarded towards performance of the Candidate at the different examinations in Theory and practical conducted by the College and 10 marks for day to day performance and journals in these subjects. (See the guidelines note).

**SOC-512** The following are the syllabuses in the various subjects of the examination.

#### **1. General Medicine**

A course of 52 lectures in General Medicine and Clinical demonstrations in a hospital extending over one academic year (64 hours).

##### **Introduction**

Aims of Medicine

Definition of agnosis, prognosis and treatment.

G.L. Disorders:

Stomatitis, glossitis, gastritis, Dysphagia, peptic ulcer, Diarrhoea, Amebiasis, Ascites.

Liver disorders and their relations to Dentistry:

Jaundice, Viral hepatitis, Cirrhosis liver.

Cardio vascular system disorders and their relations to Dentistry: Congenital heart disease, Rheumatic heart disease, Subacute bacterial endocarditis, Congestive heart failure, Left ventricular failure, Hypertension, Coronary artery disease, Thrombophlebitis, Cardiac assets.

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\* Marks for sessional work will be based on the assessment of the Candidate's day to day work and/or performance at the various periodic tests. These marks shall be sent directly to the University or the Dean/Principal of the College at the end of the course along with the applications for admission to the end of the course along with the applications for admission to the Examination. Examiners in Theory or Practical shall have no access to the sessional marks but these shall be added to the marks obtained in Theory and Practical Examinations respectively by the University authority. Utmost secrecy shall be maintained regarding the marks for sessional work.



Respiratory system disorders and their relations to Dentistry: Pneumonia, Bronchitis, Emphysema, Lung Abscess. Eosinophilia, Pulmonary Tuberculosis, Asthma, Atelectasis.

Renal Diseases and their relations to Dentistry: Acute glomerulo-nephritis, Nephrotic syndrome.

Hematological disorders and their relations to Dentistry: Anaemia, Coagulation defects, Bleeding Disorders.

Agranulocytosis, Leukaemia, Oral manifestations of hematological disorders, Lymphadenopathy and Lymphoma Blood groups-transfusion.

Central Nervous System diseases and their relations to Dentistry: Meningitis, Facial palsy, facial paimpilepsy. Headache, Syncope.

Nutritional and metabolic disorders and their relations to Dentistry: Balanced diet: Normal daily, Protein caloric malnutrition requirements, Avitaminosis, Diabetes mellitus, Calcium homeostasis.

Endocrine Disorders and relations to Dentistry

Hypo and hyper parathyroid

Hypo and hyper pituitary

Hypo and hyper Thyroid

\*Dermatological disorders of significance to Oral Cavity.

(These should be shown by dermatologist in Skin and V.D. Department).

Infections and their relations to Dentistry: Enteric fever, Mumps, Viral exanthemata, Diphtheria Syphilis.

Miscellaneous with relations to Dentistry: Allergy, Drug reactions and poisonings, Drug interactions, Evaluation of a case for general anaesthesia, Arthritis Corticosteroids, Herpes.

Alcoholism, Tetanus shock

Antibiotic, sedatives

Treatment of Medical emergencies in dental practice

Instruments and drug employed in these

Minimum number of hours in General Medicine, Lectures, demonstrations and General Hospital Practice Total 96 hours.

## **(2) General Surgery**

A course of thirty-two lectures in General Surgery and Clinical demonstrations of 64 hours in a hospital extending over one academic year.

### **Lectures**

#### **Group I**

1. Introduction, definition and scope of surgery. Its relationship with allied sciences. 2. Sepsis: asepsis, antiseptics, disinfectants Sterilization Principles and methods. 3. Inflammations, toxemia, septicemia, Abscesses, Cellulitis, Sinus, fistula-etiology, pathology, clinical features, treatment. 4. Chronic non specific and specific inflammations such as tuberculosis, Syphilis, Fungal and Leprosy 5. Tetanus-pathology, Clinical features,

prevention, Complications and management. 6. Wounds-types-healing. Role of reconstructive surgery in maxilla-FACIAL injuries. 7. Hemorrhage-management-causes, effects, features-hemostasis, Disorders of Coagulation. 8. Shock-Definition-types, physiopathology, features and treatment with particular reference in dental clinic. 9. Burns 10. Effects of vascular obstruction. 11. Common diseases of veins. 12. Nerve injuries. 13. Common affections of lymphatics and lymph nodes. 14. Tumours-Benign and malignant-etiology, pathology metastasis-management. 15. Methods of administration of anaesthesia-precautions management and resuscitation in dental clinic. 16. Blood groups, transfusion, intravenous therapy. 17. Sutures-different types and dressing 18. Operation theater techniques.

