

GOA UNIVERSITY

Taleigao Plateau, Goa 403 206

A G E N D A

For the 9th Meeting of the Standing Committee of

IX ACADEMIC COUNCIL

Day & Date

14th June, 2019

Time

10.30 a.m.

Venue

Council Hall

Ninth Meeting of the Standing Committee of the IX Academic Council

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Ninth Meeting of the Standing Committee of the IX Academic Council

Date: 14-6-2019

Time: 10.30 a.m.

Venue: Council Hall, Office of the Vice-Chancellor, Goa University,
Taleigao Plateau, Goa.

D	DISCUSSIONS
D 3	REPORTS OF BOARD OF STUDIES
D 3.1	<p>Minutes of the Meeting of Board of Studies in Microbiology held on 17/04/2019.</p> <p><u>Part A</u></p> <p>Recommendations regarding courses of study in the subject or group of subjects at the under-graduate level.</p> <p>The syllabus of T.Y.B.Sc. Microbiology Semesters V and VI under CBCS - Annexure I</p> <p><u>Annexure I</u> (refer page no 1)</p> <p>Recommendations regarding courses of study in the subject or group of subjects at the Post-graduate level. Not in the agenda</p> <p><u>Part B</u></p> <p>(i) Scheme of examinations at under-graduate level. Not in the agenda</p> <p>(ii) Panel of examiners for different examinations at the under-graduate level.</p> <p>Panel of examiners for semester V and VI for T.Y.B.Sc. Microbiology under CBCS as per OB 04 -Annexure II</p> <p>(iii) Scheme of examinations at the post-graduate level. Not in the agenda</p> <p>(iv) Panel of Examiners for different examinations at post-graduate level.</p> <p style="text-align: right;">Not in the agenda</p> <p><u>Part C</u></p> <p>(i) Recommendations regarding preparation and publication of selection of reading material in the subject or group of subject or group of subjects and names of persons</p>

recommended for appointment to make the selection.

Not in the agenda

Part D

(i) Recommendations regarding general academic requirements in the Departments of University or affiliated colleges.

Not in the agenda

(ii) Recommendations of the Academic Audit Committee and status thereof:

Not in the agenda

Part E

(i) Recommendations of the text books for the courses of study at the undergraduate level:

The list of recommended reading material for each paper is enclosed along with the syllabus of respective paper - Annexure I.

(ii) Recommendations of text books for the courses of study at the post-graduate level:

Not in the agenda

Part F

Important points for consideration/approval of Academic Council:

(i) The important points/recommendations of BOS that require consideration/ approval of Academic Council (points to be highlighted) are mentioned below:

(a) The syllabus of T.Y.B.Sc. Microbiology Semesters V and VI under CBCS - Annexure I

(b) Panel of examiners for semester V and VI for T.Y.B.Sc. Microbiology under CBCS as per OB 04 - Annexure II.

(ii) The declaration by the Chairman, that the minutes were read out by the Chairman at the meeting itself.

Date: 17.4.2019

Place: Department of Microbiology.

Sd/-
(Prof. Sandeep Garg)

	<p style="text-align: right;">Signature of the Chairperson</p> <p><u>Part G</u> :The remarks of the Dean of the faculty</p> <p>(i) The minutes are in order.</p> <p>(ii) The minutes may be placed before the Academic Council with remarks if any.</p> <p>(iii) May be recommended for approval of Academic Council.</p> <p>(iii) Special remarks if any.</p> <p>Date: 17.4.2019</p> <p>Place: Office of Dean,</p> <p style="text-align: right;">(Prof. P.K. Sharma) Dean Faculty of Life Science and Environment</p> <p style="text-align: right;">(Back to Index)</p>
D 3.2	<p>Minutes of the Board of Studies in Psychology held on 03/06/2019.</p> <p>Part A</p> <p>i) Recommendation regarding courses of study in the subject or group of subjects at the Undergraduate level- N.A.</p> <p>ii) Recommendation regarding courses of study in the subject or group of subjects at the Postgraduate level.</p> <p>Decision:</p> <ul style="list-style-type: none"> • The Course Structure for M.A. Psychology, was decided as per the guidelines given by Goa University in Ordinance OA 18A. <ol style="list-style-type: none"> 1. The Course structure for M.A. Psychology Part II with paper codes and total number of credits, is attached as <u>ANNEXURE I.</u> <u>Annexure I (refer page no 32)</u> 2. The syllabi of semester III & semester IV for M.A. Psychology Part II is attached as <u>ANNEXURE II.</u> 3. The Question Paper Format is attached as <u>ANNEXURE III.</u> <p>Part B</p> <p>i) Scheme of examinations at the Undergraduate level- N.A.</p> <p>Decision: N.A.</p> <p>ii) Panel of examiners for different examinations at the Under-Graduate level.</p> <p>Decision : N.A.</p>

iii) Scheme of Examinations at the Post-Graduate level.

Decision:

- The Question Paper Format for a course paper of 4 credits (only theory) having SEA of 60 marks and the question paper format is attached as **ANNEXURE III.**
- The marking scheme for the Dissertation is as per the evaluation scheme specified in the Goa University Ordinance OA 18A.
- The marking scheme for Specialization Practicum is outlined in the course structure and syllabus and is attached as **ANNEXURE I and II**

iv) Panel of Examiners for different Examinations at the Post-Graduate Level.

Decision: N.A.

Part C

i) Recommendation regarding preparation and publication of selection of reading material in any subject or group of subjects and the name of person recommended for appointment to make selection.

Decision: N.A.

Part D

i) Recommendation regarding general academic requirements in the departments of University or affiliated colleges.

Decision: N.A

Part E

i) Recommendation of text books for the courses of study at the undergraduate level

Decision: N.A.

ii) Recommendation of text books for the courses of study at the postgraduate level.

Decision: The syllabi of Semester III & Semester IV for **M.A. Psychology Part II** is attached as **ANNEXURE II** and contains recommendations of text books.

Part F: Important points for consideration/approval of Academic Council

i) The important points/recommendations of B.O.S. that requires consideration/approval of Academic Council are as follows:

- The Course structure for **M.A. Psychology Part II** with paper codes and total number of credits is attached as **ANNEXURE I.**

- The syllabi of Semester III & Semester IV for **M.A Psychology Part II** is attached as **ANNEXURE II.**
- The Question Paper Format for a course paper of 4 credits (only theory) having SEA of 60 marks and the question paper format is attached as **ANNEXURE III.**

Encl.: ANNEXURE I, II and III

Date: 3rd June, 2019.

Place: Panaji – Goa.

Signature of Chairperson -B.o.S

(Dr. Wendy Manuel)

Part G: The remark of the Dean of Faculty.

- i. The minutes are in order.
- ii. The minutes may be placed before the Academic Council with remarks if any.
- iii. May be recommended for approval of Academic Council.
- iv. Special remarks if any.
- v.

Date:

Place: Taleigao-Goa

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D 3.3	<p>Minutes of the Meeting of Board of Studies in Skill – Enhancement Courses held on 03/05/19.</p> <p>PART – A</p> <p>i) Recommendation regarding course of study in the subject or group of subjects at the undergraduate level. –</p> <p>The Board prepared the draft ordinances and syllabus for Semester I & II for BSc (Honours) in Interior Design and BSc (Honours) in Fashion & Apparel Design</p> <p><u>Annexure I</u> (refer page no 112)</p> <p>Please see Appendix I, II, III & IV</p> <p>ii) Recommendation regarding courses of study in the subject or group of subjects at the Post- graduate level -</p> <p>NIL</p> <p>PART – B</p> <p>i) Scheme of examinations at the undergraduate level. –NIL</p> <p>ii) Panels of examiners for different examinations at the undergraduate level – NIL</p> <p>iii) Scheme of examinations at the post –graduate level - NIL.</p> <p>iv) Panels of examiners for different examinations at the post –graduate level. – NIL</p> <p>PART – C</p> <p>i) Recommendation regarding preparation and publication of selection of reading material in any subject or group of subject and the names of person recommended for appointment to make the selection. - NIL</p> <p>PART – D</p> <p>i) Recommendation regarding general academic requirements in the Departments of University or affiliated Colleges.</p> <p>NIL</p> <p>PART – E</p> <p>i) Recommendation of text books for the courses of study at the undergraduate</p>
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	<p>Level – NIL</p> <p>Recommendation of text books for the courses of study at the post – graduate level. –NIL</p> <p>PART – F</p> <p>ii) The declaration by the Chairman that the minutes were read out by the Chairman at the meeting itself.</p> <p style="text-align: right;">Sd/- Prof. K. S. Bhat Chairperson Board of Studies</p> <p>The remark of the Dean, Faculty of Languages & Literature</p> <p>i) The minutes are in order.</p> <p>ii) The minutes may be placed before the Academic Council (with remark, if any)</p> <p>iii) Important points of the minutes which need clear point's decision of the Academic Council to be recorded.</p> <p style="text-align: right;">Sd/- (Prof. Nina Caldeira)</p> <p>Date: 03 /05/2019 Dean, Faculty of Languages & Literature</p> <p style="text-align: right;">(Back to Index)</p>
D 4	<p>REPORTS OF AFFILIATION INQUIRY COMMITTEE</p> <p>Affiliation Inquiry Committee Reports in respect of following Colleges are placed before the Standing Committee of the Academic Council for its consideration and approval.</p>
D 4.1 D 4.1.1	<p>Goa Medical College and Hospital</p> <p>Continuation of affiliation for M.D. General</p> <p>Medicine program for the academic year 2019-20.</p> <p>Date of AIC visit: 31/05/2019. Program: Aided.</p> <p>Part 1 – AIC Report (refer page no 221).</p> <p>Part 2 – Recommendations of the Affiliation Inquiry Committee.</p>

Observations:

Infrastructure is adequate.

(I) Essential conditions to be fulfilled.

Nil

(II) Overall recommendations of the AIC:

Affiliation Inquiry Committee recommends continuation of affiliation to M.D. General Medicine program for the academic year 2018-19 and 2019-20 with an intake of intake of 14 (fourteen) seats as permitted by Medical Council of India. Further extension may be granted for academic year 2020-21 and 2021-22 also, subject to payment of annual affiliation fees.

(III) Suggestions of AIC:

Nil

Position	Name	Signature
Chairperson	Dr. G.K.Rao	Sd/-
Expert	Dr. Anita Paritekar	Sd/-
Member of AC	Dr. Shabir Ali	Sd/-
Co-ordinator CDC	----	---
Representative of DHE	-----	--
Ex. Engineer	-----	--
Member Secretary	Shri A.J. Kalangutkar	Sd/-

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D 4.1.2

Continuation of affiliation for M.D. Preventive & Social Medicine program for the academic year 2019-20.

Date of AIC visit: 31/05/2019.

Program: Aided.

Part – 1 [AIC Report](#) (refer page no 226).

Observations:

- 1) Staff is adequate according to norms.
- 2) Department has requisite infrastructure.

(I) Essential conditions to be fulfilled.

Nil

(II) Overall recommendations of the AIC:

Affiliation Inquiry Committee recommends continuation of affiliation to MD Preventive

& Social Medicine program with an intake of 05 (five) seats for the academic year 20-21 as approved by Medical Council of India. Further Affiliation Inquiry Committee is of the opinion for continuation of affiliation for 2020-21 and 2021-22, as department has requisite faculty and infrastructure subject to the payment of annual affiliation fees to Goa University.

(III) Suggestions of AIC:

NIL

Position	Name	Signature
Chairperson	Dr. G.K.Rao	Sd/-
Expert	Dr. Mohan Raut	Sd/-
Member of AC	Dr. Shabir Ali	Sd/-
Co-ordinator CDC	----	---
Representative of DHE	-----	--
Ex. Engineer	-----	--
Member Secretary	Shri A.J. Kalangutkar	Sd/-

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D 4.1.3 Continuation of affiliation for M.S. Anatomy program for the academic year 2019-20.

Date of AIC visit: 31/05/2019.

Program: Aided.

Part 1 – [AIC Report](#) (refer page no 238).

Part 2 – Recommendations of the Affiliation Inquiry Committee.

Observations:

Infrastructure and facilities are adequate.

(I) Essential conditions to be fulfilled.

Nil

(II) Overall recommendations of the AIC:

Affiliation Inquiry Committee recommends continuation of affiliation to MS Anatomy program with an intake of 04 seats for the academic year 2019-20 as permitted by Medical Council of India. Further extension may be granted for the academic years 2021-22 and 2021-22 also, subject to payment of annual affiliation fees to the University.

(III) Suggestions of AIC:

1. Improvement in the Histology slides preparation.
2. Motivate the faculty to take up academic and research activities including research publications.

Position	Name	Signature
Chairperson	Dr. G.K.Rao	Sd/-
Expert	Dr. S.K. Deshpande	Sd/-
Member of AC	Dr. Shabir Ali	Sd/-
Co-ordinator CDC	----	---
Representative of DHE	-----	--
Ex. Engineer	-----	--
Member Secretary	Shri A.J. Kalangutkar	Sd/-

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D 4.1.4 Continuation of affiliation for M.D. Pulmonary Medicine program for the academic year 2019-20.

Date of AIC visit: 31/05/2019.

Program: Aided.

Part 1 – [AIC Report](#) (refer page no 241)

Part 2 – Recommendations of the Affiliation Inquiry Committee.

Observations:

- 1) Infrastructure is adequate.

(I) Essential conditions to be fulfilled.

Nil

(II) Overall recommendations of the AIC:

Affiliation Inquiry Committee recommends continuation of affiliation to M.D. Pulmonary Medicine program for the academic year 2019-20 with an intake of six (06) seats as permitted by Medical Council of India. Further extension may be granted for the academic years 2021-22 and 2021-22 also, subject to payment of annual affiliation fees to the University.

(III) Suggestions of AIC:

Nil

Position	Name	Signature
Chairperson	Dr. G.K. Rao	Sd/-
Expert	Dr. Anita Saibannavar	Sd/-

Member of AC	Dr. Shabir Ali	Sd/-
Co-Ordinator CDC	----	---
Representative of DHE	-----	--
Ex. Engineer	-----	--
Member Secretary	Shri A.J. Kalangutkar	Sd/-

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D 4.1.5 Continuation of affiliation for M.D. Pharmacology program for the academic year 2019-20.

Date of AIC visit: 04/06/2019.

Program: Aided.

Part – 1 [AIC Report](#) (refer page no 243).

Part –2 Recommendations of Affiliation Inquiry Committee.

Observations:

Adequate infrastructure and faculty members.

(I) Essential conditions to be fulfilled.

Nil

(II) Overall recommendations of the AIC:

Affiliation Inquiry Committee recommends continuation of affiliation to M.D. in Pharmacology program with an intake of six students for the academic year 2019-20, as permitted by Medical Council of India. Further extension may be granted for the academic year 2020-21 and 2021-22 also, subject to payment of annual affiliation fees to the University.

(III) Suggestions of AIC:

Nil

Position	Name	Signature
Chairperson	Dr.G.K.Rao	Sd/-
Expert	Dr. A.P.Hogade	Sd/-
Member of AC	Dr. G.Shaber Ali	Sd/-
Co-ordinator CDC	Dr. Radhika S. Nayak	---
Representative of DHE	Dr. Gervasio S.F.L.Mendes	--
Ex. Engineer	Sangam S.S. Talaulikar	--
Member Secretary	A.J. Kalangutkar	Sd/-

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D 4.1.6

Continuation of affiliation for M.D. Dermatology, Venerology and Leprosy program for the academic year 2019-20.

Date of AIC visit: 04/06/2019.

Program: Aided.

Part 1 – AIC Report (refer page no 247).

Part 2 – Recommendations of the Affiliation Inquiry Committee.

Observations:

All the things are available as pr MCI requirements.

(I) Essential conditions to be fulfilled by end of the academic year.

Nil

(II) Overall recommendations of the AIC:

Affiliation Inquiry Committee recommends continuation of affiliation to MD. in Dermatology, Venerology and Leprosy program with an intake of three students for the academic year 2019-20, as permitted by Medical Council of India. Further extension may be granted for the academic year 2020-21 and 2021-22 also, subject to payment of annual affiliation fees to the University.

(III) Suggestions of AIC:

Nil

Position	Name	Signature
Chairperson	Dr.G.K.Rao	Sd/-
Expert	Dr. Manjunath Swamy	Sd/-
Member of AC	Dr. G.Shaber Ali	Sd/-
Co-ordinator CDC	Dr. Radhika S. Nayak	---
Representative of DHE	Dr. Gervasio S.F.L.Mendes	--
Ex. Engineer	Sangam S.S. Talaulikar	--
Member Secretary	A.J. Kalangutkar	Sd/-

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D 4.2
D 4.2.1

Gomantak Ayurveda Mahavidyalaya & Research Centre, Shiroda-Goa.
Affiliation for MD Ayurveda Medicine (Ayurveda Vachaspati-Kayachikitsa) program for the year 2019-20

Date of visit: 06/06/2019

Programme: Self financing

Part 1 – [AIC Report](#) (refer page no 250)

Part 2 – Recommendations of the Affiliation Inquiry Committee.

Observations:

1. The Department is established and equipped with all necessary requirements and fulfills the norms and CCIH for post graduation.
2. The Department is having adequate staff to fulfill the student guide ratio.
3. The OPD and IPD is having adequate patients.
4. Library is having adequate books and subscribed journals.
5. The Institute has already obtained permission letter for starting of PG in Kayachikitsa from AYUSH.

(I) Essential Conditions to be fulfilled

NIL

(II) Overall recommendations of the AIC:

Affiliation Inquiry Committee recommends Affiliation to start MD Ayurveda Medicine(Ayurveda Vachaspati-Kayachikitsa) program for the academic year 2019-20, with an intake of six seats.

(III) Suggestions of the AIC:

1. To develop SOP's for Panchakarma procedures.
2. Periodical Training to Panchakarma therapists.
3. To subscribe more relevant scientific journals.
4. To improve Chemical Laboratory services.

Position	Name	Signature
Chairperson & AC Member	Dr.S.N.Mamledesai	Sd/-
Expert	Dr. B.S.Prasad	Sd/-
Co-ordinator CDC	Dr. Radhika S. Nayak	--
Representative of DHE	Shankar Naik	---
Ex. Engineer	Sangam S.S. Talaulikar	--
Member Secretary	A.J. Kalangutkar	Sd/-

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D 4.2.2 Affiliation for MD Ayurved Pharmaceuticals (Ayurveda Vachaspati-Rasashastra & Bhaisajya) program for the year 2019-20.

Date of visit: 06/06/2019

Programme: Self financing

Part 1 – [AIC Report](#) (refer page no 257)

Part 2 – Recommendations of the Affiliation Inquiry Committee.

Observations:

1. The Ministry of AYUSH has already sanctioned permission for PG in RS & BK from 2019-20.
2. The Department is well organized.
3. Teaching staff is motivated to deliver knowledge to students and have sufficient books library material and required sources as per expectation.
4. The museum of all raw materials, in process and final produces are massived well.
5. For identification and original samples to do practical required infrastructure is sufficient.
6. The number of teaching staff as per requirement & CCIM is fulfilled in the Department.

(I) Essential Conditions to be fulfilled

NIL

(II) Overall recommendations of the AIC:

Affiliation Inquiry Committee recommends Affiliation to start MD Ayurved Pharmaceuticals (Ayurveda Vachaspati-Rasashastra & Bhaisajya) program for the academic year 2019-20, with an intake of six seats.

(III) Suggestions of the AIC:

1. SOP's for all quality Control procedures.
2. Increase the number & equipments required.
3. To increase the range & medicines manufactured.