## **Group II**

1. Diseases of salivary glands and lymph glands 2. Common E.N.T diseases of relevance to dentistry (These shall be shown by E.N.T. specialist in E.N.T. Deptt.) 3. Maxilla-facial injuries including paralysis and diseases of nerves. 4. Diseases of thyroid and parathyroid 5. Respiratory obstruction and tracheostomy. 6. Management of unconscious patient with head injury.

## **Clinical**

Practice in a recognized general hospital with clinical instruction in General Surgery including E.N.T. diseases for a period on one academic year including work in surgical outdoor departments as well as on indoor cases (64 hours).

## **(3) Oral Pathology and Microbiology**

A course of 20 lectures each lecture of one hour duration once a week in II B.D.S. and 40 lectures twice a week in III B.D.S. along with 20 hours practicals in II B.D.S. with Oral Histology and 50 hours practicals twice a week in III B.D.S.

## **Lectures**

1. Aims and objectives 2. Basic principles of epidemiology of Oral lesions Etiology, Pathogenesis, Clinical Features, Pathology, Histo Pathology, Laboratory investigations, Diagnosis and differential Diagnosis of 3. Developmental, hereditary, endocranial metabolic, nutritional and other systematic conditions affecting oral and peroral tissues 4. Various traumatic injuries of teeth, jaws and soft tissues, their sequelae and healing 5. Dental caries-microbiology, epidemiology, immunology prevention, Its sequelae 6. Pulp and Periapical pathosis and their Sequelae 7. Diseases of Periodontal Ligament, gingivae, cementum. 8. Environmental Lessons on oral and paraoral tissues including effects of radiation and trauma. 9. Osteomyelitis of jaws due to various Causes and other bone disorders. 10. Diseases of maxillary Sinus and T.M. joints 11. Diseases of nerves, skin, blood and their oral manifestations 12. Neuralgia and pain of head, face and neck. 13. Salivary and lymph gland lessons. 14. Cyst and Cystlike lesions of jaws and soft tissue 15. Oral Premalignant lesions, common tumours and tumour like lesions including diagnostic procedures in ecology. 16. Principles of forensic odontology. 17. Oral microbial flora-nature, Location, age changes, factors related to growth, virulence and spread. 18. Concepts of immunology as related to oral Microbial lesions. 19. Diagnostic procedures in oral Microbiology. 20. Concepts of Infection and focal infection. 21. Defence mechanism of oral tissues against infections. 22. Infectious diseases of oral tissues.

## **Practicals**

Identification of Hard and soft oral tissue pathological specimens  
Identification of Histopathology and Microbiology slides  
Clinical examination of oral and peroral lesions  
Biopsy and exfoliative cytology techniques  
Study of swabs, smears and cultures from oral and peroral lesions  
Elective-Presentation on a pacific topic.

## **Standard of Passing the Examination**

**SOC-5.13(a)** To pass the examination the candidate shall obtain in each subject (i) 50 percent of the full marks in the written including sessional work and oral test including sessional work taken together and (ii) 50 percent of the full marks in the practical tests including sessional work separately.

(b) Those of the successful candidates who pass the examination at their first attempt and obtain 70 per cent or more of the total marks will be declared to have passed the examination in the First Class, and those obtaining 60 per cent in the Second Class and those obtaining 50 per cent in the Pass Class.

(c) Those of the successful candidates who pass the examination in the First Class and obtain 75 per cent marks in any subject or subjects will be declared to have passed with Distinction in the subject or subjects.

(d) All successful candidates other than those who pass the examination in the First Class or Second Class will be placed in the Pass Class.

**SOC-5.14** Provisions of Regulation 13 may at his option, be excused from appearing in that subject on a subsequent occasion and will be declared to have passed the examination in Pass Class when he passes in the other subject of the examination in accordance with the provisions of SOC-5.13. Candidates passing the examination in this manner in compartments will not be eligible for a Class or for any Prize or Scholarship to be awarded at the Examination.

**SOC-5.15** Candidates will be examined at the first semester examination in the following subjects:

1. Orthodontics 2. Pediatric Dentistry 3. Oral Medicine Diagnosis and Radiology 4. Community Dentistry.

**SOC-5.16** Candidate will be examined in the following subjects at the Second Semester examination:

1. Prosthodontics 2. Periodontology 3. Conservative Dentistry (Operative Dentistry) 4. Oral and Maxillofacial Surgery including local and general Anaesthesia.

The first semester examination to be held at the end of First Term shall consist of:

### **1. Orthodontics**

(i) One paper of 3 hours duration carrying 60 marks and a viva-voce carrying 15 marks. (ii) Practical and Clinical of 3 hours duration carrying 75 marks

(a) Wire bending and/or preparation of appliance 30 marks

- (b) Model analysis 25 marks
- (c) Identification of appliances, cephalometric land marks such as planes angles etc. 20 marks

(iii) Sessional work carrying 25 marks for theory and 25 marks for practical work to be added to the marks of papers and practicals respectively.

## 2. Pediatric Dentistry

- (i) One paper of 3 hours duration carrying 60 marks and a viva-voce carrying 15 marks.
- (ii) A Clinical test involving only diagnosis and treatment planning of one hour duration carrying 40 marks:
  - (a) Case History and Diagnosis 15 marks
  - (b) Treatment Planning 25 marks
- (iii) Sessional work carrying 25 marks for theory and 25 marks for practical work to be added to the marks of papers and practicals respectively.

## 3. Oral Medicine Diagnosis and Radiology

- (i) One paper of 3 hours duration carrying 60 marks and a viva-voce carrying 15 marks.
- (ii) A practical and Clinical test of one hour duration carrying 40 marks.
  - (a) Clinical examination and diagnosis of a case 25 marks.
  - (b) Taking and X-ray 15 marks
- (iii) Sessional work carrying 25 marks for theory and 25 marks for practical work to be added to the marks of papers and practicals respectively.

## 4. Community Dentistry

- (i) One paper of 3 hours duration carrying 60 marks and a viva-voce carrying 15 marks.
- (ii) Sessional work carrying 25 marks for theory to be added to the marks of papers

**SOC-5.17** The Second semester Examination to be held at the end of n term shall consists of:

### 1. Prosthodontics

- (i) One paper of 3 hours duration carrying 60 marks and a viva-voce carrying 15 marks.
- (ii)(a) Dental Prosthesis practical i.e. Clinical and Crown Bridge of 3 hours duration carrying 75 marks
  - (i) Clinical Examination 40 marks
  - (ii) Crown & Bridge 35 marks  
Tooth Preparation
- (iii) Sessional work carrying 25 marks for theory and 25 marks for practical work to be added to the marks of papers and practicals respectively.

### 2. Periodontology

- (i) One paper of 3 hours duration carrying 60 marks and a viva-voce carrying 15 marks.
- (ii) Practical and Clinical of 3 hours duration carrying 75 marks.
  - (a) Case history 15 marks
  - (b) Instrumentation, Sealing and Polishing 25 marks
  - (c) Surgery and pack 35 marks

(iii) Sessional work carrying 25 marks for theory and 25 marks for practical work to be added to the marks of papers and practicals respectively.

### **3. \*Conservative Dentistry (Operative Dentistry and Endodontics)**

- (i) One paper of 3 hours duration carrying 60 marks and a viva-voce carrying 15 marks.
- (ii) Practical and Clinical of 3 hours duration carrying 75 marks.
  - (a) Cavity preparation 40 marks
  - (b) Matrix and adaptation 10 marks
  - (c) Permanent filling or Wax pattern 25 marks
- (iii) Sessional work carrying 25 marks for theory and 25 marks for practical work to be added to the marks of papers and practicals respectively.

### **4. Oral and Maxillofacial Surgery including Local and General Anaesthesia**

- (i) One paper of 3 hours duration carrying 60 marks and a viva-voce carrying 15 marks.
- (ii) Practical and Clinical of 3 hours duration carrying 75 marks.
  - (a) Clinical examination and Diagnosis 10 marks
  - (b) Technique of local anaesthetic injection and its effect 25 marks
  - (c) Technique of extraction 25 marks
  - (d) Post operative management of Socket, care and instructions. 15 marks
- (iii) Sessional work carrying 25 marks for theory and 25 marks for practical work to be added to the marks of papers and practicals respectively.