Position	Name	Signature
Chairperson & AC Member	Dr.S.N.Mamledesai	Sd/-
Expert	Dr. Sunil S Inamdar	Sd/-
Co-ordinator CDC	Dr. Radhika S. Nayak	--
Representative of DHE	Shankar Naik	---
Ex. Engineer	Sangam S.S. Talaulikar	--
Member Secretary	A.J. Kalangutkar	Sd/-

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<p>D 4.3 D 4.3.1</p>	<p>Shree Rayeshwar Institute of Engineering & I.T., Shiroda.</p> <p>Continuation of affiliation for (i) B.E. Information Technology (ii) B.E. Computer Engineering(iii) B.E. Electronics Telecommunication Engineering programmes.</p> <p>Date of Visit: 07/06/2019</p> <p>Programme: BE(IT,ETC,Comp.Engg) Type of Programme: Self Financing</p> <p>Part 1 – <u>AIC Report</u> (refer page no 263)</p> <p>Observations:</p> <ol style="list-style-type: none"> 1. The Salary with arrears has been paid to the entire faculty up to March 2019. 2. The money is being mobilised to pay the salary for April and May along with June salary. 3. The College has placed 70% of eligible students from Campus placement. 4. The Placement Cell of the College has also taken care of ineligible students to place in the Industry. 5. The College provides full travel allowance and registration fees to the faculty for presenting papers in the Conferences. 6. The College is organising Teachers Training programme with I.T. Industry giants like Infosys, Mahindra Tech, etc., through which 111 students were trained and awarded the certificates. 7. The College has Entrepreneurship development Cell, Ladies Common Room and Wi-Fi facility provided by Jio with one GB bandwidth. 8. During interactions with students it was observed that the teachers are motivated and are very happy about the teaching and learning process of the College. 9. The College has adequate infrastructure for all the three streams i.e. ETC, IT and CE programs. 10. All the required software has been installed and equipments are functional. 11. The College has tie-up with Industries in Verna, Goa to carry out their projects. 12. The teachers have also expressed that they don't have any problem except delay in salary payments. 13. The College is having adequate strength of faculty to take care of Curriculum requirements. 14. The library has adequate number of books as per the curriculum. <p>Essential Conditions to be fulfilled before commencement of the admissions:</p> <ol style="list-style-type: none"> 1. The Post of Professors and Associate Professors be identified/ filled up as per AICTE norms. <p>Overall recommendations of the AIC:</p> <p>Affiliation Inquiry Committee recommends Continuation of affiliation for (i) B.E. Information Technology (ii) B.E. Computer Engineering(iii) B.E. Electronics Telecommunication Engineering programmes for three academic years i.e. for 2019-20, 2020-21 and 2021-22 and affiliation to start the BE. Mechanical Engineering programme</p>
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for the academic year 2019-20 subject to payment of affiliation fees to the University.

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D 4.3.2

BE Mechanical Engineering.

Date of Visit: 07/06/2019

Type of Programme: Self Financing

Part 1 – [AIC Report](#) (refer page no 289)

Programme: BE Mechanical Engineering.

Observations :

1. The college has presently three lathe machines.
2. The foundry and casting facilities are adequate.
3. The college has enough space for first year of Mechanical engineering stream with 60 intakes.
4. Additional floor is under construction for full four-year program with 240 students.
5. The College has Entrepreneurship development Cell, Ladies Common Room and Wi-Fi facility provided by Jio with one GB bandwidth.
6. The library has adequate number of books as per the curriculum.

(I) Essential Conditions to be fulfilled before commencement of the admissions:

1. One additional assistant professor to be appointed before commencement of 2nd semester.

Overall recommendations of the AIC:

Affiliation Inquiry Committee recommends affiliation to start B.E. Mechanical Engineering programme for the academic year 2019-20 with an intake of 60 students, subject to fulfilment of essential conditions.

I) Suggestions of the AIC:

1. The College should rearrange the Lab. space for Mechanical Engineering stream so that mould making, welding, etc in a more structured manner.
2. The college needs to add additional 17 lathe machines, from beginning of the 3rd semester.
3. The college is advised to show the actual casting process to students, though it is not the part of practical.

Position	Name	Signature
Chairperson	Prof. G. M. Naik	Sd/-
Expert	Dr. Mahesh	Sd/-

		Parappagoudar	
	Member of AC	Dr. Sulaxana R. Vernekar	Sd/-
	Co-ordinator, CDC – Member	Dr. R.S. Nayak	--
	Representative of DHE– Member	Dr. Shankar B Naik	Sd/-
	Ex-Engineer – Member	Sangam S.S.Talaulikar	--
	Member Secretary	A. J. Kalangutkar	Sd/-
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D 4.4	<p>Shri Kamaxidevi Homeopathic Medical College & Hospital, Shiroda, Goa. BHMS</p> <p>Date of Visit : 10/06/2019</p> <p>Programme : BHMS Type of Programme: Self Financing</p> <p>Part 1 – AIC Report (refer page no 295)</p> <p>Observations :</p> <ol style="list-style-type: none"> Salary has been paid till March 2019 and the balance two months will be paid in short time. The College has requested for additional 50 seats. As of now College has sufficient infrastructure for 60 seats and they are in process of additional infrastructure. College needs additional four teaching staff as per the regulation to support additional 50 intake capacity. As per the regulation to new intake of 100 , 28 full time teachers and 12 guest faculties are required out of which presently they have 24 full time and 05 guest faculties. There are no specific guidelines for promotion of teachers to higher post from CCH. The University may come out with specific guidelines in consultation with experts from this field so that grievances of teachers can be addressed. The College has given the document stating that with additional 50 students it is possible to pay the salary as per the current norms without getting into issues of settlement of salaries to teachers. <p>(I) Essential Conditions to be fulfilled:</p> <ol style="list-style-type: none"> The College needs to appoint four (04) full time teachers and seven (07) guest faculties for additional 50 students. Following Departments need to have one Professor each: <ol style="list-style-type: none"> Organon of Medicine Materia Medica Practice of Medicine Repertory. 		

(II) Overall recommendations of the AIC:

1. The Affiliation Inquiry Committee recommends continuation of affiliation to BHMS programme for the academic year 2019-20.
2. Affiliation Inquiry Committee recommends that the consent may be given to the College to obtain NOC for additional 50 students from State Govt., CCH, Department of AYUSH in line with the consent given earlier for additional 10 seats.

(III) Suggestions of the AIC :

1. College to have atleast one Committee Room with Air condition for efficient deliberation.
2. Each Department needs to be installed with atleast one Computer with internet connection.
3. College to show periodic progress towards the steps taken for the additional 50 students.

Position	Name	Signature
Chairperson	Prof. Gourish M. Naik	Sd/-
Expert	Dr. Vivekanand V. Vernekar	Sd/-
Member of AC	Dr. Sulaxana Vernekar	Sd/-
Co-ordinator, CDC – Member	-----	-
Representative of DHE– Member	-----	-
Ex-Engineer – Member	-----	-
Member Secretary	A. J. Kalangutkar	Sd/-

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D 7

OTHER ITEMS

D 7.1

Additional Seats for B.A LL. B for the academic Year 2019-20.

Requests received from G.R College of Law, Margao to admit 06 students (10%) for additional seats for the B.A LL. B programme for the academic Year 2019-20, as more than 100 candidates appeared for the Entrance Test held on 08/06/2019. At present the class strength is 60.

Similar requests received from the Colleges for the current academic year 2019-20 were considered by the Academic Council and Colleges were permitted to admit 10% additional seats per division for the B. A /B.Sc./B. Com/BBA programmes with the following conditions:

1. No additional students shall be permitted beyond 10% of the sanctioned intake. Consequently, no wait lists are to be maintained beyond the permitted intake.
2. Colleges applying for additional divisions shall not be permitted to admit additional 10% intake.
3. Colleges will require to apply separately for opening an additional division by requesting for N.O.C from the Directorate of Higher Education and applying for affiliation to the University with prescribed affiliation Fees.

The Standing Committee of the Academic Council may kindly consider.

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ANNEXURES

D 3.1 Minutes of the Meeting of Board of Studies in Microbiology held on 17/04/2019.

Annexure I

Goa University

B.Sc. Microbiology

Papers and Syllabus for Semester V and Semester VI under Choice Based Credit System

(Third Year)

Paper Code	Paper title	Total credit	Theory credit	Practical credit
Semester V				
Core papers				
MIC 105	Medical Microbiology	6	4	2
MIC 106	Industrial Microbiology	6	4	2
MIC 107	Microbial Genetics	6	4	2
Elective Papers				
MID 101	Applied Microbiology	4	3	1
MID 102	Microbial Physiology	4	3	1
MID 103	Biostatistics and Bioinformatics	4	3	1
Semester VI				
Core papers				
MIC 108	Immunology	6	4	2
MIC 109	Agricultural Microbiology	6	4	2
MIC 110	Genetic Engineering	6	4	2

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Elective Papers

MID 104	Cell Biology	4	3	1
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MID 105	Virology	4	3	1
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Project

MIP	Project	4
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Programme: B.Sc. (Microbiology) CBCS Structure - Semester V

Course Code: MIC 105

Title of the Course: MEDICAL MICROBIOLOGY

Number of Credits: 6 credits = 4 (Theory) + 2 (Practical)

Effective from Academic Year: 2019-20

Prerequisites	Basic understanding of human anatomy and physiology, microbial cell structure and physiology.	
Objective:	Understand relationship between human host and pathogens and the ability of pathogens to cause disease.	
Content:	THEORY (4 Credits)	(60)
1.	Normal microflora of the human body and host pathogen interaction	(14)
1.1	Normal microflora of the human body: Importance of normal microflora; normal microflora of skin, throat, gastrointestinal tract, genito - urinary tract	
1.2	Host pathogen interaction: Pathogen, Invasion, Infection, Pathogenicity, Virulence, Virulence factors (Pili, fimbriae, flagella, capsule, glycocalyx, adhesins, enzymes, chelators (siderophores), endotoxin, exotoxin)	
1.3	Toxigenicity, Carriers and their types, Opportunistic infections, Nosocomial infections. Transmission of infection, Pathophysiological effects of LPS.	

2.	Sample collection, transport and diagnosis	(6)
2.1	Sample types and collection, transport and culturing from clinical samples.	
2.2	Principle and methodology of different diagnostic techniques - ELISA, Immunofluorescence, Agglutination based tests, Complement fixation, PCR, DNA probes and Microarray.	
3.	Bacterial diseases	(16)
3.1	List of diseases of various organ systems and their causative agents. The following diseases in detail with mode of transmission, pathogenesis, symptoms, chemotherapy and prophylaxis:	
A.	Respiratory Diseases: Pneumonia (<i>Streptococcus pneumoniae</i>), Influenza (<i>Haemophilus influenzae</i>), Tuberculosis (<i>Mycobacterium tuberculosis</i>).	
B.	Gastrointestinal Diseases: Bacterial diarrhea (<i>Escherichia coli</i>), typhoid (<i>Salmonella typhi</i>), Cholera (<i>Vibrio cholerae</i>), bacterial dysentery (<i>Shigella dysenteriae</i>).	
C.	Skin infections- <i>Staphylococcus aureus</i> , <i>Vibrio parahaemolyticus</i>	
D.	Genito-Urinary Tract Infections: Syphilis (<i>Treponema pallidum</i>), UTI (<i>E. coli</i> and <i>Proteus vulgaris</i>)	
4.	Viral diseases	(14)
4.1	List of diseases of various organ systems and their causative agents. The following diseases in detail with mode of transmission, pathogenesis, symptoms, chemotherapy and prophylaxis. Polio, Hepatitis (A, B, C, D and E), Rabies, Dengue, AIDS.	
5.	Protozoan diseases	(5)
5.1	List of diseases of various organ systems and their causative agents. The following diseases in detail with mode of transmission, pathogenesis, symptoms, chemotherapy and prophylaxis. Malaria, Amoebic dysentery	
6.	Fungal diseases	(5)
6.1	List of diseases of various organ systems and their causative agents. The following diseases in detail with mode of transmission,	

	pathogenesis, symptoms, chemotherapy and prophylaxis. Cutaneous mycoses: Athlete's foot (Tinea pedis) Opportunistic mycoses: Candidiasis (Candida albicans)	
	PRACTICALS (2 Credits)	(60)
1.	Study of composition and use of important differential media for identification of bacteria: EMB Agar, McConkey's agar, SS agar, Mannitol salt agar, Deoxycholate citrate agar, TCBS agar.	(12)
2.	Identification of bacteria (E. coli, Klebsiella, Salmonella, Proteus, Staphylococcus, Vibrio) using laboratory strains on the basis of cultural, morphological and biochemical characteristics: IMViC, TSI, nitrate reduction, urease production, catalase, oxidase, HL, PPA, motility tests.	(30)
3.	Study of bacterial flora of skin by swab method.	(4)
4.	Study of symptoms of the diseases with the help of photographs: Polio, TB, Candidiasis, Dermatormycoses (ringworm).	(10)
5.	Study of various stages of malarial parasite in RBCs using permanent mounts.	(4)
Pedagogy:	Lectures, seminars, assignments and practicals.	
References/ Readings	(Latest Edition)	
	1. Kanungo R. (Editor) Ananthanarayan and Paniker's Textbook of Microbiology. University Press.	
	2. Brooks G.F., Carroll K.C., Butel J.S., Morse S.A. and Mietzner, T.A. Jawetz, Melnick and Adelberg's Medical Microbiology. McGraw Hill Publication.	
	3. Goering R., Dockrell H., Zuckerman M. and Wakelin D. Mims' Medical Microbiology. Elsevier.	
	4. Willey JM, Sherwood LM, and Woolverton CJ. Prescott, Harley and Klein's Microbiology. McGraw Hill Higher Education.	
	5. Madigan MT, Martinko JM, Dunlap PV and Clark DP. Brock Biology of Microorganisms. Pearson International Edition.	
Learning	1. Students will be able to correlate disease symptoms with causative	

Outcomes	agent, isolate and identify pathogens. 2. They will gain knowledge of mechanism of action of antimicrobial drugs and prophylaxis.	
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Programme: B.Sc. (Microbiology) CBCS Structure - Semester V

Course Code: MIC 106

Title of the Course: INDUSTRIAL MICROBIOLOGY

Number of Credits: 6 credits = 4 (Theory) + 2 (Practical)

Effective from Academic Year: 2019-20

Prerequisites Basic knowledge of microbial cell types, biochemistry, metabolism and physiology.

Objective: To understand importance of industrially significant microorganisms and their metabolites.

To understand fermentation processes and product recovery.

Content: THEORY (4 Credits) (60)

1. Isolation of industrially important microbial strains and fermentation media. (12)

1.1 Sources of industrially important microbes and methods for their isolation

1.2 Preservation and maintenance of industrial strains, strain improvement

1.3 Crude and synthetic media; molasses, corn-steep liquor, sulphite waste liquor, whey, yeast extract and protein hydrolysates

2. Types of fermentation processes, bio-reactors and measurement of fermentation parameters (18)

2.1 Solid-state and liquid-state (stationary and submerged) fermentations

2.2 Batch, fed-batch (baker's yeast) and continuous fermentations (ethanol). Kinetics of batch, fed-batch and continuous fermentations

2.3 Components of a typical bio-reactor, Types of bioreactors-Laboratory,

pilot-scale and production fermenters, constantly stirred tank and air-lift fermenters

2.4	Monitoring and control of fermentation parameters - pH, temperature, dissolved oxygen, foaming and aeration	
3.	Down-stream processing	(12)
3.1	Cell disruption, filtration, centrifugation, solvent extraction, precipitation, lyophilization and spray-drying	
4.	Microbial production of industrial products (micro-organisms involved, media, fermentation conditions, downstream processing and uses)	(18)
4.1	Citric acid	
4.2	Ethanol	
4.3	Penicillin	
4.4	Vitamin B12	
4.5	Enzymes (amylase and β -galactosidase)	
	PRACTICAL (2 credits)	(60)
1.	Study of different parts of fermenter.	(4)
2.	Microbial fermentations for the production and estimation of:	(38)
	(a) Enzymes: Amylase	
	(b) Organic acid: Citric acid	
	(c) Alcohol: Ethanol	
	(d) Antibiotic: Penicillin	
3.	Bioassay of Penicillin and Vitamin B12	(10)
4.	A visit to any educational institute/industry to see the working of an industrial fermenter and other downstream processing operations.	(8)
Pedagogy:	Lectures/tutorials/assignments/self-study/Practicals/Videos/Field trip	
References/	(Latest editions)	
Readings		

1. Patel A.H. Industrial Microbiology. Macmillan India Limited.

2. Okafor N. Modern Industrial Microbiology and Biotechnology. Bios Scientific Publishers Limited. USA.
3. Waites M.J., Morgan N.L., Rockey J.S. and Highton G. Industrial Microbiology: An Introduction. Wiley – Blackwell
4. Glaze A.N. and Nikaido H. Microbial Biotechnology: Fundamentals of Applied Microbiology. W.H. Freeman and Company.
5. Casida LE. Industrial Microbiology. Wiley Eastern Limited.
6. Cruieger W and Cruieger A. Biotechnology: A textbook of Industrial Microbiology. Panima Publishing Co. New Delhi.
7. Stanbury PF, Whitaker A and Hall SJ. Principles of Fermentation Technology. Elsevier Science Ltd.

Learning Outcomes	Students will be able to understand the industrial production of important microbial metabolites and products.
	Students will gain knowledge of isolation, maintenance and handling of industrially important microbial cultures in laboratory settings.

Programme: B.Sc. (Microbiology) CBCS Structure - Semester V

Course Code: MIC 107

Title of the Course: MICROBIAL GENETICS

Number of Credits: 6 credits = 4 (Theory) + 2 (Practicals)

Effective from Academic Year: 2019-20

Prerequisites	Basic knowledge of cell biology, nucleic acids and their functions.	
Objective:	<p>To understand mechanisms of gene transfer, expression and regulation.</p> <p>To comprehend the types and effects of mutations and recombination.</p>	
Content:	THEORY (4 Credits)	(60)
1.	Gene expression and regulation	(10)

	General Structure of Operon : Structural and regulatory genes	
	Induction and repression; catabolite repression.	
	Positive and negative regulation of lac operon.	
	Structure and regulation: Trp operon.	
2.	Gene transfer mechanisms	(15)
2.1	Transformation	
	Griffith's experiment; Avery, MacLeod and McCarty's experiment.	
	Factors affecting transformation.	
	Competence factor.	
	Steps in transformation.	
2.2	Transduction	
	Davis' U-Tube experiment.	
	Lytic and lysogenic cycles.	
	Generalized, Specialized, Complete and Abortive Transduction.	
2.3	Conjugation	
	Gene transfer by F+ strains, Hfr donor, F-prime state.	
	Chromosome mapping.	
3.	Mutations	(20)
3.1	Spontaneous Mutations	
	Concept of spontaneous mutations and mechanisms. Principle, methodology and significance of replica plating and fluctuation test.	
	Auxotrophs, Complementation Test.	
3.2	Types of mutations	
	Point mutations: base pair substitution, tautomerism (transitions, transversions).	
	Frame shift (slippage).	

	Missense, nonsense, silent, conditional, suppressor (intragenic, extragenic).	
	Large deletions, site directed mutagenesis.	
3.3	Induced mutations	
	Physical /chemical mutagens.	
	Teratogenicity testing – Ames test.	
	DNA damage and repair mechanisms (light/dark repair).	
4.0	Molecular recombination and molecular taxonomy	(15)
	General features of recombination, types of recombination.	
	Models for reciprocal and non-reciprocal recombination – Fox and Holliday's model, evidence for Fox and Holliday's model.	
	Rec A and Rec BCD complex.	
	rRNA and molecular taxonomy.	
	PRACTICALS (2 Credits)	(60)
1.	Preparation of competent cells for transformation.	(08)
2.	Bacterial transformation.	(12)
3.	Bacterial conjugation.	(12)
4.	Replica plate technique.	(12)
5.	UV Survival curve with effect of dark repair mechanism.	(16)
Pedagogy:	Lectures, seminars, assignments and practicals.	
References/ Readings	Latest Edition	
	Pelczar, M.J., Chan, E.C.S. and Krieg, N.R. Microbiology. McGraw Hill Book Company.	
	Gardner, E.J., Simmons, M.J. and Snustad, D.P. Principles of Genetics. Wiley-India.	
	Stanier, R.Y. General Microbiology. Macmillan Publishers.	

	Wiley, J.M., Sherwood, L.M. and Woolverton, C.J. Prescott's Microbiology. McGraw Hill International.	
	Stryer, L. Biochemistry. W H Freeman and Company.	
	Primrose, S.B., Twyman, R.M. and Old, R.W. Principles of Gene Manipulation. Wiley-Blackwell.	
	Nelson, D.L. and Cox, M.M. Lehninger Principles of Biochemistry. W H Freeman.	
	Sambrook, J. and Russell, D. Molecular Cloning: A Laboratory Manual. Cold Spring Harbor Laboratory Press.	
Learning Outcomes	Students will gain knowledge of prokaryotic gene transfer mechanisms, mutations and recombination.	