### **I Semester Subjects**

#### **Orthodontics**

##### Lectures

Stress in lectures should be on the preventive and interceptive principles Orthodontics

1. Definition, Aims, objects and scope of Orthodontics. 2. Structure and Function of Stomognathic system. 3. Growth and Development of Jaws, teeth, face and skull and establishment of normal occlusion. 4. Genetics as applied to Orthodontics 5. Normal occlusion and its characteristics, actors responsible for establishment and maintenance of normal occlusion 6. Malocclusion - types and different classifications 7. Aetiology of Malocclusion 8. History taking and examination of patient and case analysis and differential diagnosis including photographic analysis, cephalometries and treatment planning and prognosis. 9. (a) Preventive and interceptive treatment of malocclusion. (b) Extraction in orthodontics. 10. Appliances used in Orthodontic treatment - Adequate knowledge of (a) removable appliances. Mechanical appliances and functional appliances and elementary knowledge of fixed appliances. (b) Surgical Orthodontics 11. Tissue changes incident to Orthodontic treatment. 12. Retention after treatment and relapse. 13. Materials used in Orthodontics. 14. Habit breaking appliances

##### Lectures

40 hours

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\* The technology of the subject Operative Dentistry and Endodontics has been changed to Conservative Dentistry.

Practical and Clinicals

150 hours

15. Elementary knowledge of Craniofacial abnormality - cleft lip-Palate.

The teaching of Orthodontics clinics and practicals should be arranged during Third and final B.D.S. year.

### **Paediatric Dentistry**

Lectures

1. Introduction, definition, scope and importance of pedodontics 2. Growth Development of Dental and oral Facial Structures and normal occlusion. Development anomalies. Genetics related to pedodontics 3. Morphology of Dentitions and its applications (a) Applied Morphology and Histology of deciduous and permanent teeth (b) Importance of first permanent molar 4. Fundamentals of Dental Health Biological factors responsible for maintenance of Dental and Oral Health. 5. Contributory local factors affecting oral health plaque etc. 6. Child psychology and management of child patient. 7. Examination, Diagnosis; and treatment planning 8. Preventive Dentistry: Fluorides, fissure, sealants, foods etc 9. Endodontics in Paediatric Dentistry. 10. Clinical aspects of paediatric Dentistry set up of pedodontic clinic, Teething disorders, Developmental Anomalies, Dental caries in children, Restorative Dentistry, Pulp Therapy and Endodontics. 11. Space Maintainers, Treatment of traumatized teeth, Management of problems of the primary and mixed dentition period, Gingival disorders in children, Stomatological conditions in Children, Management of handicapped children, Classification of Mouth habits and their managements.

12. Materials used in Paediatric Dentistry

Lectures 40 hours

Practical and Clinical 150 hours.

Practicals

Case history, diagnosis and treatment planning.

### **Oral Medicine Diagnosis and Radiology**

Lectures

#### **A. Oral/Medicine Diagnosis**

1. Scope and Importance of the subject 2. Methods of diagnosis including special investigations 3. Acute infections of oral and paracoral structures 4. Blood dyscrasia and their management 5. Management of Cardiac patient in dentistry 6. Metabolic and Endocrine disturbances, their oral manifestations 7. Nutritional deficiencies, and their significance in dentistry 8. Oral sepsis and its effect on general system. 9. Dysfunction of Temporomandibular joints. 10. Cervico-facial lymphadenopathy 11. Diseases of salivary glands 12. Facial pain 13. Cysts and tumours of the oral cavity 14. Oral manifestations of dermatological and other systematic disturbance 15. Special investigations 16. Immune concepts of oral lesions 17. Forensic odontology.

#### **B. Radiology**

1. Physics of radiation-production and properties of X-rays

2. Principles of X-ray techniques and factors for Radiography and Fluoroscopy. Processing

and developing films.

3. Technique of intra-oral and extra oral Radiography and normal anatomical land marks
4. Radiological interpretation of abnormal dental and jaw conditions
5. Elements of Radiations treatment in oral and facial conditions and their sequelae
6. Contrast radiography and recent advances in Dental Radiology including radioactive traces

Lectures	40 hrs.
Clinical	90 hrs.