Programme: B.Sc. (Microbiology) CBCS Structure - Semester V

Course Code: MID 101

Title of the Course: APPLIED MICROBIOLOGY

Number of Credits: 3 + 1 = 4

Effective from Academic Year: 2019-20

Prerequisites	Basic knowledge of microbial cell biochemistry and molecular biology.	
Objective:	To study the applications of microorganisms and their components.	
Content:	THEORY (3 Credits)	(45)
1.	Nutraceuticals	(5)
1.1	Probiotics, Prebiotics, Synbiotics, PUFA, Antioxidants, Vitamins, Polyphenols, SCP, Applications.	
2.	Biosensors	(5)
2.1	Definition, Components, Basic Characteristics, Elements, Principles,	

	Applications. Detailed study of glucose and BOD sensor.	
3.	Bioplastics	(6)
3.1	Definition, Properties, types and composition, synthesis, microorganisms involved in biodegradation, uses, Environmental impact.	
4.	Applications of Microbes in Biotransformation	(8)
4.1	Definition, types of microbial transformations/bioconversions (oxidation, reduction, hydrolysis, condensation, isomerisation, formation of C=C double bonds).	
4.2	Screening and enrichment of organisms, biocatalysts and techniques, biotransformation of hydrocarbons and heavy metals.	
5.	Immobilisation methods and Applications	(7)
5.1	Introduction, preparation of immobilised enzymes, support matrix. Methods of immobilisation (adsorption, covalent bonds, entrapment, copolymerisation, encapsulation), advantages and disadvantages, applications.	
6.	RNAi	(2)
6.1	Definition, RNA silencing, mechanism, applications (therapeutics and agriculture)	
7.	Intellectual Property Rights (IPR)	(5)
7.1	Introduction, types of IPR, copyrights, trademark, patents, types of patents, process of patent application.	
8	Nanotechnology	(4)
8.1	Definition of nanoparticles, types, characterization and properties.	
8.2	Applications - drug delivery systems, bioremediation, antifouling, degradation of xenobiotics and fiber retting.	
9.	Omics	(3)
9.1	Metabolomics, metagenomics, transcriptomics, proteomics.	
	PRACTICALS (1 Credit)	(30)
1	Estimation of Ascorbic acid by colorimetric/titration method.	4

2	Isolation of Probiotic bacteria from curd.	4
3	Isolation of Polyhydroxybutyrate producing bacteria from mangrove ecosystems	6
4	Isolation of hydrocarbon degrading bacteria by inverted plate method.	6
5	Immobilisation of cells by calcium alginate method.	4
6	Synthesis of zinc nanoparticles.	6
Pedagogy:	Lectures, seminars, assignments and practicals.	
References/ Readings	(Latest Edition)	
	Ratledge, C and Kristiansen, B. Basic Biotechnology, Cambridge University Press.	
	Demain, A. L and Davies, J. E. Manual of Industrial Microbiology and Biotechnology, ASM Press.	
	Swartz, J. R. Advances in Escherichia coli production of therapeutic proteins. Current Opinion in Biotechnology, 12, 195–201.	
	Prescott, Harley and Klein's Microbiology by Willey JM, Sherwood LM, Woolverton CJ, Mc Graw Hill Publishers.	
	Gupta PK Elements of Biotechnology Rastogi Publications,	
	Glazer AN and Nikaido H Microbial Biotechnology, Cambridge University Press	
	Glick BR, Pasternak JJ, and Patten CL Molecular Biotechnology, ASM Press	
	Stanbury PF, Whitaker A, Hall SJ Principles of Fermentation Technology, Elsevier Science	
	Crueger W, Crueger, A Biotechnology: A text Book of Industrial Microbiology Sinauer associates, Inc.	
	Shukla, RP and Mishra, RS. Nutraceuticals Food Processing Technology: Innovative Scientific Research Hardcover, Bharti Publications.	

	Dubey, RC. A Textbook of Biotechnology, S. Chand & Co. Pvt. Ltd., New Delhi.	
Learning Outcomes	Students will be able to apply the knowledge for start-ups in the field of microbiology.	

Programme: B.Sc. (Microbiology) CBCS Structure - Semester V

Course Code: MID 102

Title of the Course: MICROBIAL PHYSIOLOGY

Number of Credits: 4 credits = 3 (Theory) + 1 (Practical)

Effective from Academic Year: 2019-20

Prerequisites	Knowledge of basic principles of chemistry and structures of biomolecules.	
Objective:	To understand the energetics and biochemistry of metabolic pathways	
Content:	THEORY (3 Credits)	(45)
1.	<p>Bioenergetics and Electron transport chain</p> <p>Definitions of Gibb's Free Energy, Standard free energy change and equilibrium constant, Coupled reactions and additive nature of standard free energy change, Energy rich compounds: Phosphoenolpyruvate, 1,3- Bisphosphoglycerate, Thioesters, ATP.</p> <p>ATP as a high energy system, ATP hydrolysis and other high energy phosphate compounds, utilization of ATP in chemical work, ETC and oxidative phosphorylation, substrate level phosphorylation</p>	(10)
2.	<p>Chemoheterotrophic Carbohydrate Metabolism</p> <p>Catabolism: Glyoxylate cycle (Amphibolic pathway, Anaplerotic reactions), glycogenolysis.</p> <p>Anabolism: Gluconeogenesis, Biosynthesis of glycogen and peptidoglycan</p>	(08)

3.	Chemoheterotrophic Lipid Metabolism Catabolism: Beta oxidation, Omega-oxidation Anabolism: Biosynthesis of saturated fatty acids and poly beta-hydroxybutyric acid	(09)
4.	Chemoheterotrophic Protein Metabolism Catabolism: Digestion of proteins and peptides, Amino acid oxidation, Transamination, Deamination, Decarboxylation, Stickland reaction.	(08)
5.	Chemolithotrophic and Phototrophic Metabolism Definition and reaction of hydrogen oxidation and methanogenesis. Introduction to phototrophic metabolism - groups of phototrophic microorganisms, anoxygenic v/s oxygenic photosynthesis with reference to photosynthesis in green bacteria, purple bacteria and cyanobacteria Anaerobic respiration: Dissimilatory nitrate reduction (denitrification, nitrate/nitrite and nitrate/ammonia respiration, fermentative nitrate reduction)	(10)
	PRACTICALS (1 Credit)	(30)
1.	IMViC tests	(04)
2.	Fermentation - Sugars, HL test	(04)
3.	Estimation of lactic acid/acetic acid	(04)
4.	Staining of PHB granules	(02)
5.	Quantitative estimation of total sugars by Phenol sulphuric acid method	(04)
6.	Quantitative estimation of reducing sugars by DNSA and Nelson-Somogyi methods.	(08)
7.	Detection of Nitrification	(04)
Pedagogy:	Lectures, seminars, assignments and practicals	
References/ Readings	(Latest Edition)	
	Berg JM, Tymoczko JL and Stryer L. Biochemistry, W.H. Freeman and Company.	

	Pawar and Dagainawala General Microbiology Volume I. Himalaya Publishing House	
	Murray RK, Mayes PA, Granner DK and Rodwell VW. Harper's Biochemistry. Prentiss Hall International Editions.	
	Jayaraman J. Laboratory Manual in Biochemistry. New Age International (P). Ltd. Publishers Plummer David T. An Introduction to Practical Biochemistry. Tata McGraw Hill Publishers	
	Stanier RY, Ingraham JI, Wheelis ML and Painter PR. General Microbiology. McMillan Press.	
	Willey JM, Sherwood LM, and Woolverton CJ. Prescott's Microbiology. McGraw Hill Higher Education.	
	Moat AG and Foster JW. Microbial Physiology. John Wiley & Sons	
	Nelson DL and Cox MM. Lehninger Principles of Biochemistry. W.H. Freeman and Company.	
	Voet, D. and Voet J.G. Biochemistry. John Wiley and Sons	
	Conn E and Stumpf P. Outlines of biochemistry. John Wiley and Sons.	
Learning Outcomes	Students will gain knowledge of energy transfers and biomolecular transformations. Students will comprehend metabolic pathways unique to microorganisms.	

Programme: B.Sc. (Microbiology) CBCS Structure - Semester V

Course Code: MID 103

Title of the Course: BIOSTATISTICS AND BIOINFORMATICS

Number of Credits: 4 credits = 3 (Theory) + 1 (Practical)

Effective from Academic Year: 2019-20

Prerequisites	Mathematics fundamentals, computer knowledge and basics of biomolecules	
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Objective:	Ability to use appropriate tools for the analysis and interpretation of biological data	
Content:	THEORY (3 Credits)	(45)
1.	Biostatistics	(30)
1.1	Data type: Discrete and continuous data type; nominal, ordinal, interval, ratio data type and scale.	
1.2	Measures of central tendency, Correlation and Regression: Measure of central tendency - Mean, Mode and Median. Correlation types and characteristics. Linear regression.	
1.3	Statistical methods: Scope of statistics: utility and misuse. Principles of statistical analysis of biological data. Sampling parameters. Difference between sample and Population, Sampling Errors Sampling Distributions, Standard Error, Testing of Hypothesis, Level of Significance and Degree of Freedom. Normal distribution, Fitting of Distributions, Large Sample Test based on Normal Distribution, Small sample test based on t-test, Z- test and F-test; Confidence Interval; Distribution-free test - Chi-square test.	
2.	Bioinformatics	(15)
2.1	Introduction to Bioinformatics and Biological Databases: Biological databases - type of biological database for nucleic acid, genome, protein sequence. Database for structure of biomolecules. Mode of data storage - File formats - FASTA, Genbank and Uniprot	
2.2	Sequence Alignments, Phylogeny and Phylogenetic trees: Local and Global Sequence alignment, pairwise and multiple sequence alignment. Scoring an alignment	
2.3	Protein Structure Predictions:	

	Hierarchy of protein structure - primary, secondary and tertiary structures, modeling Structural Classes, Motifs, Folds and Domains	
	PRACTICALS (1 Credit)	(30)
1.	Mean, Median, Mode from grouped and ungrouped Data set	(4)
2.	Standard Deviation and Coefficient of Variation	(4)
3.	Correlation	(2)
4.	Regression	(2)
5.	Finding area under the curve using normal probability	(4)
6.	Testing of Hypothesis- Normal Distribution, t-test and Chi-Square-test	(4)
7.	Confidence Interval	(4)
8.	Search of nucleic acid sequence database (GenBank), alignment and construction of phylogenetic tree	(4)
9.	Deducing 3D structure of proteins using primary sequence.	(2)
Pedagogy:	Lectures, seminars, assignments and practicals.	
References/ Readings	(Latest Edition)	
	Rastogi S.C., Mendiratta N. and Rastogi P. Bioinformatics: methods and applications, genomics, proteomics and drug discovery, Prentice Hall India Publication	
	Batschelet E: Introduction to Mathematics for Life Scientists, Springer Verlag, Narosa Publishing House, New Delhi	
	Pradeep and Sinha Preeti. Foundations of Computing, BPB Publications	
	Danial W Biostatistics: A foundation for Analysis in Health Sciences, John Wiley and Sons Inc.	
	Primrose and Twyman. Principles of Genome Analysis & Genomics. Blackwell	
Learning Outcomes	Students will be able to understand the different tools for data analysis and apply the appropriate tool for data processing	

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Programme: B.Sc. (Microbiology) CBCS Structure – Semester VI

Course Code: MIC 108

Title of the Course: IMMUNOLOGY

Number of Credits: 6 credits = 4 (Theory) + 2 (Practical)

Effective from Academic Year: 2019-20

Prerequisites Basic knowledge of human anatomy and physiology.

Objective : To study the components of human immune system.

To understand human defense mechanisms.

Content: THEORY (4 Credits) (60)

1. Introduction of Immunology (5)

1.1 Concept of Innate and Adaptive immunity

1.2 Contributions of following scientists to the development of field of immunology:

Edward Jenner, Karl Landsteiner, Robert Koch, Paul Ehrlich, Elie Metchnikoff, Peter Medawar, MacFarlane Burnet, Neils K Jerne, Rodney Porter and Susumu Tonegawa.

2. Immune Cells and Organs (8)

2.1 Structure, Functions and Properties of: Immune Cells – Stem cell, T cell, B cell, NK cell, Macrophage, Neutrophil, Eosinophil, Basophil, Mast cell, Dendritic cell

2.2 Structure, Functions and Properties of Immune Organs – Bone Marrow, Thymus, Lymph Node, Spleen, GALT, MALT, CALT.

3. Antigens and Antibodies (10)

3.1 Characteristics of an antigen (Foreignness, Molecular size and Heterogeneity); Haptens; Epitopes (T & B cell epitopes); T-dependent

and T-independent antigens; Adjuvants

- 3.2 Antibodies: Structure, Types, Functions and Properties of antibodies; Antigenic determinants on antibodies (Isotypic, allotypic, idiotypic); Monoclonal and Chimeric antibodies.
4. Major Histocompatibility Complex (6)
 - 4.1 Structure and Functions of MHC I & II molecules
 - 4.2 Antigen processing and presentation. (Cytosolic and Endocytic pathways).
5. Complement System (5)
 - 5.1 Components of the Complement system; Activation pathways (Classical, Alternative and Lectin pathways)
 - 5.2 Biological consequences of complement Activation.
6. Generation of Immune Response (10)
 - 6.1 Primary and Secondary Immune Response
 - 6.2 Generation of Humoral Immune Response (Plasma and Memory cells)
 - 6.3 Generation of Cell Mediated Immune Response (Self MHC restriction, T cell activation, Co- stimulatory signals)
 - 6.4 Killing Mechanisms by CTL and NK cells
 - 6.5 Introduction to tolerance.
7. Immunological Disorders and Tumor Immunity (6)
 - 7.1 Types of Autoimmunity (Rheumatoid arthritis) and Hypersensitivity (I-V).
8. Immunological Techniques (5)
 - 8.1 Principles of Precipitation, Agglutination, Immunodiffusion, Immuno-electrophoresis, ELISA, Western blotting, Immunofluorescence, Immunoelectron microscopy.
9. Immunohaematology (5)
 - 9.1 ABO blood group system, haemolytic disease of newborn.

PRACTICALS (2 Credits)	(60)
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- | | | |
|----|---|------|
| 1. | Identification of human blood groups. | (4) |
| 2. | Total Leukocyte Count of a blood sample. | (6) |
| 3. | Total RBC count of a blood sample. | (4) |
| 4. | Differential Leukocyte Count (Leishman/Giemsa) of a blood sample. | (6) |
| 5. | Preparation of serum and plasma from blood. | (10) |
| 6. | Immunodiffusion by Ouchterlony method. | (20) |
| 7. | VDRL test and WIDAL test (qualitative). | (10) |

Pedagogy:	Lectures, seminars, assignments and practicals.
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References/ Readings	(Latest Edition)
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1. Delves P, Martin S, Burton D, Roitt IM. Roitt's Essential Immunology. Wiley-Blackwell Scientific Publication, Oxford.
2. Goldsby RA, Kindt TJ, Osborne BA. Kuby's Immunology. W.H. Freeman and Company, New York.
3. Murphy K, Travers P, Walport M. Janeway's Immunobiology. Garland Science Publishers, New York.
4. Peakman M, and Vergani D. Basic and Clinical Immunology. Churchill Livingstone Publishers, Edinberg.
5. Richard C and Geiffrey S. Immunology. Wiley Blackwell Publication.

Learning Outcomes	Students will gain hands on experience of haematology and immunotechniques
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Programme: B.Sc. (Microbiology) CBCS Structure – Semester VI

Course Code: MIC 109

Title of the Course: Agricultural Microbiology

Number of Credits: 6 credits = 4 (Theory) + 2 (Practical)

Effective from Academic Year: 2019-20

Prerequisites	Basic knowledge of microbiology of soil, biotic and abiotic factors affecting plant growth.	
Objective:	To understand the plant microbe interactions in the soil and mechanisms involved in improving crop productivity	
Content:	THEORY (4 Credits)	(60)
1	Soil as microenvironment	(8)
1.1	Organic matter decomposition – humus formation Rhizosphere and endophytic microflora and their role	
1.2	R:S ratio, Microbivory, Microbial associations in phytosphere: rhizosphere – phyllosphere – spermosphere.	
1.3	Degradation of cellulose, hemicelluloses, lignin and pectin in soils	
2	Plant Microbe Interaction	(15)
2.1	Plant diseases	
	Mode of entry of pathogens, disease symptoms	
2.1.1	Bacterial diseases	
	Crown gall, Citrus cancer, Black rot	
2.1.2	Viral diseases, virioids	
	TMV, Tomato leaf curl, Potato spindle tuber	
2.1.3	Fungal diseases	
	Late blight of potato - <i>Phytophthora infestans</i> , Loose smut of wheat - <i>Ustilago nuda</i> , Rice blight - <i>Magnaportha griseae</i> , Wilt - <i>Fusarium</i>	
2.1.4	Control of plant diseases	
	Principles and practices, cultural practices, chemical methods, biological methods and genetic engineering for disease resistant plants.	
2.2	Beneficial associations	
	Rhizobium (Nitrogenase, Nodulation, Hydrogenase)	
	Azolla	
	Frankia (infection process, nodulation)	

Mycorrhiza (Types- ecto/endo, mechanism of symbiosis)

Unit 3 Phytostimulation and Bioinsecticides (15)

3.1 Plant Growth Promoting Bacteria (PGPB)

3.1.1 Microorganisms in soil, Root exudation, Effect of PGPB on plants, Root microbiome, PGPB :Direct (Nitrogen fixation, P solubilisation, IAA producers, ammonia producers, ethylene (ACC deaminase) and indirect (Siderophores, HCN)

3.2 Biopesticides - Introduction, types (bacterial- *Bacillus thuringiensis*, viral - NPV, fungal - *Trichoderma*, *Metarhizium*), mode of action, genes involved, factors influencing their action and target pests.

4 Biofertilizers (16)

4.1 Biofertilizers – definition, importance

4.1.1 Types

i) Nitrogen fixing – *Azotobacter*, *Rhizobium*, *Azolla*, *Frankia*, *Cyanobacteria* and *Azospirillum*.

ii) Phosphate solubilizing Microorganisms.

iii) Vesicular Arbuscular Mycorrhiza (VAM)

4.1.2 Biochemistry of symbiotic and non- symbiotic nitrogen fixation, Phosphate solubilisation and Potassium mobilization

4.1.3 Application methods

Steps in mass production of bacterial biofertilizers, quality guidelines for biofertilizers. Methods of preparation and application – liquid and carrier based, Mass production of blue green algae, *Azolla* and mycorrhiza. Plant response to biofertilizers.

Unit 5 Genetically Modified Crops 06

Definition, Advantages, social and environmental aspects, Bt crops, Golden rice, salinity tolerance, cold temperature

PRACTICALS (2 Credits) (60)

1. Study of soil profile (6)

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|----|---|------|
| 2. | Study of microflora of different types of soils | (10) |
| 3. | Isolation of plant growth promoting bacteria: | (24) |
| | (a) nitrogen fixers - symbiotic and non-symbiotic) | |
| | (b) PSB's and KSB | |
| | (c) IAA producers | |
| | (d) siderophores producers | |
| 4. | Formulation of biofertilizers | (6) |
| 5. | Effect of biofertilizers on seedlings of Vigna radiata. | (6) |
| 6. | Visit to ICAR/ ELA – Old Goa for study of plant pathogens and genetically modified crops. | (8) |

Pedagogy: Lectures/tutorials/assignments

References/ (Latest edition)

Readings

1. Agrios GN. Plant Pathology. Academic press, San Diego,
2. Singh RS. Plant Diseases Management. Oxford & IBH, New Delhi.
3. Glick BR, Pasternak JJ, and Patten CL Molecular Biotechnology ASM Press
4. Atlas RM and Bartha R. Microbial Ecology: Fundamentals & Applications. Benjamin/Cummings Science Publishing, USA
5. Maier RM, Pepper IL and Gerba CP. Environmental Microbiology. Academic Press
6. Barton LL & Northup DE Microbial Ecology. Wiley Blackwell, USA
7. Campbell RE. Microbial Ecology. Blackwell Scientific Publication, Oxford, England.
8. Coyne MS. Soil Microbiology: An Exploratory Approach. Delmar Thomson Learning.
9. Altman A Agriculture Biotechnology, Marcel decker Inc.