### **Community Dentistry (Public Health Dentistry)**

#### Lectures

1. Biostatistics: Introduction and General Principles of Biostatistics, Statistical procedures
2. Psychology - Introduction, Psychological development from birth to adolescence Management of child in the dental office-parent Counselling in respect of dental health and Hygiene of the Child
3. Public Health - Concept and philosophy of public health, public Health in India
4. General Epidemiology, Health Education, environmental health, disposal of wastes water norms for potability purification.
5. Preventive Dentistry- Prevention, levels of prevention, various measures in the prevention of dental and oral diseases at individual and mass level
6. Public Health Dentistry-Introduction, definition objectives functions of public health dentist, procedural steps in dental public health, indices for dental diseases, surveying and evaluation; epidemiology of dental caries, periodontal diseases; oral cancer. Utilization of dental manpower, payment for dental care, public dental health programme. School Dental health programmer. Dental Health Services at state and Center. Private practice administration, ethics. Dental Council and Association.
7. Epidemiology of Periodontal disease and parameter used in clinical and population studies.
8. Social Sciences - As applied to health, social structure concepts, groups, social institutions urban and rural societies, their concept of health, Application of sociology in health programmer, social environment. Cultural Anthropology, objective, different aspects of Folk medicine, and popular medicine, Culture pattern and complexes, taboos, as related to health.

#### **Field Programme**

1. In rural areas to conduct survey of Dental diseases, provided dental Health Education, emergency treatment.
2. School- Health Programme Dental care for school children and preventive programme - Topical fluoride application and oral hygiene demonstrations.

Lectures	30 hours
Field programme	100 hours

#### II Semester Subject

##### Prosthodontics

#### Lectures

##### I. Complete Dentures

1. AIMS, OBJECT, Introduction and scope.
2. Applied anatomy.
3. Examination, diagnosis, treatment planning and prognosis.
4. Principles of retention and stability.
5. Principles and techniques of impression making.
6. Preparation of casts, trays and temporary dentures - bases.
7. Jaw-relation and methods of registration.
8. Artificial teeth their selection and arrangements and aesthetics.
9. Articulator and face bows.
10. Occlusion and articulation in

complete denture. 11. Trying in of complete dentures. 12. Processing and finishing of dentures. 13. Correction of occlusal; discrepancies 14. Delivery and adjustments of complete dentures. 15, Sequelae of ill-fitting dentures. 16. Repair, rebating and relining. 17. Immediate dentures. 18. Implant dentures.

## II. Removable Partial Dentures

1. Introduction and scope. 2. Classifications. 3. Examination, diagnosis and treatment planning, 4. Components of removable partial dentures and their function. 5. Surveyors: 6. Mouth preparations for partial dentures. 7. Impression procedures including newer impression materials. 8. Designs of removable partial dentures and its associated problems. 9. Fabrication of cast metal frame work. 10. Jaw relation record. 11. Selection and arrangement of teeth 12. Acrylic partial denture. 13. Trying in partial dentures. 14. Processing, finishing, delivery and maintenance of partial dentures. 15. Immediate partial dentures. 16. New denture base materials included in the text book.

## FIXED PROSTHODONTICS

### III. Elements of Crown and Bridge Prosthesis

1. Introduction Definitions 2. Indication and contra-indications. 3. Examination, diagnosis and treatment planning. 4. Types of crown and Bridges. 5. Selection and choice of abutment teeth. 6. Principles of tooth reduction. 7. Indications constrains indications, and procedures of preparation of abutement teeth for receiving various types of retainers. 8. Temporary protection of a prepared tooth. 9 Gingival retractions and Impress procedures. 10. Construction of dyes and working models, direct and indirect technique. 11. Technique of fabrication of retainers. 12. Selection and fabrication of pontics. 13. Connectors stress - breakers and assembly of fixed bridges. 14. Finishing, cementing and maintenance of crowns and bridges. Ceramics and ceramic to metal restorations. Causes of failure of fixed Prosthesis. Dental implants & Implant Dentures.

## IX Maxillofacial Prosthesis

1. Splints 2. Obturatus 3. Carries

Lectures	100 hrs.
Practical/Clinics	360 (techniques) Plus 540(Clinics)
Total	900 hours.

4. New Maxillofacial Materials & Technics included in the text book.

## **Periodontology**

A course of 8 orientation lectures in II year BDS and minimum 52 lectures and clinical demonstrations spread over III and final years covering the following:

### Lectures

1. Introduction - scope and applicability of the subject. Historical background of Periodontology. 2. Maintenance of Health - Role and scope of Oral Physio-therapy measures, patient education program and periodic check 3. Classification of gingival and periodical disturbances. 4. Gingival Enlargement. 5 Infective muco-gingival conditions



specific and non-specific. 6. Degenerative condition Gingivosis and Periodontist. 7. Atrophic conditions affection gingival and periodontal tissues including aging. 8. Local and systematic factors in the causation of gingival and periodontal lessons. 9. Peridonatal and sequelae. 10. Malocclusion, Mal-alignment and traumatic occlusion Bruxism and Tempero mandibular joint disturbances, Occlusai equilibration. 11. Diagnosis and diagnostic aids including recentgenography and its uses and limitations. 12. Prognosis. 13. Morphological defects of the muco-gingival structures influencing periodontium and their treatment. 14. Treatment of all gingival and periodontal disturbances, Treatment planning phases and rational Different available therapeutr procedures. Healing Mechanism. 15. Role of Nutrition in actinology and treatment. 16. Drugs and materials used in Periodontics. 17. Instrumentation. 18. Splints. 19. Preventive periodontics concept of focal infection. 20. Concept of Focal infection. 21. Oral hygiene practices in India.

## Clinical

1. Varied approaches towards plaque control. 2. Treatment of sufficient number of cases of scaling and root planning. 3. Approach examination, diagnosis (including differential /diagnosis) and analysis of Periodontal and other cases, clinically. 4. Treatment planning including surgical treatment and execution of the same.

Occlusal equilibration.

Lectures	60 hrs.
Practical/Clinical	224 hrs.

## \*Conservative Dentistry (Operative Dentistry)

Lectures

1. Definition and scope 2. Oral hygiene in relation to conservation dentistry. 3. Instruments Nomenclature design and formulae, care and sterilisation. 4. Examination diagnosis and treatment planning. 5. Charting and recording of cases. 6. Histology of the tooth structure as related to the Operative procedure. 7. Hypoplasia, attrition, abrasion, erosion and their management. 8. Dental caries, etiology, Pathology, Clinical features, classification, diagnosis, prevention and control. 9. Cavities classification and nomenclature. 10. Choice of filling materials. 11. Principles of cavity preparation control of pain, prevention of damage to hard and soft tissues during Operative procedures. 12. Methods employed for exclusion of saliva. 13. Bio-Mechanics of cavity design and restoration with filling materials Filling materials. Pulp and soft tissue protection. 14. Airotors, high speed equipment, air motor and micromotor. 15. Cavity preparation for various types of restoration including inlays, onlays and pinlays restorative procedures Material. 16. Drugs used in conservative Dentistry 17. Introduction to recent advances in restoration material and procedures. 18. Fractured teeth and their management, effect of systematic diseases dental tissues. 19. Sensitive dentine, its management. 20. Ceramics in conservation Dentistry. 21. Perio-operative problems. 22. Biological aspects of restorative materials.

## Endodontics

Definition, aim and object. Rationale of endodontic therapy morphology of root canal and

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\* The terminally of the subject Operative Dentistry and Endodontics has been changed to Conservative Dentistry.

Diseases of the pulp and periapical tissues endodontic entries. Diagnostic aids in Endodontics, Endodontics Instruments, Care and sterilization of instruments for endodontics, Treatment of vital and non-vital pulp, Restoration of non-vital teeth, Tests for sterility of the roots canal. Drugs used in root canal therapy.

Bleaching of teeth Restoration of endodontically treated teeth Surgical treatment in endodontics. Emergencies in endodontics, Endo Perio Problems.

Lectures	70 hrs.
Technics	240 hrs.
Practical	360 hrs.

Note - In view of the importance of the digital dexterity more numbers of hours is provided for technique work.

### **Oral and Maxillofacial Surgurly including Oral Surgery, Local and General Anaesthesia**

Lectures

Local Anaesthesia

1. Introduction 2. Properties of an idea local anaesthesia drug. 3. Properties of common local anaesthesia drugs in use. 4. Choice of anaesthesia, local of general anaesthesia. 5. Indications - an contra-indications, advantages and disadvantages of local anaesthesia. 7. How does local anaesthetic acts. 8. fre-anaesthetic medication. 9. Technique of infiltration anaesthesia. Nerve block anaesthesia, Symptom and Sings of anaesthesia. 10. Complications associated with local anaesthesia and their management.