10. Mahendra K. Rai Hand Book of Microbial Biofertilizers, The Haworth Press, Inc. New York

11. Reddy, S.M. et al. Bioinoculants for Sustainable Agriculture and Forestry, Scientific Publishers

12. Saleem F and Shakoori AR. Development of Bioinsecticide, Lap Lambert Academic Publishing.

13. Rangaswamy G. Diseases of crop plants in India

14. Glick B.R. Beneficial Plant Bacterial Interactions, Springer.

Outcome	<p>1. The students will be able to identify the types of plant diseases affecting crops</p> <p>2. They will be able to isolate PGPB and formulate bioinoculant preparation.</p>
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Programme: B.Sc. (Microbiology) CBCS Structure - Semester VI

Course Code: MIC 110

Title of the Course: GENETIC ENGINEERING

Number of Credits: 6 credits = 4 (Theory) + 2 (Practical)

Effective from Academic Year: 2019-20

Prerequisites	Students should have knowledge of microbial genes and genetics.
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Objective	To familiarize the students with tools and techniques in genetic engineering.
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Content	THEORY (4 Credits)	(60)
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1	Introduction to genetic engineering	(20)
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Milestones in genetic engineering

1.1	Tools and strategies: Restriction endonucleases: Type I, II, III. Mode of action, nomenclature and applications of Type II restriction enzymes in genetic engineering. Restriction and modification.
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|-----|---|------|
| 1.2 | DNA modifying enzymes and their applications: DNA polymerases, Klenow fragment, kinases and phosphatases, terminal deoxynucleotidyl transferase, DNA ligases, S1 nuclease, and RNAase H. Use of linkers and adapters. Synthesis of cDNA, sticky end and blunt end cloning. | |
| 1.3 | Cloning and Expression vectors: Plasmids, pBR and pUC series, Ti plasmid based vector; Bacteriophage, lambda and M13 based vectors; cosmids; phagemids, Bacterial Artificial Chromosomes (BACs); Yeast Artificial Chromosomes (YACs). Shuttle vectors, Expression vectors (Fusion and Pure proteins), E. coli lac promoter based vector, Yeast Episomal Plasmids (YEPs), Mammalian vector (SV40). | |
| 2 | Methods in molecular cloning | (25) |
| 2.1 | DNA, RNA and Protein Analysis - agarose gel electrophoresis, PAGE - 1D/2D gel analysis, concept of nucleic acid probes, Northern, Southern, Western and Immuno-blotting techniques and protein sequencing. | |
| 2.2 | DNA amplification and DNA sequencing - PCR, Sanger's method, Maxam and Gilbert's method, Shot gun sequencing. | |
| 2.3 | Transformation, Transduction and Screening

Chemical methods, electroporation, shotgun method, virus mediated gene delivery; Agrobacterium mediated gene delivery, selection methods of transformed bacterial cells (antibiotic resistance markers and Blue white screening).

Colony hybridization and Plaque hybridization. Chromosome walking and chromosome jumping. | |
| 3 | Applications of recombinant DNA technology | (15) |
| 3.1 | Products of rDNA technology: Human therapeutic significance – insulin, antisense molecules. Gene therapy, RNAi, recombinant vaccines. Agricultural significance – Bt transgenic: cotton, brinjal. | |
| | PRACTICALS (2 Credits) | (60) |
| 1. | Restriction enzyme digestion of DNA and analysis by agarose gel electrophoresis. | (5) |
| 2. | Ligation of DNA fragments and analysis by agarose gel electrophoresis. | (5) |
| 3. | Interpretation of sequencing gel electropherograms and sequence analysis. | (5) |

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|----|--|------|
| 4. | Native PAGE. | (5) |
| 5. | Demonstration of Immuno-blotting technique | (10) |
| 6. | Demonstration of PCR | (10) |
| 7. | Demonstration of Gel-Doc | (5) |
| 8. | Screening of transformed cells (blue-white screening method) | (15) |

Pedagogy: Lectures, seminars, assignments and practicals.

References/ (Latest Edition)

Readings

Sambrook J and Russell D. Molecular Cloning: A Laboratory Manual. Cold Spring Harbor Laboratory Press.

Freifelder D. Microbial Genetics. Jones and Bartlett Publishers.

Gardner EJ, Simmons MJ, Snustad DP. Principles of Genetics. Wiley India.

Stryer L. Biochemistry. W H Freeman and Company.

Krebs JE, Goldstein ES, Kilpatrick ST. Lewin's Genes. Jones and Bartlett Publishers.

Glick BR, Pasternak JJ, and Patten CL. Molecular Biotechnology ASM Press.

Dubey RC, A Textbook of Biotechnology. S. Chand & Co. Ltd.

Mathur SK, Purohit SS, Biotechnology. Fundamentals and Applications. Agro Botanica.

Brown TA. Gene Cloning and DNA Analysis: An Introduction. Wiley Publication.

Learning Outcome: Students will be able to handle microorganisms for isolation and amplification of DNA and transform host cells.

Programme: B.Sc. (Microbiology) CBCS Structure - Semester VI

Course Code: MID 104

Title of the Course: CELL BIOLOGY

Number of Credits: 4 credits = 3 (Theory) + 1 (Practical)

Effective from Academic Year: 2019-20

Prerequisites	Students are expected to have a basic knowledge of prokaryotic and eukaryotic cells.	
Objective:	To study the types and functioning of different organelles in cells	
Content:	THEORY (4 Credits)	(60)
1.	Cell to cell interactions.	(10)
1.1	Eukaryotic cell membrane, Extra cellular matrix and cell matrix interactions, cell surface protrusions, Types of cellular junctions - adhesion junctions, tight junctions, gap junctions, and plasmodesmata.	
2.	Protein Sorting and Transport	(10)
2.1	Ribosomes, Endoplasmic Reticulum – targeting and insertion of proteins in the ER, protein folding, processing and quality control in ER, smooth ER, export of proteins and lipids. Golgi Apparatus – Organization, protein glycosylation, protein sorting and export from Golgi Apparatus.	
3.	Cell Signalling	(10)
3.1	Cyclic GMP and MAP kinase pathway, chemotaxis and phototaxis, quorum sensing: CFTR, Calmodulin.	
4.	Cell Cycle	(5)
4.1	Regulation of eukaryotic cell cycle, mitosis and meiosis. Cell death and apoptosis.	
5.	Development of cancer, causes and types	(10)
5.1	Introduction to cancer, Oncogenes, Tumor suppressor genes, Properties and development of cancer cells (activation of cell division), Symptoms, Causes, Risk factors, Classification (benign and malignant), Different types (Carcinoma, Sarcoma, Leukemia, Lymphoma and Myeloma), Stages of cancer (Histological classification).	
	PRACTICALS (1 Credit)	(30)
1.	Study of stages of mitosis.	(2)
2.	Study of stages of meiosis.	(2)

3.	Study of gap junctions through electron micrographs.	(2)
4.	Identification and study of cancer cells by photomicrographs.	(4)
5.	Demonstration of quorum sensing (Swarming by Proteus).	(8)
6.	Demonstration of positive and negative chemotaxis (Effect of attractants and repellants on E.coli).	(8)
7.	Demonstration of apoptosis and necrosis	(4)
Pedagogy:	Lectures, seminars, assignments and practicals.	
References/ Readings	(Latest Edition)	
	1. Hardin J, Bertoni G and Kleinsmith LJ. Becker's World of the Cell. Pearson.	
	2. Karp G. Cell and Molecular Biology: Concepts and Experiments. John Wiley & Sons. Inc.	
	3. De Robertis, EDP and De Robertis EMF. Cell and Molecular Biology. Lipincott Williams and Wilkins, Philadelphia.	
	4. Cooper, G.M. and Hausman, R.E. The Cell: A Molecular Approach. ASM Press & Sunderland, Washington, D.C.; Sinauer Associates, MA.	
	5. Lodish H., Berk A., Kaiser C., Krieger M., Scott M., Bretscher A., Ploegh H., Matsudaira P., Molecular cell biology .W H Francis and company, New York.	
	6. Alberts B., Johnson A., Lewis J., Raff M., Roberts K., Walter P., Molecular Biology of The Cell Garland science, Taylor and Francis group.	
	7. Adler J. Chemotaxis in Bacteria .Annual Reviews of Biochemistry. 44:341-356.	
Learning Outcomes	Students will gain knowledge of functioning of different part of cells and understand differences between normal and diseased cells.	

Programme: B.Sc. (Microbiology) CBCS Structure - Semester VI

Course Code: MID 105

Title of the Course: VIROLOGY

Number of Credits: 4 credits = 3 (Theory) + 1 (Practical)

Effective from Academic Year: 2019-20

Prerequisites	Basic understanding of human physiology and genetics	
Objective:	To study bacteriophages and understand the classification of viruses along with their role in cancers in humans	
Content:	THEORY (3 Credits)	(45)
1.	Nature and Properties of Viruses	(15)
1.1	Introduction: Discovery of viruses, nature and definition of viruses, general properties, concept of viroids, virusoids, satellite viruses and Prions.	
1.2	Structure of Viruses: Capsid symmetry, enveloped and non-enveloped viruses, Isolation, purification and cultivation of viruses.	
1.3	Viral taxonomy: Molecular classification and nomenclature of different groups of viruses.	
2.	Bacteriophages	(14)
2.1	Diversity, Classification of bacteriophage on the basis of structure, one step multiplication curve	
2.2	Lytic and lysogenic phages (lambda phage) concept of early and late proteins	
2.3	Regulation of transcription in lambda phage.	
3.	Viruses and Cancer	(8)
3.1	Introduction to oncogenic viruses	
3.2	Types of oncogenic DNA and RNA viruses: Concepts of oncogenes and proto-oncogenes	
4.	Prevention & control of viral diseases	(8)
4.1	Antiviral compounds and their mode of action	
4.2	Interferon and their mode of action	

4.3	General principles of viral vaccination	
	PRACTICALS (1 Credit)	(30)
1.	Study of the structure of important animal viruses (rhabdo, influenza, hepatitis B and retroviruses) using electron micrographs	(6)
2.	Study of the structure of important plant viruses (caulimo, Gemini, tobacco mosaic virus) using electron micrographs	(6)
3.	Study of the structure of important bacterial viruses (T4, λ) using electron micrograph.	(6)
4.	Determination of phage titre from water/sewage sample.	(8)
5.	Study of cytopathic effects of viruses using photographs	(4)
Pedagogy:	Lectures, seminars, assignments and practicals.	
References/ Readings	(Latest Edition)	
	1. Dimmock, NJ, Easton, AL, Leppard, KN. Introduction to Modern Virology. Blackwell Publishing Ltd.	
	2. Carter J and Saunders V. Virology: Principles and Applications. John Wiley and Sons.	
	3. Flint SJ, Enquist, LW, Krug, RM, Racaniello, VR, Skalka, AM. Principles of Virology, Molecular biology, Pathogenesis and Control. ASM press Washington DC.	
	4. Levy JA, Conrat HF, Owens RA. Virology. Prentice Hall publication, NewJersey.	
	5. Wagner EK, Hewlett MJ. Basic Virology. Blackwell Publishing.	
Learning Outcomes	1. Students will learn to differentiate between types of viruses and their role in disease and cancer. 2.Ability to isolate and cultivate bacteriophages	

Programme: B.Sc. (Microbiology) CBCS Structure - Semester VI

Course Code: MIP

Title of the Course: PROJECT

Number of Credits: 4 credits

Effective from Academic Year: 2019-20

Prerequisites Knowledge of various techniques in Microbiology and Laboratory training obtained during B.Sc. practical.

Objective: Planning and execution of various research related practicals independently or as a group.

Content:

1. Identification of research problem in Microbiology.
2. Review of literature associated with project.
3. Listing the various objectives.
4. Planning and conducting experiments related to project work.
5. Collection and analysis of data for preparation of project report.
6. Final preparation of project report to be submitted as dissertation in partial fulfillment of B.Sc. Programme.

Pedagogy: Students individually / as a group of five will conduct practical/ survey and prepare project report at the end of Semester VI.

References
/ Readings As required for review of literature and methodology for compilation of project report.

Learning
Outcomes Ability to apply the tools and techniques of Microbiology in conducting research. Enhanced capacity to analyze observations and results & prepare project report.

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D 3.2 Minutes of the Board of Studies in Psychology held on 03/06/2019.

Annexure I

ANNEXURE I

OPTIONAL COURSES FOR CHOICE BASED CREDIT SYSTEM FOR MA PART II PSYCHOLOGY COMMENCING IN 2019-2020.

The student may choose one of three specializations during M.A. Part-II namely Clinical Psychology, Counselling Psychology and Human Resource Management.

Student must opt for a minimum of 32 optional credits in Semester III and IV combined. Extra credits beyond 32 credits may be obtained as specified in the ordinance OA 18A.

In semester III, Specialization Practicum PLO 316 (4 credits) and in semester IV, Specialization Practicum PLO 416 (4 credits) will be in the specialization offered.

The remainder of the 24 credits to make a minimum of 32 credits may be selected from the other optional courses within the specialization. Three optional papers may be chosen from those listed in semester III and 3 optional papers may be chosen from those listed in semester IV. However, Dissertation may be offered in lieu of 2 optional papers.

OPTIONAL COURSE STRUCTURE FOR M.A. PSYCHOLOGY PART-II

SPECIALIZATION COURSES [CLINICAL PSYCHOLOGY]			
Paper code	Paper title	Hrs/week	Credits
<i>Semester III</i>			
PLO 301	Psychopathology	4	4
PLO 302	Psychodiagnostics	4	4
PLO 303	Ethics in Clinical Practice	4	4
PLO 304	Palliative Care	4	4
PLO 305	Clinical Psychopharmacology	4	4
<i>Semester IV</i>			
(Back to Index) (Back to Agenda)			

PLO 401	Psychotherapy	4	4
PLO 402	Psychosocial Rehabilitation	4	4
PLO 403	Clinical Mental Health Counselling	4	4
PLO 404	Clinical Neuropsychology	4	4
PLO 405	Clinical Geropsychology	4	4
SPECIALIZATION COURSES [COUNSELLING PSYCHOLOGY]			
<i>Semester III</i>			
PLO 306	Counselling Process, Ethics and Interventions	4	4
PLO 307	Guidance and Counselling in Schools	4	4
PLO 308	Counselling Across the Lifespan	4	4
PLO 309	Psychology of Addiction	4	4
PLO 310	Career Counselling and the World of Work	4	4
<i>Semester IV</i>			
PLO 406	Counselling Specific Populations	4	4
PLO 407	Marital Counselling and Family Therapy	4	4
PLO 408	Counselling Individuals with Life-Threatening Illness	4	4
PLO 409	Crisis and Trauma Counselling	4	4
PLO 410	Interventions in Positive Psychology	4	4
SPECIALIZATION COURSES [HUMAN RESOURCE MANAGEMENT]			
<i>Semester III</i>			
PLO 311	Advanced Human Resource Management	4	4

PLO 312	Work Psychology	4	4
PLO 313	Organizational Development and Change	4	4
PLO 314	Strategic Management	4	4
PLO 315	Employee Training and Development	4	4
<i>Semester IV</i>			
PLO 411	Performance Management	4	4
PLO 412	Marketing Psychology and Consumer Behaviour	4	4
PLO 413	Innovation and Entrepreneurship	4	4
PLO 414	Business and Managerial Communication	4	4
PLO 415	Workplace Counselling and Ethics	4	4
FIELD BASED COURSES			
PLO 316	Specialization Practicum (Semester III)	4	4
PLO 416	Specialization Practicum (Semester IV)	4	4
PLO 417	Dissertation	4	8

ANNEXURE II

SPECIALIZATION: CLINICAL PSYCHOLOGY

SEMESTER III

PLO 301: PSYCHOPATHOLOGY

Number of Credits	04
Teaching Hours	48 Hours
Marks	100 (40 ISA and 60 SEA)
Duration of Lecture	01 Hours
Duration of Examination	03 Hours

Course Objectives:

1. To understand the nature of maladaptive behaviour and etiology of psychopathology
2. To analyze symptoms and understand the clinical presentation of psychological disorders according to DSM V.
3. To apply the treatments suitable for the psychological disorders

Learning Outcomes:

At the end of this course, the learner will be able to:

1. Explain the nature of maladaptive behavior and etiology of psychopathology
2. Categorize symptoms and understand the clinical presentation of psychological disorders according to DSM V.
3. Identify treatment modalities suitable for the psychological disorders

I – NEURODEVELOPMENTAL DISORDERS**(12 Hours)**

1. Intellectual disabilities
2. Communication disorders
3. Autism spectrum disorders
4. Attention-Deficit/Hyperactivity disorder
5. Specific learning disorders

II – SCHIZOPHRENIA SPECTRUM, MOOD, & ANXIETY-RELATED DISORDERS**(12 Hours)**

1. Schizophrenia spectrum and other psychotic disorders
2. Bipolar and related disorders
3. Depressive disorders
4. Anxiety, Obsessive-compulsive, trauma and stressor-related disorders

III – DISSOCIATIVE, SOMATIC, SEXUAL AND PERSONALITY DISORDERS**(12 Hours)**

1. Dissociative disorders
2. Somatic symptom and related disorders

3. Sexual dysfunctions
4. Personality Disorders

IV – FEEDING, ELIMINATION, SLEEP & SUBSTANCE RELATED DISORDERS

(12 Hours)

1. Feeding and Eating disorders
2. Elimination disorders
3. Sleep-wake disorders
4. Substance-related and addictive disorders

NOTE: All the disorders will cover the following:

- Clinical presentation
- Diagnostic criteria
- Etiology
- Treatment

BOOKS FOR STUDY:

1. American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.
2. Butcher, J. N., Mineka, S., & Hooley, J. M. (2017). *Abnormal psychology* (16th edition). Boston: Pearson.
3. Dziegielewska, S. F. (2014). *DSM-5 in action* (3rd ed.). Hoboken, NJ: John Wiley & Sons.
4. Kring, A. M., Johnson, S. L., Davison, G. C., & Neale, J. M. (2014). *Abnormal psychology*. New Jersey: John Wiley & Sons.
5. Mulherin, K. L. (2014). *Introduction to abnormal psychology*. USA: Asia Pacific holdings Private Limited.
6. Sadock, B. J., Sadock, V. A., & Ruiz, P. (2017). *Kaplan & Sadock's synopsis of psychiatry: Behavioral sciences/clinical psychiatry*. Philadelphia: Wolters Kluwer.

SUGGESTED READINGS:

1. Comer, R.J. (2012). *Abnormal psychology*. New York, NY: Worth.
2. Craighead, W. E. (2017). *Psychopathology: History, diagnosis, and empirical foundations* (2nd ed.). John Wiley & Sons.
3. Davison, G. C., & Neale, J. M. (2001). *Abnormal psychology*. New York: John Wiley.
4. Sperry, L., Carlson, J., & Sperry, J. (2014). *Psychopathology and psychotherapy: DSM-5 diagnosis, case conceptualization, and treatment* (3rd ed.). Routledge.

SEMESTER III

PLO 302: PSYCHODIAGNOSTICS

Number of Credits	04
Teaching Hours	48 Hours
Marks	100 (40 ISA and 60 SEA)
Duration of Lecture	01 Hours
Duration of Examination	03 Hours

Course Objectives:

1. To understand the psychometric strengths and weaknesses of psychological tests.
2. To administer psychological assessments relevant to client needs and interpret the scores obtained on the assessments.
3. To generate a report and communicate the findings to clients.

Learning Outcomes:

At the end of this course, the learner will be able to:

1. Discuss the psychometric strengths and weaknesses of psychological tests.
2. Identify and administer psychological assessments relevant to client needs and interpret the scores obtained on the assessments.

3. Formulate a report and communicate the findings to clients.

I – ASSESSMENT OF INTELLIGENCE

(12 Hours)

1. Raven’s Progressive Matrices: Colored, Standard and Advanced Progressive Matrices.
2. Wechsler’s Intelligence Scales: All revised scales.
3. Seguin Form Board, Vineland Social Maturity Scale, Draw A Man Test.

II – ASSESSMENT OF PERSONALITY

(12 Hours)

1. Minnesota Multiphasic Personality Inventory (MMPI)
2. Myers Briggs Type Indicator (MBTI)
3. Rorschach Inkblot Test
4. Thematic Apperception Test (TAT) & Children’s Apperception Test (CAT)

III - ASSESSMENT OF CHILDREN WITH SPECIAL NEEDS

(12 Hours)

1. Childhood Autism Rating Scale (CARS)
2. Connor’s rating scale for Attention deficit hyperactive disorder
3. NIMHANS index for specific learning disorders
4. Child Behavior Checklist (CBCL)

IV- BRIEF INSTRUMENTS FOR CLINICAL DECISION MAKING

(12 Hours)

1. Symptom Checklist-90-R and Brief Symptom Inventory
2. Beck Depression Inventory–II and State Trait Anxiety Inventory
3. The Psychological Report: Mental Status Evaluation, General Guidelines, Feedback, Format for a Psychological Report, Sample Reports

NOTE: All psychological tests will cover the following:

- Psychometric properties

- Administration
- Scoring
- Interpretation
- Report Writing

This course is meant to provide students with skills of selection, administering, scoring, interpreting and reporting in clinical settings. As an ISA component this course will be linked to community service where students will conduct free assessment camps in community settings such as schools catering to poor students, NGO's working with children etc.

BOOKS FOR STUDY:

1. Anastasi, A. & Urbana, S. (2016). *Psychological testing* (7th ed.). Delhi: Pearson Education Pvt. Ltd.
2. Cohen, J.R., Swerdlik, M. E. & Kumthekar, M.M. (2017). *Psychological testing and assessment: An introduction to tests and measurement* (7th ed.). New York. McGraw-Hill International edition
3. Cooper, C. (2019). *Psychological testing: Theory and practice*. Abingdon, Oxon: Routledge.
4. Gregory, R. J. (2017). *Psychological testing: History, principles and applications* (7th ed.). New Delhi: Pearson Education
5. Kaplan, R. M., & Saccuzzo, D. P. (2018). *Psychological testing: Principles, applications, & issues*. Boston, MA.: Cengage Learning.

SUGGESTED READINGS:

1. Martínez, A. D. (2016). *Psychological assessment*. Valencia: Tirant lo Blanch.
2. Murphy, R. K. & Davidshofer, O.C. (2013). *Psychological testing: Principles & applications* (6th ed.). New Jersey: Prentice Hall.
3. Suhr, J. A. (2015). *Psychological assessment: A problem-solving approach*. New York: The Guilford Press.

SEMESTER III

PLO 303: ETHICS IN CLINICAL PRACTICE

Number of Credits	04
Teaching Hours	48 Hours
Marks	100 (40 ISA and 60 SEA)
Duration of Lecture	01 Hours
Duration of Examination	03 Hours

Course Objectives:

1. To understand general ethical principles and standards in practicing clinical psychology.
2. To develop awareness about the professional codes and licensing procedure as clinical psychologists.
3. To apply knowledge of ethical decision-making skills in clinical practice.

Learning Outcomes:

At the end of this course, the learner will be able to:

1. Demonstrate general ethical principles and standards in practicing clinical psychology.
2. Examine the professional codes and licensing procedure as clinical psychologists.
3. Adopt ethical decision-making skills in clinical practice.

I – ETHICS IN CLINICAL PRACTICE

(12 Hours)

1. History of Ethical Principles in Clinical Practice

2. Ethical Principles: Beneficence and Nonmaleficence, Fidelity and Responsibility, Integrity, Justice
3. Respect for People's Rights and Dignity
4. Ethical Standards: Resolving Ethical Issues, Competence, Human Relations, Privacy and Confidentiality, Advertising and other Public Statements, Record Keeping and Fees.

II – PRACTICE ISSUES

(12 Hours)

1. Critical Issues in Clinical Psychology: Legal Issues, Cultural Issues, Role of the Clinician, Clinical Judgment
2. Multiple Relationships and Boundary Issues, Close Encounters, Attraction, Sexual Misconduct
3. Psychotherapy Contract: Informed Consent, Confidentiality and Guidelines for Contracting
4. Ethics and Confidentiality in Digital Age and Online Therapy

III – ISSUES IN WORKING WITH SPECIAL POPULATION

(12 Hours)

1. Couples and Families, Survivors of Sexual Violence
2. Therapy with LGBT
3. Ethical Issues in Working with Children in the Consultation-Liaison Context, Assessment and Management of Suicide Risk, Ethnic Minority Groups
4. Ethics in Multicultural and Interpersonal Context

IV – RULES, LICENSURE AND CERTIFICATION

(12 Hours)

1. RCI Regulations and Act 2000
2. Process of Certification as a Licensed Clinical Psychologists
3. Mental Health Care Act 2017
4. Representing Clients in Court of Law; Goa State Mental Health Rules

BOOKS FOR STUDY:

1. Bhola, P. & Raguram, A. (2016). *Ethical issues in counselling and psychotherapy practice walking the line*. New Delhi: Springer
2. Hawley, G. (2017). *Ethics in clinical practice: An inter-professional approach*. S.L.: Routledge.
3. Neukrug, E. (2014). *A brief orientation to counseling: Professional identity, history, and standards*. Belmont, CA.: Brooks/Cole, Cengage Learning.
4. Pope, K, S., & Vasquez, M. J. T. (2016). *Ethics in psychotherapy and counseling, a practical guide* (5th ed.). New Jersey: Wiley.
5. Topolski, A. (2018). *Ethics for psychologists: A global and case-based approach*. London: SAGE Publications.

SUGGESTED READINGS:

1. American Psychological Association. (2017). *Ethical principles of psychologists and code of conduct*. <https://www.apa.org/ethics/code/ethics-code-2017.pdf>
2. Rehabilitation Council of India (2000). RCI Amendment Act 2000. Retrieved from <http://www.rehabcouncil.nic.in/writereaddata/rciact.pdf>
3. Tien, L. (2012). *Ethics for psychologists: A casebook approach*. Thousand Oaks, CA: Sage Publications.
4. Francis, R. D. (2013). *Ethics for psychologists*. Chichester, U.K: British Psychological Society/Blackwell.

SEMESTER III

PLO 304: PALLIATIVE CARE

Number of Credits	04
Contact Hours	48 Hours
Marks	100 (40 ISA and 60 SEA)
Duration of Lecture	01 Hours
Duration of Examination	03 Hours

Course Objectives:

1. To develop knowledge of palliative care and symptom management.
2. To understand the interdisciplinary approach to palliative care.
3. To assess a team approach to patient care, especially for the terminally ill patients.

Learning Outcomes:

At the end of this course, the learner will be able to:

1. Explain palliative care and symptom management.
2. Examine the interdisciplinary approach to palliative care.
3. Discuss a team approach to patient care, especially for the terminally ill patients.

I - INTRODUCTION TO PALLIATIVE CARE**(12 Hours)**

1. Definition, Communication and research on palliative care.
2. Symptom Management: Pain, Gastro-intestinal symptoms, Palliation of head and neck cancer, Endocrine and metabolic complications of advanced cancer, Psychiatric symptoms.
3. Principles of drug use in palliative care: The use of drugs beyond license, Drug interactions in palliative care, Syringe drivers, Antibiotics in palliative care, Non-medical prescribing.
4. The terminal phase and bereavement.
5. Legal and professional standards of care.

II - PALLIATIVE CARE ACROSS VARIOUS SETTINGS - I**(12 Hours)**

1. Oncology and palliative care
2. Pediatric palliative care
3. Palliative care for learning disabilities
4. Palliative care in the home and hospital liaison
5. Self-care for health professionals and emergencies in palliative care

III - PALLIATIVE CARE ACROSS VARIOUS SETTINGS - II**(12 Hours)**

1. Respiratory disease
2. Heart failure
3. Neurological disease

4. AIDS
5. Palliation in the care of the elderly

IV - PALLIATIVE CARE AND ALLIED HEALTH PROFESSIONS (12 Hours)

1. Rehabilitation and social work
2. Occupational therapy
3. Physiotherapy
4. Speech and language therapy
5. Clinical and other applied psychology in palliative care.

BOOKS FOR STUDY:

1. Faull, C., Caestecker, S., Nicholson, A., & Black, F. (2012). *Handbook of palliative care* (3rd ed.). New Jersey: Wiley-Blackwell.
2. Macauley, R. C. (2018). *Ethics in palliative care: A complete guide*. UK: Oxford University Press.
3. Morrissey, M, B., & Jennings, B. (2013). *Partners in palliative care: Enhancing ethics in care at the end of life*. USA: Routledge.
4. Protus, B. M., Kimbrel, J., Grauer, P. (2015). *Palliative care consultant: Guidelines for effective management of symptoms* (4th ed.). Montgomery: Catamaran Company.
5. Zeppetella, J. (2012). *Palliative care in clinical practice*. London: Springer publications.

SUGGESTED READINGS:

1. Marrelli, T. M. (2018). *Hospice and palliative care handbook*, (3rd ed.). USA: Sigma Global Nursing Excellence.
2. Sumser, B. & Leimena, M. (2019). *Palliative care: A guide for health social workers*. UK: Oxford University Press.
3. Watson, M., Lucas, C., Hoy, A., & Wells, J. (2009). *Oxford handbook of palliative care* (2nd ed.). New York: Oxford University Press.

SEMESTER III

PLO 305: CLINICAL PSYCHOPHARMACOLOGY

Number of Credits	04
Teaching Hours	48 Hours
Marks	100 (40 ISA and 60 SEA)
Duration of Lecture	01 Hours
Duration of Examination	03 Hours

Course Objectives:

1. To sketch an understanding of the pharmacology and pharmacodynamics of major drug groups.
2. To develop knowledge of clinical psychopharmacology of diseases and syndromes.
3. To examine the challenges associated with the use of psychotropic drugs in specific populations.

Learning Outcomes:

At the end of this course, the learner will be able to:

1. Demonstrate fundamental knowledge of the pharmacology and pharmacodynamics of major drug groups used in the treatment of mental disorders.
2. Discuss how pharmacological investigation informs the understanding of the underlying pathology of mental illnesses.
3. Identify issues and challenges in the use of psychotropic drugs for specific populations, i.e., women, children, older persons etc.

I – FUNDAMENTALS OF PSYCHOPHARMACOLOGY

(12 Hours)

1. Psychopharmacology nomenclature
2. Neurobiology, psychotropic drug structures and mechanisms
3. Overview of clinical psychopharmacology of drugs classes
4. Carcinogenicity of psychotropic drugs

5. Diagnostic validators and the concept of a diagnostic hierarchy

II – CLINICAL PSYCHOPHARMACOLOGY OF DISEASES AND SYNDROMES-1

(12 Hours)

1. Treatment of affective illnesses
2. Anxiety conditions
3. Treatment of personality

III - CLINICAL PSYCHOPHARMACOLOGY OF DISEASES AND SYNDROMES-2

(12 Hours)

1. Schizophrenia and Schizoaffective conditions
2. Substance-related disorders
3. Post-traumatic stress

IV –APPROACHES FOR SPECIFIC POPULATIONS

(12 Hours)

1. Children and Women
2. Older persons
3. Ethnic and racial groups
4. Suicide
5. Persons with medical illnesses

BOOKS FOR STUDY:

1. Behere, P. B., Das, A., & Behere, A. P. (2019). *Clinical Psychopharmacology: An Update*. Springer.
2. Ghaemi, N. (2019). *Clinical Psychopharmacology: Principles and Practice*. Oxford University Press, USA.
3. Preston, J., O'Neal, J. H., & Talaga, M. C. (2017). *Handbook of clinical psychopharmacology for therapists*. New Harbinger Publications.

4. Schatzberg, A. F., & Charles DeBattista, D. M. H. (2019). *Schatzberg's Manual of Clinical Psychopharmacology*. American Psychiatric Pub.

SUGGESTED READINGS:

1. Anderson, I. M., & McAllister-Williams, R. H. (Eds.). (2015). *Fundamentals of clinical psychopharmacology*. CRC Press.
2. Muse, M., & Moore, B. A. (Eds.). (2012). *Handbook of clinical psychopharmacology for psychologists*. John Wiley & Sons.

SPECIALIZATION: COUNSELLING PSYCHOLOGY

SEMESTER III

PLO 306: COUNSELLING PROCESS, ETHICS AND INTERVENTIONS

Number of Credits	04
Teaching Hours	48 Hours
Marks	100 (40 ISA and 60 SEA)
Duration of Lecture	01 Hours
Duration of Examination	03 Hours

Course Objectives:

1. To understand the nature of counselling as a helping profession
2. To develop the knowledge the stages of the counselling process and the ethical principles involved
3. To apply interventions to specific populations

Learning Outcomes:

At the end of this course, the learner will be able to:

1. Explain the nature of counselling as a helping profession
2. Discuss the stages of the counselling process and the ethical principles involved
3. Use interventions with specific populations

I – INTRODUCTION TO COUNSELLING

(12 Hours)

1. Fundamental principles of effective helping
2. Characteristics of effective helpers
3. Nature of counselling, definition, goals, ethical principles
4. Understanding counselling: process, assessment and diagnosis

II – STAGES IN COUNSELLING

(12 Hours)

1. Stage 1: Building the counselling relationship and facilitating initial disclosure
2. Stage 2: In-depth exploration
3. Stage 3: Commitment to Action and termination

III – ADAPTING THE COUNSELLING PROCESS TO SPECIFIC POPULATIONS

(12 Hours)

1. Working with ambivalent, indifferent and oppositional clients
2. Issues of human diversity
3. Working with children and parents
4. Working with older adults

IV – ETHICS IN COUNSELLING

(12 Hours)

1. Code of Ethics and Standards of Practice, American Psychological Association
2. Ethical Principles and ethical theory

3. Responsibility to the client: Safety, Negligence and Insurance, Respect for client Autonomy, Suicide and Refusal to Accept Life-saving Treatment, Counsellor Competence, Avoiding the Exploitation of Clients, Confidentiality
4. Responsibilities of the Counsellor: Responsibility to Oneself, Colleagues and the Community, Counselling-supervision, Record-keeping, Monitoring Counselling

BOOKS FOR STUDY:

1. Bond, T. (2015). *Standards and ethics for counselling in action*. London: Sage Publications.
2. Galbraith, V. (2018). *Counselling psychology*. London: Routledge.
3. Murphy, D. (2017). *Counselling psychology: An introduction*. Wiley & Sons, Incorporated, John.
4. Sue, D., & Sue, D. W. (2016). *Counselling the culturally diverse: Theory and practice*. Hoboken, NJ: John Wiley and Sons.

SUGGESTED READINGS:

1. Jordan, T. J. (2016). *Counselling psychology meets multiculturalism in the twenty-first century*. luniverse.
2. Patterson, L. E., & Welfel, E. R. (2005). *The counseling process*. Belmont, CA, US: Thomson Brooks/Cole Publishing Co.
3. Sharf, R. S. (2011). *Theories of psychotherapy and counselling: Concepts and cases*. Pacific Grove: Brooks/Cole Pub. Co

SEMESTER III

PLO 307: GUIDANCE AND COUNSELING IN SCHOOLS

Number of Credits	04
Contact Hours	48 Hours
Marks	100 (40 Internal and 60 External)

Duration of Lecture 01 Hours

Duration of Examination 03 Hours

Course Objectives:

1. To understand the concepts of guidance and counseling in school settings.
2. To develop knowledge of different types of exceptionalities among children.
3. To appraise the target population's development with counseling interventions.

Learning Outcomes:

At the end of this course, the learner will be able to:

1. Explain the concepts of guidance and counseling in school settings.
2. Identify different types of exceptionalities among children.
3. Determine suitable counseling interventions for the target population.

I - INTRODUCTION TO GUIDANCE AND COUNSELING (12 Hours)

1. Guidance: Definition, Characteristics, Nature, Types, Aims.
2. Educational guidance: Definition, Need, Methods.
3. Vocational guidance: Definition, Aims, Methods.
4. Counseling: Definition, Role of a counselor, Counseling process and interviews.
5. Guidance services in schools.

II - COUNSELORS IN EDUCATIONAL SETTINGS (12 Hours)

1. Role and functions of counselors in school settings: Elementary, middle, high school, secondary, vocational schools and higher education.
2. Teacher and administrator roles in the school counseling program: The classroom teacher and the chief school administrator.
3. The counselor and relationships with other helping professions: School psychologist, school social worker, special educator, school health personnel, Psychiatrists.

4. The counselor as educational consultants: The consultation process, Consultation models, Consultation skills, Consultation in school settings.
5. Inclusive education: Concept, Need, Inclusive education programmes in India, Steps for inclusive education at school level, Role of a teacher.

III - COUNSELING CHILDREN WITH SPECIAL CONCERNS (12 Hours)

1. Counseling children with a physical disability.
2. Counseling children with emotional disturbance.
3. Counseling children with learning disabilities.
4. Counseling children facing maltreatment.
5. Counseling children in chemically dependent families.

IV - COUNSELING FOR CAREER PLANNING AND DECISION MAKING (12 Hours)

1. The changing nature of the world of work and current interests in career planning.
2. Career counseling and the development of the human potential: Women, Minorities, The poor, People with disabilities, Dual career couples.
3. The school counselor's role in student career development, Techniques for career planning and decision making in schools.
4. Career counseling in non-school settings: Community mental health agencies, Community career centers, Employment offices, Employment assistance programs, Private practice.
5. Computerized career assistance systems: Information systems, Guidance systems, Career information and the internet, Ethical considerations.

BOOKS FOR STUDY:

1. Aggarwal, J. C. (2014). *Essentials of educational psychology* (3rd ed.). Noida: Vikas publishing house Private Limited.
2. Gibson, R. L., & Mitchell, M. H. (2014). *Introduction to counseling and guidance* (7th ed.). New Delhi: PHI Learning Private Limited.
3. Henderson, D. A., & Thompson, C. L. (2011). *Counseling children* (8th ed.). Spain: Brooks/Cole Cengage Learning.
4. Kolbert, J. B., Williams, R. L., Morgan, L. M. Crothers, L. M., Hughes, T. L. (2016). *Introduction to professional school counseling: Advocacy, leadership, and intervention*. New York: Routledge.

5. Ziomek-Daigle, J. (2016). *School counseling classroom guidance: Prevention, accountability and outcomes*. London: Sage Publications.

SUGGESTED READINGS:

1. Bor, R., Landy, J. E., Gill, S. & Brace, C. (2002). *Counseling in schools*. London: Sage Publications.
2. Sharry, J. (2004). *Counseling children, adolescents and families: A strength-based approach*. London: Sage Publications.
3. Ziomek-Daigle, J. (2017). *Counseling children and adolescents: Working in school and clinical mental health settings*. New York: Routledge.

SEMESTER III

PLO 308: COUNSELLING ACROSS THE LIFESPAN

Number of Credits	04
Contact Hours	48 hours
Marks	100 (40 ISA and 60 SEA)
Duration of Lecture	01 hour
Duration of Examination	03 hours

Course Objectives:

1. To develop an understanding of specific concerns associated with each stage of the lifespan.
2. To apply knowledge of specific concerns in each stage to design suitable preventive and treatment strategies.
3. To understand the importance of health promotion for numerous contexts over the lifespan.

Learning Outcomes:

At the end of this course, the learner will be able to:

1. Identify specific concerns in childhood, adolescence, adulthood and old age.
2. Design effective strategies to deal with specific concerns such as developmental disruptions, psychosocial crisis and conflicts experienced at various stages across the lifespan.
3. Formulate developmentally appropriate counseling strategies and interventions to facilitate optimal health over the lifespan.

I - COUNSELLING CHILDREN

(12 Hours)

1. Child identity development
2. Fostering resilience in children experiencing developmental disruptions
3. Promoting healthy and effective relationships among school aged children
4. Psychosocial adjustment of children with chronic illness

II - COUNSELLING ADOLESCENTS

(12 Hours)

1. Promoting healthy lifestyles
2. Positive identity development among adolescents
3. Fostering adolescent work and career readiness
4. Health disparities and help-seeking behaviour among adolescents

III – COUNSELLING ADULTS

(12 Hours)

1. Young adulthood: Promoting healthy relationships, treating behavioural health challenges, positive parenting and child rearing
2. Middle adulthood: Role strain and conflict, supporting adaptation to new family roles, promoting positive career change in midlife

IV - GERIATRIC COUNSELLING

(12 Hours)

1. A positive aging framework for counselling older adults
2. Psychosocial crisis and emotional impact of chronic illness and disability
3. Facilitating transitions through retirement
4. Working therapeutically with older adults

BOOKS FOR STUDY:

1. Capuzzi, D. (2016). *Human growth and development across the lifespan: Applications for counselors*. John Wiley & Sons.
2. Juntunen, C. L., & Schwartz, J. P. (Eds.). (2015). *Counseling Across the Lifespan: Prevention and Treatment* (2nd ed.). Sage Publications.
3. Vondracek, F. W., Lerner, R. M., & Schulenberg, J. E. (2018). *Career development: A life-span developmental approach*. Routledge.
4. Wong, D. W., Hall, K. R., Justice, C. A., & Hernandez, L. W. (2015). *Counselling individuals through the lifespan*. Sage Publications.

SUGGESTED READINGS:

1. Sharpy, J. (2004). *Counseling children, adolescents and families: A strengths-based approach*. Sage Publications.
2. Horton-Parker, R. J., & Brown, N. W. (2002). *The unfolding life: Counseling across the lifespan*. Bergin & Garvey.

SEMESTER III**PLO 309: PSYCHOLOGY OF ADDICTION**

Number of Credits	04
Teaching Hours	48 Hours
Marks	100 (40 ISA and 60 SEA)
Duration of Lecture	01 Hours
Duration of Examination	03 Hours

Course Objectives:

1. To develop knowledge and skills useful in working with individuals with addictive behaviors.
2. To examine specific addiction models with suitable counselling approaches.
3. To understand the major classifications of psychotropic drugs of abuse and typical routes of administration.

Learning Outcomes:

At the end of this course, the learner will be able to:

1. Discuss knowledge and skills useful in working with individuals with addictive behaviors.
2. Classify specific addiction models with suitable counselling approaches.
3. Identify the major classifications of psychotropic drugs of abuse and typical routes of administration.