#### **General Anaesthesia**

1. Properties of general anaesthesia drug commonly used. 2. Pre-anaesthesia preparation of a patient and pre-medication. 3. Evaluation of a patient for general anaesthesia. 4. Short anaesthesia in a Dental Chair, Endotracheal anaesthesia, Intravenous anaesthesia. 5. Symptoms and signs of general anaesthesia. 6. Complications arising during the administration of general anaesthesia and their management.

#### **Exodontia**

1. Objectives. 2. Indications for tooth extraction. 3. Pre-operative assessment. 4. Forceps extraction. 5. Surgical extraction (Trans-aveolar extraction) 6. Extraction technique under general anaesthesia in Dental chair. 7. Complications of tooth extraction and their management.

#### **Oral Surgery**

1. Definition and scope. 2. Diagnosis in Oral Surgery. a) History taking b) Clinical examination c) Special investigations. 3. Importance of general condition of the patient in relation to oral surgery. 4. Treatment planning 5. Sterilization 6. Use of antibiotics in oral surgery. 7. Diagnosis, preoperative assessment and treatment of impacted teeth. 8. Pre-prosthetic Surgery. 9. Surgical and Orthodontics 10. Oro-facial infections, their diagnosis and treatment. 11. Inflammatory diseases of jaw bone and their management. 12. Diagnosis and management of Cysts of Oral Cavity. 13. Diagnosis and treatment of the fracture of the mandible. 14. General outline of the fracture, of the middle third of the facial skeleton. 15. Diagnosis and treatment of begin neoplastic lesion of the Oral Cavity (Odontogenic and non-odontogenic). 16. Surgical produced in relation to endodontic therapy (Apicectomy).

17. Surgical treatment of tumour like lesions of the oral cavity including odontome. 18. Diseases of maxillary sinus, with special reference to oroantral fistula. 19. Management of hemorrhage in Oral Surgery 20. Diseases of Salivary glands, Diagnosis and treatment of Salivary Calculi and neoplasma arising from minor salivary glands. 21. Surgical aspects of histopathological diagnosis. 22. Oral Surgical Complications and their management. 23. Diagnosis of malignant condition of Oral Cavity, a broad outline about the different methods of treatment 24. Diseases of temporomandibular joint, such as arthritis hypoplasia, subluxation, dislocation, ankylosis. Other causes of inability to open the mouth. 25. Affections of trigeminal and facial nerves.

#### Lectures

Anaesthesia (Local and General)	10 hrs.
Exodontia	10 hrs.
Oral Surgery	<u>40 hrs.</u>
	60 hrs.
Clinical	<u>220 hrs.</u>
Total Practical and Clinical	<u>280 hrs.</u>

#### Standard of Passing the Examination

**SOC-5.18(a)** To pass the examination the candidate shall obtain in each subject (i) 50 percent of the full marks in the written including sessional work and oral tests including sessional work taken together and (ii) 50 percent of the full marks in the practical tests including sessional work separately.

(b) Those of the successful candidates who pass the examination in both semesters at their first attempt and obtain 70 per cent or more of the total marks will be declared to have passed the examination in the First Class, and those obtaining 60 per cent in the Second Class and those obtaining 50 per cent in the Pass Class.

(c) Those of the successful candidates who pass the examination in the First Class and obtain 75 per cent marks in any subject or subjects will be declared to have passed with Distinction in the subject or subjects.

(d) All successful candidates other than those who pass the examination in the First Class or Second Class will be placed in the Pass Class.

**SOC-5.19** A candidate who has passed in any of the subjects of the examination in accordance with the provisions of Regulation SOC-5.18 may at his option, be excused from appearing in that subject on a subsequent occasion and will be declared to have passed the examination in Pass Class when he passes in the other subject of the examination in accordance with the provisions of SOC-5.18 provided always that the candidate shall pass in all the subjects of the examination within a period of two years and provided further that at the time of passing the whole examination the exemption earned by the candidate in any of the subjects shall not be in period to time older than two years. Candidates passing the examination in this manner in compartments will not be eligible for a Class or for any Prize or Scholarship to be awarded at the Examination.

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