I – ADDICTION: A COMPREHENSIVE APPROACH**(12 Hours)**

1. Introduction: Definition, process, abuse and dependence, signs and symptoms
2. Types of Addiction: DSM V classifications
3. Theories of addictions: Biological, Exposure, Adaptation
4. Causes of Addictive behaviours: Sociocultural, Psychological, Physiological Moral and Spiritual, Role of Heredity

II – SUBSTANCE ABUSE AND ADDICTION**(12 Hours)**

1. Alcohol and Drug Use: Neurons, Drugs, reward and dopamine
2. Addictive's: Opiates, Stimulants, Sedatives, Marijuana, Hallucinogenic, Nicotine, Cannabis.
3. Subjective aspects of drug use: Craving, Intoxication, Cognitive Deficits
4. Physiology and Pharmacology: Body and alcohol; Ingestion, Absorption, Excretion, Metabolism, alcohol and behaviour; Tolerance, Synergism, effects on blood vessels

III - ADDICTION: THE FAMILY DISEASE

(12 Hours)

1. Addiction and Mental Health: Association between substance misuse and psychosis, prevalence, outcomes associated with addiction
2. Short- and long-term effects on Health: Fatal Alcohol Effects
3. Substance Misuse in older adults: Illicit Drug Use, Medication Misuse, Assessment of older people with substance misuse, using & evaluating health and social outcomes.
4. Family and Addiction: impact on children, co-dependency, family

IV- TREATMENT AND RECOVERY PROCESS

(12 Hours)

1. Using CBT to treat addictions
2. Alcoholics Anonymous and 12 steps Therapy: The process and criticisms
3. Narrative identity and change: Addiction & Recovery; Narrative Therapy, Client Talk, Generating Narrative, Narratives of Recovery, Interviewing; Change Talk, The four Motivational Interview Processes, Core Motivational Interview Skills
4. Relapse Prevention: Models and Prevention Counselling, building a support system in Communication, psycho- social care (rehabilitation, after care etc)

BOOKS FOR STUDY:

1. Abadinsky, H. (2018). *Drug use and abuse* (9th ed.). Boston: Cengage Learning
2. Chandler, C. S. (2018). *Addiction psychology: Theory, intervention and practical issues*. New Delhi: Sage Publications.
3. Davis, P., Patton, Robert., & Jackson, S. (2017). *Addiction Psychology and Treatment*. New Jersey: John Wiley and Sons.
4. Maisto, S., Galizio, M. & Connors, G. (2019). *Drug use and abuse* (8th ed.). Boston: Cengage Learning.

SUGGESTED READINGS:

1. Moss, A., & Dyer, K. (2010). *Psychology of addictive behavior*. London: Red Globe Press.

2. Svanberg, J. (2018). *The psychology of addiction*. London: Routledge, Taylor & Francis Group.
3. West, R. (2013). *Theory of addiction*. New Jersey: John Wiley and Sons.

SEMESTER III

PLO 310: CAREER COUNSELLING AND THE WORLD OF WORK

Number of Credits	04
Contact Hours	48 hours
Marks	100 (40 ISA and 60 SEA)
Duration of Lecture	01 hour
Duration of Examination	03 hours

Course Objectives:

1. To develop an understanding of core concepts and terminology relevant to career counselling.
2. To examine the diverse skills and techniques in career guidance and counselling.
3. To explore and be sensitive to the problems that diverse populations encounter in career planning and development.
4. To understand contextual perspectives on career and lifestyle planning.

Learning Outcomes:

At the end of this course, the learner will be able to:

1. Identify and describe major theories of career development and demonstrate an understanding of assessment procedures and ethical issues in career counselling.
2. Identify and utilize career counselling skills and techniques to design effective career development plans with clients.

3. Apply career counselling skills and techniques to multicultural groups, individuals with disabilities, couples and families, and in career transitions and job loss.
4. Demonstrate an understanding of career counselling and lifestyle planning in educational, mental health, vocational rehabilitation settings, and for clients with addictive behaviours.

I - FOUNDATIONS OF CAREER COUNSELLING

(12 Hours)

1. Career: Development, interventions, counselling and education.
2. Theories of career development: Super's Life-span, Life-space theory, Holland's theory of types
3. Integrating career and personal counselling
4. Career counselling intake interview, standardized tests and self-assessment procedures
5. Ethical issues in career counselling

II - SKILLS AND TECHNIQUES IN CAREER GUIDANCE AND COUNSELLING

(12 Hours)

1. Individual and group assessment and appraisal
2. Using information technology
3. Designing career development plans with clients
4. Establishing a thriving career development program
5. Supervision, coaching and consultation

III - CAREER COUNSELLING FOR SPECIAL POPULATIONS

(12 Hours)

1. Multicultural groups
2. Individuals with disabilities
3. Career transitions and job loss
4. Couples and families

IV - CONTEXTUAL PERSPECTIVES ON CAREER AND LIFESTYLE PLANNING

(12 Hours)

1. Educational settings
2. Mental health and private practice
3. Vocational rehabilitation settings
4. Clients with addictive behaviours

BOOKS FOR STUDY:

1. Capuzzi, D., & Stauffer, M. D. (Eds.). (2018). *Career counselling: Foundations, perspectives, and applications*. Routledge.
2. Gysbers, N. C., Heppner, M. J., & Johnston, J. A. (2009). *Career counselling: Contexts, processes, and techniques*. American Counselling Association.
3. Niles, S. and Harris-Bowlsbey, J. (2013). *Career development interventions in the 21st century* (4th ed.). Upper Saddle River, NJ: Pearson Education.
4. Zunker, V. (2015). *Career counselling: A holistic approach* (9th ed.). Cengage Learning.

SUGGESTED READINGS:

1. Herr, E.L., and Cramer, S.H. (2003). *Career guidance and counseling through the life span: Systematic approaches* (6th ed.). Boston: Allyn and Bacon.
2. Kidd, J. M. (2006). *Understanding career counseling: theory, research and practice*. Sage Publications.

SPECIALIZATION: HUMAN RESOURCE MANAGEMENT

SEMESTER III

PLO 311: ADVANCED HUMAN RESOURCE MANAGEMENT

Number of Credits	04
Contact Hours	48 Hours
Marks	100 (40 ISA and 60 SEA)
Duration of Lecture	01 Hours
Duration of Examination	03 Hours

Course Objectives:

1. To understand the current theory and practice of human resource management.
2. To develop knowledge of the key issues such as motivation, career planning, diversity and training in order to enhance human resource planning and management.
3. To apply motivational techniques and feedback strategies that help employees reach professional and organizational goals.

Learning Outcomes:

At the end of this course, the learner will be able to:

1. Outline the current theory and practice of human resource management.
2. Identify the key issues such as motivation, career planning, diversity and training in order to enhance human resource planning and management.
3. Explain motivational techniques and feedback strategies that help employees reach professional and organizational goals.

I - NATURE OF HUMAN RESOURCE MANAGEMENT**(12 Hours)**

1. Nature and functions of Human Resource Management.
2. Human Resource Models: Fombrun model, Harvard model, Guest model, Warwick model, Ulrich model.
3. Context of Human Resource Management: External forces, Technology, Cultural forces, Internal forces.
4. Integrating HR strategy with Business strategy: Strategic human resource management, Integrating HR with strategic management, Benefits and challenges of strategic management.

II - HUMAN RESOURCE PLANNING**(12 Hours)**

1. The planning process: Environmental scanning, organizational objectives and policies, HR demand forecast, Managerial judgment, HR supply forecast, HR programming, HR plan implementation, Control and evaluation.
2. Job design and Job evaluation: Job design approaches, Significance, Factors influencing job designs, Job evaluation process, Wage survey, Employee classification.
3. Recruitment: Nature, Process, Evaluation and control.

4. Selection: Nature, Process, Evaluation, Barriers.

III - INDUSTRIAL RELATIONS, DISPUTES AND TRADE UNIONS (12 Hours)

1. Industrial Relations: Nature, Industrial relations strategy, Approaches – Systems approach, Unitary approach, Pluralistic approach, Marxist approach.
2. Industrial disputes: Nature, Manifestation, Settlement.
3. Trade Unions: Movement in India, Major Unions, Trends, Managing trade unions.
4. Labor laws: Nature and need of labor laws, Principles of labor legislations, Trade Union legislation, The Industrial Disputes act (1947), The Payment of Wages Act (1936), The Factories Act (1948), The Employee' Compensation Act (1923).

IV - DEVELOPMENTS IN HUMAN RESOURCE MANAGEMENT (12 Hours)

1. New frontiers: Non-hierarchical structure, Attitude and emotions, Team design and analysis, Employee referrals, Employees for lease, Outsourcing, Moon-lighting by employees, Dual career groups, Flextime.
2. Knowledge management and Learning organizations: Individual knowledge conversion process, Organizational knowledge creation process, Knowledge management process and benefits; Need for organizational learning, Characteristics, Quality circles, Total Quality Management.
3. Virtual organizations and Human resource management: Concept, Characteristics, Human resource trends.
4. Managing global human resources: The internalization of business, Global differences and similarities in HR practices, Staffing the global organization, Training and maintaining expatriate employees, Equal employment opportunity responsibilities of multinational employers.

BOOKS FOR STUDY:

1. Aswathappa, K. (2017). *Human resource management: Text and cases* (8th ed.). Chennai: McGraw Hill Education (India) Private Limited.
2. Bratton, J., & Gold, J. (2017). *Human resource management: Theory and practice* (6th ed.). New York: Palgrave Macmillan.

3. Dessler, G. (2017). *Human resource management* (15th ed.). London: Pearson.
4. Kleiman, L. (2012). *Human resource management: A managerial tool for competitive advantage* (6th ed.). US: Kendall Hunt Publishing.
5. Robbins, S. P., Verhulst, S. L., & Decenzo, D. A. (2013). *Human resource management* (11th ed.). Singapore: John Wiley & Sons.

SUGGESTED READINGS:

1. Durai, P. (2016). *Human resource management* (2ed.). India: Pearson India Education Services Pvt. Ltd.
2. Jain, T. K., & Chugh, P. (2011). *Human resource management*. Jaipur: Garima Publications.
3. Sinha, P.R., Shekhar, P. S., & Sinha, B. I. (2017). *Industrial relations, trade unions and labour legislations* (3rd ed.). India: Pearson India Education Services Pvt. Ltd.

SEMESTER III

PLO 312: WORK PSYCHOLOGY

Number of Credits	04
Teaching Hours	48 Hours
Marks	100 (40 ISA and 60 SEA)
Duration of Lecture	01 Hours
Duration of Examination	03 Hours

Course Objectives:

1. To understand the evolution of work psychology and its challenges and limitations.
2. To determine the principles and theories of work behavior.
3. To analyze the core issues of central importance in effective work management.

Learning Outcomes:

At the end of this course, the learner will be able to:

1. Discuss the evolution of work psychology and its challenges and limitations.
2. Assess the principles and theories of work behavior.

3. Outline the core issues of central importance in effective work management.

I – INTRODUCTION TO WORK PSYCHOLOGY

(12 Hours)

1. Work Psychology: Definition, Nature and Science
2. Research Methods in Work Psychology: Research Design, Methods and Techniques
3. Emerging issues in Work Psychology: Work and Family, Gender and Work, Woman and Work, Occupational Health, Cultural Diversity
4. The world of Work and Organizations: Applying Psychology to Work

II – PEOPLE AND GROUPS AT WORK

(12 Hours)

1. People at Work: Personality and Individual Differences, Motivation and Work Satisfaction
2. The Group at Work: Groups, Teams and Decision Making
3. Leadership at Work: Theories, Gender and Leadership
4. Career Management: Career Theories, Gender and Careers

III- RECRUITMENT AND SELECTION

(12 Hours)

1. Recruitment: Internal and External Environment, Sources of Recruitment
2. Selection: Selection Tests, Interviewing
3. Evaluating Recruitment and Selection Process: Job Vacancy, Job Analysis, Attracting and Screening Candidates, Interviewing and Appointing Candidates, Induction and Training, Employee Evaluation
4. Legal issues and Employee Selection: Age and Pregnancy Discrimination Act, Disabilities Act, Minimum Wage Policies

IV - MANAGEMENT ISSUES AND NEW DIRECTIONS

(12 Hours)

1. Stress management: Dealing with the demands of Life and Work
2. Psychological health in the work place: Organizational Responsibility, Moderating Factors, Organizational Interventions
3. The Loss of work: Employment, Unemployment, Underemployment, Retirement

4. The future of work: Forces for Change, New Ways of Working

BOOKS FOR STUDY:

1. Arnold, J., & Randall, R. (2016). *Work psychology: Understanding human behavior in the workplace*. Harlow, England: Pearson.
2. Gautier, C. (2016). *Psychology of work: Insights into successful working practices*. New York: Kogan Page Stylus.
3. Matthewman, L., Rose, A., & Hetherington, A. (2014). *Work psychology: An introduction to human behaviour in the workplace*. New York: Oxford University Press.
4. Robbins, S.P. & Judge, T.A. (2016). *Organizational behaviour* (6th ed.). New Delhi: Prentice- Hall of India Private Limited.
5. Steele, C. (2018). *Work Psychology*. New York: Taylor & Francis Group.

SUGGESTED READINGS:

1. Landy, F. J., & Conte, J. M. (2013). *Work in the 21st century: An introduction to industrial and organizational psychology* (4th ed.). New Jersey: Wiley.
2. Mishkin, F. S., & Eakins, S. (2015). *Work Psychology*. Harlow, United Kingdom: Pearson.
3. Nydegger, R. (2018). *Clocking in: The psychology of work*. ABC-CLIO, LL

SEMESTER III

PLO 313: ORGANIZATIONAL DEVELOPMENT AND CHANGE

Number of Credits	04
Teaching Hours	48 Hours
Marks	100 (40 ISA and 60 SEA)
Duration of Lecture	01 Hours
Duration of Examination	03 Hours

Course Objectives:

1. To understand the concepts, features and process of organizational development and change
2. To examine the process of organizational change to organizations and apply suitable interventions
3. To assess the relevance and effectiveness of organizational development and change interventions to different work settings

Learning Outcomes:

At the end of this course, the learner will be able to:

1. Explain the concepts, features and process of organizational development and change
2. Discuss the process of organizational change to organizations and apply suitable interventions
3. Outline the relevance and effectiveness of organizational development and change interventions to different work settings

I – INTRODUCTION TO ORGANIZATIONAL DEVELOPMENT (12 Hours)

1. Organizational development: definition, history, evolution, relevance
2. Conceptual framework: concepts, organizational differentiations, building human capital, prospects and problems in organizational development
3. Organizational Development Practitioner: competencies and role of organizational development professionals
4. Professional values and ethics

II – PROCESS OF ORGANIZATIONAL CHANGE (12 Hours)

1. Organizational change: definition, nature, scope, theories of planned change, General model of planned change
2. Managing change: change activities, motivating change, creating a vision, developing political support, managing transition, sustaining momentum
3. Designing effective interventions: types, contingencies related to change situation, contingencies related to target of change

4. Evaluating and Institutionalizing interventions to organizational development and change

III – TECHNO-STRUCTURAL AND STRATEGIC CHANGE INTERVENTIONS

(12 Hours)

1. Restructuring organizations: structural design, downsizing, re-engineering
2. Employee involvement and work design
3. Transformational change: organizational design, integrated strategic change, culture change, learning organizations, built to change organizations
4. Trans-organizational change: mergers, acquisitions, strategic alliances, network interventions

IV – APPLICATIONS OF ORGANIZATION DEVELOPMENT

(12 Hours)

1. Organization development for economic, ecological and social outcomes
2. Sustainable management organizations and global social change
3. Applications in non-industrial settings: health care, public school systems, public sector, family owned businesses
4. Future directions in organizational development: trends within organizations and trends in the context of organizational development

BOOKS FOR STUDY:

1. Cummings, T. G. and Worley C. G. (2016). *Organizational development and change*. Toronto: Nelson Education.
2. Daft, R.L. (2012). *Organizational theory and design*. (7th ed.). Singapore: Thomson Asia Pte. Ltd.
3. French, W.L., Bell, Jr, C.H and Vohra, V. (2011). *Organization development*. (6th ed). New Delhi: Pearson Prentice Hall.
4. Hodges, J. (2017). *Consultancy, organization development and change*. USA: Kogan Page Ltd.

SUGGESTED READINGS:

1. Anderson, D.L. (2010). *Organization development: The process of leading organizational change*. Thousand Oaks, California: SAGE Publications Inc.

2. Helfat, C.E. and the Strategic Management Society. (2007). *The SMS Blackwell handbook of organizational capabilities: Emergence, development, and change*. [Malden, Mass.] : Blackwell Pub.
3. Sinha, J. B. P. (2008). *Culture and organizational behaviour*. Singapore: SAGE Publications Asia-Pacific Pte. Ltd.

SEMESTER III

PLO 314: STRATEGIC MANAGEMENT

Number of Credits	04
Contact Hours	48Hours
Marks	100 (40 ISA and 60 SEA)
Duration of Lecture	01 Hours
Duration of Examination	03 Hours

Course Objectives:

1. To gain knowledge of the basic concepts, principles and practices associated with strategic management.
2. To understand the strategic decisions that organisations make and have an ability to engage in strategic planning.
3. To apply the knowledge of strategic management to human resource practices.

Learning Outcomes:

At the end of this course, the learner will be able to:

1. Outline the basic concepts, principles and practices associated with strategy formulation and implementation.
2. Explain the strategic decisions that organisations make and have an ability to engage in strategic planning.
3. Identify the various of strategies applicable to human resource practices.

I – STRATEGIC MANAGEMENT: AN OVERVIEW (12 Hours)

1. Concept, Process and Strategic framework.
2. Strategic management input: Strategic management and Strategic competitiveness
3. The external environment: Opportunities, Threats, Industry Competiveness, Competitor analysis.
4. The Internal Environment: Resources, Capabilities, Core competencies, Competitive advantage.

II – STRATEGIC ACTIONS AND STRATEGY IMPLEMENTATION (12 Hours)

1. Corporate Governance: Ownership and Managerial control, Ownership concentration, Executive compensation
2. Organizational Structure and Controls: Relationship between strategy and structure, Evolutionary patterns of strategy and organizational structure
3. Strategic Leadership: Strategic leadership and style, Role of top-level managers, Managerial succession, Strategic leadership actions.
4. Strategic Entrepreneurship: International entrepreneurship, Internal innovation, Innovation through cooperative strategies, Innovation through acquisitions.

III - STRATEGIC HUMAN RESOURCE MANAGEMENT IN ACTION (12 Hours)

1. HR strategies: Role of HR, Strategic HRM, Strategic international HRM.
2. Formulating and Implementing HR strategies: Process, Characteristics, Strategic review, Implementing HR strategies.
3. HR Strategies: Resourcing strategy, Learning and development strategy, Reward strategy, Employee relations strategy.
4. Managing in a Global context: Strategic life cycle models, Integrative models, Composing a global workforce, Expatriate preparation, Repatriation Training.

IV – STRATEGIC KNOWLEDGE MANAGEMENT TECHNOLOGY (12 Hours)

1. Strategy Analysis: Knowledge management analysis, Analysis needs for change.
2. Strategy Choice: Identifying alternative actions, Knowledge management actions.
3. Strategy Implementation: Knowledge management technology, Barriers to implementation.
4. The Y model in Strategic Management

BOOKS FOR STUDY:

1. Burgelman, R., Christensen, C., Wheelwright, S. (2017). *Strategic Management of Technology and Innovation*. New York: McGraw-Hill Education.
2. Pearce, J. A., Robinson, R. B., & Mital, A. (2012). *Strategic Management: Formulation, Implementation and Control*, (12th Ed). New Delhi: Tata McGraw Hill Education Private Limited.
3. Rees, G., & Smith, P. (2017). *Strategic Human Resource Management: An International Perspective*, (2nd ed.). New Delhi: Sage Publication.
4. Rothaermel, F. T. (2018). *Strategic Management: Concepts*. New York: McGraw-Hill Education.

SUGGESTED READINGS:

- a. Armstrong, M. (2007). *Strategic Human Resource Management*. London: Kogan Page.
- b. Gottschalk, P. (2005). *Strategic Knowledge Management Technology*. UK: Idea Group Publishing
- c. Hitt, M. A., Ireland, R. D., & Hoskisson, R. E. (2010). *Strategic Management* (8th ed.). US: South – Western Cengage Learning.

SEMESTER III

PLO 315: EMPLOYEE TRAINING AND DEVELOPMENT

Number of Credits	04
Teaching Hours	48 Hours
Marks	100 (40 ISA and 60 SEA)
Duration of Lecture	01 Hours

Duration of Examination 03 Hours

Course Objectives:

1. To highlight theory and application of training and development.
2. To equip students with the understanding of the basic concepts of training.
3. To develop an understand of the training methods, techniques and aids.

Learning Outcomes:

At the end of this course, the learner will be able to:

1. Understand the role of training in an organization and its application in the growth of the organization.
2. Comprehend the techniques to change motivate its employees and retain strong employees with the correct knowledge, skill, and attitudes to perform their jobs.
3. Assess the stages and dynamics of training and development.
4. Examine the value of using a system approach in designing, implementing and evaluating training programs.

I – TRAINING AND DEVELOPMENT IN ORGANIZATIONS (12 Hours)

1. Objectives, Scope, and Types
2. Training, Development and Education
3. Strategic Training
4. Future Trends in Training

II - TRAINING NEED ANALYSIS AND TRAINING DESIGNING (12 Hours)

1. Organizational Analysis: Task, Person, Requirement Analysis
2. Methods and Techniques of Training needs, Approaches of Training Need Analysis
3. Training and Designing: Design theory, designing and development of a program
4. Designing a Training Program: Stages in designing a training structure

III – TRAINING: METHODS, TECHNIQUES AND AIDS

(12 Hours)

1. Training approaches: The education, problem centered, action learning approach
2. Training methods: Lecture or presentation, group discussion, case study, role play method.
3. E Learning and use of Technology in Training: Computer and satellite-based training, computer aided web-based training
4. Static and dynamic media: Print based material, flip charts, slide projector, audio-video tapes.

IV –TRAINING EVALUATION

(12 Hours)

1. Physical arrangements: Choosing the venue, room layout, controlling physical environment.
2. Implementation of training; Dry run, Pilot training
3. Classroom management: Nature, conceptual framework
4. Classroom problems: strategies, practices, group climate

BOOKS FOR STUDY:

1. Blanchard, P.N., & Thacker, J.W. (2017) *Effective Training: Systems, Strategies, and Practices* (5th Edition). New Delhi: Pearson.
2. Janakiram, B. (2017). *Training and Development*. New Delhi: Dreamtech Press.
3. Page, R., & Tickell. M (2014). *Learning and Development: A practical introduction*. London:Kogan Page.
4. Raymond, N., & K, Amitabh. (2018). *Employee Training and Development* (7th ed.) New York: Mc Graw-Hill Education.
5. Ross, S.C. (2019). *Training and Development in organizations*. New York: Routledge Press, Taylor and Francis.

SUGGESTED READINGS:

1. Dessler, G. (2017). *Human Resource Management* (15th Edition). New Delhi: Pearson Education.
2. Goldstein, I.L., & Ford, J.K. (2014). *Training in Organization* (4th Edition). USA:Thomson Wadsworth,.

3. Lynton, R.P., & Pareek, U. (2015). *Training for Organizational Transformation Part I & II*. New Delhi: Sage Publications.
4. Mamoria, C.B., & Gankar, S.V. (2017). *Personnel Management Text & Cases*. (21st Revised Edition). Mumbai: Himalaya Publishing House.

SEMESTER III

PLO 316: SPECIALIZATION PRACTICUM

Number of Credits	04
Teaching Hours	48 hours
Marks	100 (40 Internal and 60 External)
Duration of Lecture	01 hour
Duration of Examination	03 hours

Course Objectives:

1. To develop knowledge to administer and interpret psychological assessment tools.
2. To understand concepts of adaptive/ non-adaptive behavior to case formulations and diagnosis in the context of human development.
3. To understand techniques of assessment and report writing in mental health settings.

Learning Outcomes:

At the end of this course, the learner will be able to:

1. Administer and interpret psychological assessment tools to target groups.
2. Discuss concepts of adaptive/ non-adaptive behavior to case formulations and diagnosis in the context of human development.
3. Demonstrate skills of interviewing, case history eliciting, and report writing in mental health settings.

(FIELD SETTING TO BE SELECTED AS PER THE SPECIALIZATION)

I – PSYCHOLOGICAL TESTING

(01 Credit, 12 Hours)

1. Rapport building, Diagnosis and Assessment

2. Taking a case history, conducting Mental Status Examination, testing rationale
3. Test demonstrations (MMPI, TAT, DAP, Rorschach, and related) and Case protocol analysis
4. Case conferences
 - Assessment will be conducted through simulated case analysis and case presentations

II – OBSERVATION IN FIELD SETTINGS

(01 Credit, 12 Hours)

1. Observation in various field settings: NGOs, schools, private practitioner clinics, companies and industrial/ corporate organizations.
2. Observation log book to be maintained.

III – PARTICIPATORY INVOLVEMENT IN COMMUNITY SERVICE

(01 Credit, 12 Hours)

1. Attending workshops and certificate courses to enhance core competency skills
2. Organizing and conducting workshops for specific target groups (adolescents, parents, educators, employees etc.) to promote awareness and engage in psycho-education on critical psychological issues
 - Assessment will be conducted on the basis of a documented report, including photographs and permission letters, submitted for evidence purpose

IV – CLIENT INTERACTION AND CASE WRITING

(01 Credit, 12 Hours)

06 cases to be assessed as specified below:

Clinical Psychology: child – 01, adolescents – 02, adults – 02, geriatric – 01

Counselling Psychology: child – 01, adolescents – 02, adults – 02, geriatric – 01

Human Resource Management: adults – 04, geriatric – 02

The student has to maintain a journal to include the following: Detailed case history, mental status examination, testing rationale with basic test details, test interpretation, points to consider, suggested interventions, prognosis

SPECIALIZATION: CLINICAL PSYCHOLOGY

SEMESTER IV

PLO 401: PSYCHOTHERAPY

Number of Credits 04

Teaching Hours	48 Hours
Marks	100 (40 ISA and 60 SEA)
Duration of Lecture	01 Hours
Duration of Examination	03 Hours

Course Objectives:

1. To understand the therapeutic approaches available in the treatment of psychological disorders
2. To examine the intervention techniques as postulated by the therapeutic approaches.
3. To develop knowledge of the application of various psychotherapeutic techniques in varied techniques

Learning Outcomes:

At the end of this course, the learner will be able to:

1. Outline the therapeutic approaches available in the treatment of psychological disorders
2. Explain the intervention techniques as postulated by the therapeutic approaches.
3. Apply various psychotherapeutic techniques in varied settings.

I – PSYCHOTHERAPY: ANALYTICAL APPROACHES (12 Hours)

1. Counselling theory, competency and treatment planning
2. Psychoanalysis
3. Transactional analysis

II – PSYCHOTHERAPY: HUMANISTIC-EXISTENTIAL APPROACHES (12 Hours)

1. Person centered counselling and psychotherapy
2. Existential counselling and psychotherapy
3. Gestalt counselling and psychotherapy

III – PSYCHOTHERAPY: ACTION-ORIENTED APPROACHES (12 Hours)

1. Behaviour therapy
2. Cognitive –behaviour therapy

3. Rational Emotive behaviour therapy
4. Evidence-based cognitive behavioural approaches: dialectical behaviour therapy and Trauma focused cognitive behavioural therapy

IV – PSYCHOTHERAPY: POST MODERN APPROACHES

(12 Hours)

1. Solution-based approach
2. Narrative and Collaborative approaches
3. Feminist and multicultural counselling and psychotherapy

NOTE: All the therapies will cover the following:

- Concepts
- Overview of the counseling process
- Counselling relationship
- Goal setting
- Interventions and special concerns in therapy

BOOKS FOR STUDY:

1. Corey, G., & California State University. (2013). *Theory and practice of counseling and psychotherapy*. Belmont, Calif: Wadsworth.
2. Gehart, Diane R. (2016) *Mastering competencies in family therapy :a practical approach to theories and clinical case documentation* Belmont, CA : Brooks/Cole
3. Gehart, Diane R. (2013) *Theory and treatment planning in Counselling and Psychotherapy*. Cengage Learning: Brooks/Cole
4. Seligman, L. & Reichenberg, L.W. (2010). *Theories of Counseling and psychotherapy: systems, strategies, and skills*. Boston : Prentice Hall
5. Sharf, R. S. (2014). *Theories of psychotherapy and counselling: Concepts and cases*. Pacific Grove: Brooks/Cole Pub. Co.

SUGGESTED READINGS:

1. George, R. and Cristiani, T. (1995). *Counseling: Theory and practice*. Old Tappen, United States: Pearson Education, p.28.
2. James, R. K., & Gilliland, B. E. (2003). *Theories and strategies in counseling and psychotherapy* (5th ed.). Needham Heights, MA, US: Allyn & Bacon.

3. Prochaska, J. O., & Norcross, J. C. (2003). *Systems of psychotherapy: A transtheoretical analysis*. Pacific Grove, CA: Brooks/Cole Pub.

SEMESTER IV

PLO 402: PSYCHOSOCIAL REHABILITATION

Number of Credits	04
Contact Hours	48 hours
Marks	100 (40 ISA and 60 SEA)
Duration of Lecture	01 hour
Duration of Examination	03 hours

Course Objectives:

1. To develop knowledge of the concepts, nature, scope, theories, models and ethical concerns in psychosocial rehabilitation.
2. To examine the assessment strategies and ways of engaging clients in the process of recovery so as to build a recovery focused therapeutic relationship and collaborative rehabilitation plan.
3. To sketch an understanding of specific skills and interventions such as formulating a rehabilitation goal, strengths assessment and treatment adherence.
4. To evaluate the critical role of life care planning and community support systems in facilitating psychosocial recovery.

Learning Outcomes:

At the end of this course, the learner will be able to:

1. Describe the concepts, nature, scope, theories, models and ethical concerns in psychosocial rehabilitation.
2. Demonstrate skills and intervention strategies within the context of comprehensive rehabilitation treatment planning.
3. Discuss assessment strategies and the importance of client engagement in the recovery focused therapeutic relationship and rehabilitation plan.
4. Formulate a rehabilitation treatment plan that aims at reconnecting/integrating clients into the community through life care planning and community support systems.

I - INTRODUCTION TO PSYCHOSOCIAL REHABILITATION**(12 Hours)**

1. Understanding the nature and scope of psychosocial rehabilitation
2. Concepts of ability, disability, recovery and rehabilitation
3. Theories and models in rehabilitation psychology: Medical, neuropsychological, social, and bio-psychosocial models
4. Ethical issues in rehabilitation

II - THERAPEUTIC RELATIONSHIP AND REHABILITATION PLAN**(12 Hours)**

1. Components of therapeutic relationship, therapeutic alliance and treatment outcomes
2. Client engagement in the therapeutic process
3. Overcoming strains in the therapeutic alliance and resolving alliance ruptures
4. The assessment strategy
5. The rehabilitation plan

III - THERAPEUTIC SKILLS AND INTERVENTIONS**(12 Hours)**

1. Deciding on life changes: Role of motivational interviewing
2. Individual recovery planning: aligning values, strengths and goals
3. Activation and related interventions
4. Cognitive remediation
5. Treatment adherence

IV - COMMUNITY AND PEER-SUPPORT**(12 Hours)**

1. Social skills and employment
2. Promoting healthy lifestyles
3. Living skills
4. Peer support in mental health service context
5. Supporting families and carers

BOOKS FOR STUDY:

1. Corrigan, P. W. (2016). *Principles and practice of psychiatric rehabilitation: An empirical approach*. Guilford Press.
2. Cox, D. R., Cox, R. H., & Caplan, B. (2013). *Specialty competencies in rehabilitation psychology*. Oxford University Press.

3. King, R., Lloyd, C., & Meehan, T. (2013). *Handbook of psychosocial rehabilitation*. John Wiley & Sons.
4. Pratt, C. W., Gill, K. J., Barrett, N. M., & Roberts, M. M. (2013). *Psychiatric rehabilitation*. Academic Press.

SUGGESTED READINGS:

1. Frank, R. G., Rosenthal, M., & Caplan, B. (2010). *Handbook of rehabilitation psychology* (2nd ed.). Washington, DC, US: American Psychological Association.
2. King, R., Lloyd, C., Meehan, T., Deane, F., & Kavanagh, D. (Eds.). (2012). *Manual of psychosocial rehabilitation*. John Wiley & Sons.
3. Sunder, S. (2010). *Textbook of Rehabilitation* (3rd ed.). Chennai: Jaypee brothers Medical Publishers.

SEMESTER IV

PLO 403: CLINICAL MENTAL HEALTH COUNSELLING

Number of Credits	04
Contact Hours	48 hours
Marks	100 (40 ISA and 60 SEA)
Duration of Lecture	01 hour
Duration of Examination	03 hours

Course Objectives:

1. To develop an understanding of the foundational elements for clinical mental health counselling and its impact on clinical practice.
2. To understand the procedures of assessment, diagnosis, treatment planning, clinical documentation and record maintenance in clinical mental health counselling.
3. To evaluate the methods and models of supervision and research in the practice of clinical mental health counselling.
4. To examine the current and future trends in the practice of clinical mental health counselling.

Learning Outcomes:

At the end of this course, the learner will be able to:

1. Describe the general framework and its impact on the practice of clinical mental health counselling.
2. Demonstrate knowledge of assessment, diagnosis, treatment planning, clinical documentation and record maintenance in clinical mental health counselling.
3. Judge the effectiveness of various methods and models of supervision and research in the practice of clinical mental health counselling.
4. Discuss how current and future trends facilitate and challenge the practice of clinical mental health counselling.

I - FRAMEWORK FOR CLINICAL MENTAL HEALTH COUNSELLING (12 Hours)

1. Foundational principles, history and evolution of clinical mental health counselling
2. Legal and ethical issues in clinical mental health counselling
3. Understanding advocacy and social justice
4. Continuum of care: Modalities, services, settings, and roles, professional issues

II - CLINICAL MENTAL HEALTH COUNSELLING PROCEDURES (12 Hours)

1. Assessing client concerns: clinical intake and diagnostic interviewing, mental status examination, quantitative and qualitative assessment
2. Diagnosis and treatment planning
3. Crisis management and disaster relief: Impact, responses, training
4. Clinical documentation and record maintenance

III - SUPERVISION AND RESEARCH IN CLINICAL PRACTICE (12 Hours)

1. Models of clinical supervision: Developmental, discrimination, peer, group supervision, triadic models

2. Maximizing supervision experience: Self-assessment, preparation, risk taking, self-reflection, feedback from authority and peers, bringing difficult topics for supervision
3. Using research to improve clinical practice: Evidence-based practice, scientist-practitioner model

IV - CURRENT & FUTURE TRENDS

(12 Hours)

1. Neuroscience in counselling: Neural anatomy, neuroscience and the therapeutic relationship, neurofeedback
2. Motivational interviewing: Basics of MI support for MI, practice of MI
3. Emotionally Focused Couple Therapy and Dialectical Behaviour Therapy
4. Trauma-Focused Cognitive Behavioural Therapy (TF-CBT)
5. Mindfulness and spirituality in clinical mental health counselling

BOOKS FOR STUDY:

1. Gerig, M. S. (2017). *Foundations for clinical mental health counselling: An introduction to the profession*. Upper Saddle River: Pearson
2. Gladding, S. T., & Newsome, D. W. (2017). *Clinical mental health counselling in community and agency settings*. Pearson.
3. Watson, J. C., & Schmit, M. K. (2019). *Introduction to Clinical Mental Health Counseling: Contemporary Issues*. Sage Publications.

SUGGESTED READINGS:

1. Sherperis, C. J., & Sheperis, D. S. (2014). *Clinical mental health counselling: Fundamentals of applied practice*.
2. Young, J. S., & Cashwell, C. S. (Eds.). (2016). *Clinical mental health counselling: Elements of effective practice*. Sage Publications.

SEMESTER IV

PLO 404: CLINICAL NEUROPSYCHOLOGY

Number of Credits	04
Contact Hours	48 hours
Marks	100 (40 ISA and 60 SEA)

Duration of Lecture 01 hour

Duration of Examination 03 hours

Course Objectives:

1. To sketch an understanding of the concepts, principles, theories, issues and relevance of neuropsychology in clinical and forensic settings.
2. To develop knowledge of pediatric, adult, and geriatric cognitive and neurological disorders.
3. To apply knowledge of pediatric, adult, and geriatric neuropsychological disorders to prognosis and treatment planning.
4. To implement interventions and strategies for neuropsychological rehabilitation in the clinical context.

Learning Outcomes:

At the end of this course, the learner will be able to:

1. Demonstrate fundamental knowledge and comprehension of the basic terminology and core concepts including principles, theories, issues and relevance of neuropsychology in clinical and forensic settings.
2. Describe and differentiate disorders across the lifespan through review of pediatric, adult, and geriatric cognitive and neurological disorders.
3. Extend knowledge of pediatric, adult, and geriatric neuropsychological disorders to prognosis and treatment planning.
4. Integrate knowledge to the design of individualized patient interventions and suggest directions for rehabilitation

I - INTRODUCTION TO CLINICAL & FORENSIC NEUROPSYCHOLOGY (12 Hours)

1. Historical background to modern theories of clinical neuropsychology
2. Relevance of neuropsychology for clinical psychology practice
3. Basic concepts and principles of neuropsychological assessment
4. Psychological and psychiatric aspects of brain disorder: Nature, assessment and implications for clinical psychology
5. Issues in clinical and forensic neuropsychological practice

II - PEDIATRIC, ADULT, AND GERIATRIC NEUROPSYCHOLOGY (12 Hours)

1. Pediatric neuropsychology: Ethical issues with children, acquired central nervous system difficulties, neurodevelopmental disorders, pediatric clinical neuropsychological assessment
2. Adult neuropsychology: Disorders of memory, language and communication, acquired disorders of voluntary movement, adult clinical neuropsychological assessment
3. Geriatric neuropsychology: Ethical issues, neuropsychological aging difficulties, geriatric clinical neuropsychological assessment

III - PROGNOSIS AND TREATMENT PLANNING

(12 Hours)

1. Premorbid patient factors: Intellectual abilities, personality factors, social support network, age, gender
2. Types of difficulties expressed by the patient: Nature and extent of changes, course of illness or injury
3. Ways to enhance recovery: Spontaneous recovery, recovery of old functional systems, development of new functional systems, changing the environment

IV – CLINICAL NEUROPSYCHOLOGICAL REHABILITATION

(12 Hours)

1. Principles of cognitive rehabilitation
2. Theoretical approaches to cognitive rehabilitation
3. Interventions for psychological problems after brain injury
4. Neurorehabilitation strategies for people with neurodegenerative conditions

BOOKS FOR STUDY:

1. Goldstein, L. H., & McNeil, J. E. (Eds.). (2012). *Clinical neuropsychology: A practical guide to assessment and management for clinicians*. John Wiley & Sons.
2. Gurd, J.M., Kischka, U. & Marshall, J.C. (2013). *The handbook of clinical neuropsychology* (2nd ed.).NY, NY: Oxford University Press.
3. Heilman, K. M., & Valenstein, E. (Eds.). (2012). *Clinical neuropsychology* (4th ed.). New York, NY, US: Oxford University Press.
4. Morgan, J. E., & Ricker, J. H. (Eds.). (2017). *Textbook of clinical neuropsychology*. Taylor & Francis.

SUGGESTED READINGS:

1. Holtz, J. L. (2010). *Applied clinical neuropsychology: An introduction*. Springer Publishing Company.
2. Lezak, M. D., Howieson, D. B., Bigler, E. D., & Tranel, D. (2012). *Neuropsychological assessment* (5th ed.). New York, NY, US: Oxford University Press.
3. Ogden, J. A. (2005). *Fractured minds: A case-study approach to clinical neuropsychology* (2nd ed.). New York, NY, US: Oxford University Press.

SEMESTER IV

PLO 405: CLINICAL GEROPSYCHOLOGY

Number of Credits	04
Teaching Hours	48 Hours
Marks	100 (40 ISA and 60 SEA)
Duration of Lecture	01 Hours
Duration of Examination	03 Hours

Course Objectives:

1. To apply various geriatric assessment to formulate a comprehensive plan for treatment.
2. To examine the various sources causing psychological distress among adults.
3. To develop knowledge of various interventions that can be employed with older adults.

Learning Outcomes:

At the end of this course, the learner will be able to:

1. To apply various geriatric assessment to formulate a comprehensive plan for treatment.
2. Identify the various sources causing psychological distress, i.e. Depression, anxiety, mood disorders, personality disorders, psychosis, among older adults.
3. To apply knowledge of interventions such as Cognitive behaviour Therapy, Cognitive grief therapy, exercise and health promotion to older adults.

I – CLINICAL GEROPSYCHOLOGY: AN INTRODUCTION

(12 Hours)

1. Historical perspectives
2. Successful development and ageing: Theory and intervention
3. Transitions in later life
4. Moral and ethical considerations

II – GERIATRIC ASSESSMENT AND FORMULATION

(12 Hours)

1. Interviewing older adults
2. Assessing change of cognitive trajectories over time in later life
3. Evaluation and treatment of geriatric neurocognitive disorders
4. Older adults and long-term care: Trends and challenges in mental health treatment

III - SOURCES OF PSYCHOLOGICAL DISTRESS AMONG OLDER ADULTS

(12 Hours)

1. Loneliness and health
2. Depression and anxiety
3. Mood disorders, personality disorders and psychosis
4. Life-style risks and health

IV – INTERVENTIONS FOR OLDER ADULTS

(12 Hours)

1. Cognitive-Behaviour Therapy
2. Cognitive Grief Therapy
3. Psychological interventions in non-mental health settings
4. Cognitive impairment: Exercise and health promotion

BOOKS FOR STUDY:

1. Bush, S.S., Allen, R.S., & Molinari, V. (2016). *Ethical practice in geropsychology*. Washington, DC: American Psychological Association.
2. Hersen, M., & Van Hassett, V.B. (Eds.). (2013). *Handbook of clinical geropsychology*. Springer Science & Business Media.
3. Lichtenberg, P.A., Mast, B.T., Carpenter, B.D., Wetherell, J.L., & American Psychological Association (2015). *APA handbook of clinical geropsychology*. Washington, DC: American Psychological Association.

SUGGESTED READINGS:

1. Panchana, N.A., & Laidlaw, K. (2014). The Oxford handbook of clinical geropsychology.
2. Panchana, N.A., Laidlaw, K., & Knight, B.G. (Eds.). (2010). Casebook of clinical geropsychology: International perspectives on practice. USA: Oxford university press.
USA: Oxford University Press.

SPECIALIZATION: COUNSELLING PSYCHOLOGY**SEMESTER IV****PLO 406: COUNSELLING SPECIFIC POPULATIONS**

Number of Credits	04
Contact Hours	48 hours
Marks	100 (40 ISA and 60 SEA)
Duration of Lecture	01 hour
Duration of Examination	03 hours

Course Objectives:

1. To develop an understanding of the characteristics and needs of clients in specific populations.
2. To examine causal factors, and preventive and treatment strategies for counselling clients in specific populations.

Learning Outcomes:

At the end of this course, the learner will be able to:

1. Describe the characteristics and needs of clients in specific populations.
2. Demonstrate the ability to apply major counselling strategies to respond to the distinct needs of clients in specific populations.

I- SUBSTANCE ABUSE COUNSELLING**(12 Hours)**

1. Understanding substance abuse: Definition and diagnosis, drugs and their effects, motivational interviewing
2. The process of behaviour change: Assessment and treatment planning, helping clients change, empowering clients with group work, maintaining change in substance abuse behaviours
3. The context of change: Working with families, program planning and evaluation, preventing substance abuse

II - COUNSELLING FOR EATING DISORDERS

(12 Hours)

1. Understanding eating disorders and its causes: Hidden meanings and motivations, assessment and evaluation
2. Cognitions and eating disorders: Unhelpful thinking styles, challenging negative thoughts and positive self-talk
3. Social aspects of eating disorders: Eating disorders and relationships, family roles, eating disorders in the workplace and positive communication
4. Treatment of eating disorders and maintenance of recovery: CBT, damage limitation, relapse prevention, aiding recovery

III- COUNSELLING FOR SPECIAL POPULATIONS IN SCHOOL

(12 Hours)

1. Students with physical and emotional problems
2. Students involved with the Juvenile justice system
3. Gifted students
4. Counselling students to increase motivation and school completion
5. Students with Incarcerated parents

IV: COUNSELLING SPECIAL GROUPS

(12 Hours)

1. Counselling sexual minorities
2. Suicide prevention and management
3. Trauma and sexual abuse counselling
4. Single parents and blended families

BOOKS FOR STUDY:

1. Brooks, F., & McHenry, B. (2015). *A contemporary approach to substance use disorders and addiction counseling*. John Wiley & Sons.
2. Connors, G. J., DiClemente, C. C., Velasquez, M. M., & Donovan, D. M. (2016). *Substance abuse treatment and the stages of change: Selecting and planning interventions*. Guilford Press.
3. Davies, N., & Bacon, E. (2016). *Eating disorder recovery handbook: A practical guide to long-term recovery*. Jessica Kingsley Publishers.
4. Fisher, E. S., & Kennedy, K. S. (2016). *Counselling special populations in schools*. Oxford University Press.
5. James, R., & Gilliland, B. (2016). *Crisis intervention strategies* (8th ed.). Cengage Learning.
6. Reeves, A. (2010). *Counselling suicidal clients*. Sage Publications.
7. Vacc, N. A., DeVaney, S. B., & Brendel, J. M. (Eds.). (2015). *Counselling multicultural and diverse populations: Strategies for practitioners* (4th ed.). Routledge.

SUGGESTED READINGS:

1. Gilbert, M. S. (2005). *Counselling for eating disorders*. Sage Publications.
2. Lewis, J. A., Dana, R. Q., & Blevins, G. A. (2014). *Substance abuse counseling*. Cengage Learning.
3. Velleman, R. (2011). *Counselling for alcohol problems*. Sage Publications.
4. Wright, H. N. (2011). *The complete guide to crisis & trauma counseling: What to do and say when it matters most*. Gospel Light Publications.

SEMESTER IV

PLO 407: MARITAL COUNSELING AND FAMILY THERAPY

Number of Credits 04

Teaching Hours 48 Hours

Marks 100 (40 ISA and 60 SEA)

Duration of Lecture 01 Hours

Duration of Examination 03 Hours

Course Objectives:

1. To understand the vulnerabilities that arise in marriage and families.
2. To examine the nature of marital counselling.
3. To implement the theories and interventions in family therapy.

Learning Outcomes:

At the end of this course, the learner will be able to:

1. Recognize vulnerabilities that arise in marriage and families.
2. Explain the nature of marital counselling.
3. Apply theories and interventions in family therapy

I – UNDERSTANDING MARRIAGE AND FAMILY IN THE MODERN CONTEX T

(12 Hours)

1. Marriage and Intimate relationships: Moving toward marriage, Marital Adjustment across the family life cycle
2. Vulnerable areas in Marriage and Families
3. Changing trends in marriage and family structure
4. Nurturing healthy relationships: Principles of a good marriage

II – NATURE OF MARITAL COUNSELLING

(12 Hours)

1. Nature of Marital Counselling: definition, nature and scope
2. Objectives of marital counselling: domains of intervention, balance in marriage and system variables targeted for change
3. Focus of Marital counselling: Assessment of marriage, relationship, and conflict
4. Structuring of the counselling session and therapeutic responses to special issues in counselling

III – INTERVENTION IN MARITAL COUNSELLING

(12 Hours)

1. Assumptions and Intervention overview in marital counselling

2. Interventions to address issues of motivation, meaning and management
3. Working through and acceptance based interventions: resistance to change, avoiding relapse, emotion and meta-emotion, dealing with perpetual problems
4. Solution focused interventions: enhancing marital friendship, resolving conflicts, buffering children from marital conflict, working as a team and terminating therapy

IV – FAMILY THERAPY

(12 Hours)

1. Nature of Family therapy: objectives, perspectives and scope
2. Structuring of the family counselling session: principles, challenges and risk
3. Approaches to Family therapy: Bowen's intergenerational approach, Structural family therapy approach, Strategic therapy approach
4. Current trends in family therapy: psycho-educational approach, professional training and organizations, family law, medicine, gender-related and multicultural aspects

BOOKS FOR STUDY:

1. Ferrier, S., & McDermid, V. (2017). *Marriage*. London: Virago.
2. Gottman, J. M., & Silver, N. (2018). *The seven principles for making marriage work*. New York: Three Rivers Press.
3. Gottman, J. S., Gottman, J. M., & Siegel, D. J. (2015). *10 principles for doing effective couples therapy*. New York: W.W. Norton & Company.
4. Sharf, R. S. (2011). *Theories of psychotherapy and counselling: Concepts and cases*. Pacific Grove: Brooks/Cole Pub. Co.

SUGGESTED READINGS:

1. Bubenzer, D. L. and West, J. D. (2002). *Counselling couples*. (10th ed.). Delhi: SAGE Publications India Pvt. Ltd.
2. Peterson, G.W. & Bush K.R. (2013). *Handbook of marriage and the family*. New York, NY, US: Springer.
3. Sherman, R., & Fredman, N. (2015). *Handbook of structured techniques in marriage and family therapy*. New York: Routledge.

SEMESTER IV

PLO 408: COUNSELLING INDIVIDUALS WITH LIFE-THREATENING ILLNESS

Number of Credits 04

Contact Hours	48 hours
Marks	100 (40 ISA and 60 SEA)
Duration of Lecture	01 hour
Duration of Examination	03 hours

Course Objectives:

1. To sketch an outline of the historical perspectives and overview of counselling individuals with life-threatening illness.
2. To analyze the complexities of life-threatening illness in each phase of the illness trajectory.
3. To comprehend the experience of life-threatening illness from the perspective of the family.

Learning Outcomes:

At the end of this course, the learner will be able to:

1. Explain the historical perspectives and develop sensitivity to the individual as a whole person and respond appropriately to illness concerns.
2. Identify effective counselling strategies and interventions for each phase of illness, i.e., prediagnostic, diagnostic, chronic, recovery, and terminal phase.
3. Recognize and respond to the emotional concerns of the family and discuss specific family tasks to facilitate support through the course of illness.

I – HISTORICAL PERSPECTIVES AND OVERVIEW (12 Hours)

1. Historical perspectives on dying and illness
2. Seven sensitivities of effective professional caregivers
3. Sensitivities to families, different age groups, populations, generational differences
4. Responses to life-threatening illnesses: Physical, cognitive, emotional, behavioural, and spiritual

II - COUNSELLING IN VARIOUS PHASES OF ILLNESS (12 Hours)

1. The pre-diagnostic phase: Symptom related factors, physical, psychological, situational and social factors, health seeking - process and contexts

2. The crisis of diagnosis: Understanding the disease, maximizing coping strengths and limiting weaknesses, exploring the impact of the disease on self and others, ventilating feelings and fears, the end of the diagnostic phase
3. The chronic phase of illness: Managing symptoms, side effects, stress; health regimens, social support, isolation, normalizing life, preserving self-concept, redefining relationships, finding meaning, the end of the chronic phase

III - COUNSELLING CLIENTS IN RECOVERY AND IN THE TERMINAL PHASE

(12 Hours)

1. Counselling clients in recovery: Dealing with the residues of illness, coping with ongoing fears and anxieties, fear of recurrence, examining lifestyle issues and reconstructing one's life, redefining relationships with caregivers
2. Counselling clients in the terminal phase: Discussing death, decisions in the terminal phase, end-of-life phenomena

IV - COUNSELLING FAMILIES DURING A LIFE-THREATENING ILLNESS

(12 Hours)

1. The experience of illness: A family perspective
2. Assessing factors that affect family relations
3. Assessing caregiving
4. Family tasks throughout the illness
5. Supporting families at the time of death

BOOKS FOR STUDY:

1. Altschuler, J. (2011). *Counselling and psychotherapy for families in times of illness and death*. Palgrave Macmillan.
2. Doka, K. J. (2013). *Counselling individuals with life-threatening illness*. Springer Publishing Company.
3. Werth, J. L. (Ed.). (2012). *Counselling clients near the end of life: A practical guide for mental health professionals*. Springer Publishing Company.
4. Zeppetella, J. (2012). *Palliative care in clinical practice*. London: Springer Publishing Company.

SUGGESTED READINGS:

1. Heyse-Moore, L. (2008). *Speaking of dying: A practical guide to using counselling skills in palliative care*. Jessica Kingsley Publishers.
2. Humphrey, G. M., & Zimpfer, D. G. (2007). *Counselling for grief and bereavement*. Sage Publications.
3. Watson, M., Lucas, C., Hoy, A., & Wells, J. (2009). *Oxford handbook of Palliative care* (2nd ed.). New York: Oxford University Press.

SEMESTER IV

PLO 409: CRISIS AND TRAUMA COUNSELLING

Number of Credits	04
Teaching Hours	48 Hours
Marks	100 (40 ISA and 60 SEA)
Duration of Lecture	01 Hours
Duration of Examination	03 Hours

Course Objectives:

1. To understand the nature and stages of crisis and trauma.
2. To plan strategic interventions relevant to crisis and trauma management.
3. To examine the clinical outcomes of crisis and trauma.

Learning Outcomes:

At the end of this course, the learner will be able to:

1. Discuss the nature and stages of crisis and trauma.
2. Determine strategic interventions relevant to crisis and trauma management.
3. Explain the clinical outcomes of crisis and trauma which will place them in an advantageous position to deal with crisis situation in future.

I – INTRODUCTION TO CRISIS AND TRAUMA

(12 Hours)

1. Crisis: Definition, Categories of Crisis, Normative and Traumatic Stressor

2. Trauma: Definition, The Role of Triggers, Risk Factors, Response to Trauma
3. Trauma Related Disorders: Post-Traumatic Stress Disorder, Major Depressive Disorder
4. Theories: Intervention Theory, Expanded Theory, Applied Theory

II – SPECIFIC CRISIS AND TRAUMA – I

(12 Hours)

1. Traumatic Death and the Crisis of Suicide
2. Family Crisis, Personal Loss, Bereavement and Grief
3. Cultural Sensitivity in Crisis Situations
4. Crisis Related to Serious Illness and Disabilities

III – SPECIFIC CRISIS AND TRAUMA - II

(12 Hours)

1. A Marriage or Partnership in Crisis
2. Disaster Trauma Response
3. The Crisis of Violence and Abuse
4. Crisis at Workplace

IV – THERAPEUTIC INTERVENTIONS IN CRISIS AND TRAUMA

(12 Hours)

1. Crisis and Disaster Management Skills
2. ABC Model of Crises Intervention
3. Trauma Recovery Models: Albert Roberts' Seven-Stage Crisis Intervention Model, Mitchell's Critical Incident Stress Management intervention system
4. Tools of Trade: Listening, Basic Strategies and Interventions
5. Telephone and Online Crisis Counselling

BOOKS FOR STUDY:

1. Elena, W. (2018). *Trauma survivors' strategies for healing*: California: Althea Press.
2. James, R.K., & Gilliland, B.E. (2017). *Crisis intervention strategies*. Boston: Cengage Learning.
3. Kurt, D. (2018). *The crisis intervention manual* (3rd ed.). California: Empathy Works
4. Steele, W. & Malchiodi, C. (2015). *Trauma-informed practices with children and adolescents*. USA: Routledge.

SUGGESTED READINGS:

1. Kolski, T.D., Jongsma, A.E., & Myer, R.A. (2014). *The crisis counseling and traumatic events treatment planner, with DSM-5 updates* (2nd Ed.). Wiley: New York, NY.
2. Dass-Brailsford, P. (2012). *A practical approach to trauma: Empowering interventions*. USA: Sage Publications.
3. Najavits, L. M. (2017). *Recovery from trauma and addiction*. New York: The Guilford Press.

SEMESTER IV

PLO 410: INTERVENTIONS IN POSITIVE PSYCHOLOGY

Number of Credits	04
Contact Hours	48
Duration of Lecture	01 Hour
Marks	100 (40 ISA and 60 SEA)
Duration of Examination	03 Hours

Course Objectives:

1. To understand the fundamental concepts of positive psychological interventions.
2. To examine established areas of interventions in positive psychology.
3. To apply positive psychological interventions across populations and contexts.

Learning Outcomes:

At the end of this course, the learner will be able to:

1. Describe the meaning, nature, importance of interventions in positive psychology and the general guidelines and challenges associated with developing and implementing positive psychological interventions.
2. Implement a strength-based practice through the use of gratitude, patience, creativity forgiveness, and empathy-related interventions in diverse settings.
3. Use positive psychological interventions across populations and contexts, i.e., clinical populations, chronic illnesses, terminally ill, substance abuse, workplace, classroom, rehabilitation, community.

I – INTRODUCTION TO INTERVENTIONS IN POSITIVE PSYCHOLOGY (12 Hours)

1. Interventions in positive psychology: Meaning, nature, importance
2. The relationship between counseling psychology and positive psychology
3. General guidelines for developing positive psychological treatment plans
4. Challenges associated with implementing positive psychological interventions

II - INTERVENTIONS IN POSITIVE PSYCHOLOGY - 1

(12 Hours)

1. Gratitude interventions: Interventions to increase gratitude in children, adolescents and adults
2. Positive psychological interventions for promoting forgiveness: Efficacious components of forgiveness interventions, unresolved questions about forgiveness interventions
3. Empathy-related interventions

III - INTERVENTIONS IN POSITIVE PSYCHOLOGY - 2

(12 Hours)

1. Creativity as a target and tool for positive interventions: Creativity as a tool for increasing well-being, building creativity-based positive interventions
2. Patience interventions to improve well-being: Defining and discriminating patience, possible applications of patience interventions
3. Positive family therapy interventions: Systems theory, positive family therapy, interventions in positive family therapy

IV- INTERVENTIONS ACROSS POPULATIONS AND CONTEXTS

(12 Hours)

1. Interventions across populations: Clinical populations, chronic illnesses, terminally ill, substance abuse
2. Interventions across contexts: Workplace, classroom, rehabilitation, community
3. Recent advances: Online positive psychological interventions, social identity interventions, forensic settings, posttraumatic growth, traumatic brain injury, positive neuroscience, cyberbullying

BOOKS FOR STUDY:

1. Carr, A. (2011). *Positive psychology: The science of happiness and human strengths*, (2nd ed.). Hove, UK; Routledge.

2. Dunn, D. S. (Ed.). (2017). *Positive Psychology: Established and Emerging Issues*. Routledge.
3. Lopez, S. J., Pedrotti, J. T., & Snyder, C. R. (2018). *Positive psychology: The scientific and practical explorations of human strengths*. Sage Publications.
4. Parks, A. C., & Schueller, S. (Eds.). (2014). *The Wiley Blackwell handbook of positive psychological interventions*. John Wiley & Sons.
5. Proctor, C. (Ed.). (2017). *Positive psychology interventions in practice*. Springer.
6. Warren, M. A., & Donaldson, S. I. (2017). *Scientific advances in positive psychology*. Westport, Connecticut: Praeger Publishers.

SUGGESTED READINGS:

1. Donaldson, S. I., Csikszentmihalyi, M., & Nakamura, J. (Eds.). (2011). *Applied positive psychology: Improving everyday life, health, schools, work, and society*. Routledge.
2. Lomas, T., Hefferon, K., & Ivztan, I. (2014). *Applied positive psychology: Integrated positive practice*. Sage.
3. Magyar-Moe, J. L. (2009). *Therapist's guide to positive psychological interventions*. Academic press.
4. Snyder, C. R., & Lopez, S. J. (2002). *Handbook of positive psychology*. New York: Oxford University.

SPECIALIZATION: HUMAN RESOURCE MANAGEMENT

SEMESTER IV

PLO 411: PERFORMANCE MANAGEMENT

Number of Credits	04
Teaching Hours	48 Hours
Marks	100 (40 ISA and 60 SEA)
Duration of Lecture	01 Hours
Duration of Examination	03 Hours

Course Objectives:

1. To understand the behavior of employees in the context of the workplace.

2. To develop knowledge of psychological factors that influence performance of an individual.
3. To plan and implement performance management strategies.

Learning Outcomes:

At the end of this course, the learner will be able to:

1. Explain the behavior of employees in the context of the workplace.
2. Identify the psychological factors that influence performance of an individual.
3. Implement performance management strategies.

I – FOUNDATIONS OF PERFORMANCE MANAGEMENT**(12 Hours)**

1. Human Resource Management: Definitions, Models, Theoretical Frameworks, Characteristics
2. Performance Management: Pre-requisites, Characteristics and Objectives, Principles, Benefits and Importance
3. Performance Management System: Objectives, Functions, Characteristics
4. Performance Counselling: Principles, Skills, Process

II – PERFORMANCE MANAGEMENT PROCESS**(12 Hours)**

1. Performance Planning: Characteristics, Principles, Process, Importance, Barriers
2. Performance Management: Characteristics, Objectives, Importance, Process
3. Performance Appraisal: Characteristics, Objectives, Importance, Principles, Methods, Process
4. Performance Monitoring: Characteristics, Objectives, Importance, Process

III – ETHICAL IMPLEMENTATION OF PERFORMANCE MANAGEMENT(12 Hours)

1. Performance Management Implementation: Bottle Necks, Strategies, Characteristics
2. Performance Management Linked Reward System: Objectives, Components, Implications
3. Ethics in Performance Management: Principles, Objectives, Ethical Issues and Dilemmas, Ethical Strategies, Developing Code of Ethics, Future Implications

IV – APPLICATION OF PERFORMANCE MANAGEMENT

(12 Hours)

1. Introduction to Case-Study Method
2. Performance Appraisal Checklist for Managers
3. Performance Appraisal Forms
4. Industry Specific Competencies and its implication for Performance Management

BOOKS FOR STUDY:

1. Aguinis, H. (2019). *Performance management* (6th ed.). Chicago: Chicago Business Press..
2. Kohli, A.S. & Deb, T. (2014). *Performance management*. New Delhi: Oxford University Press.
3. Murphy, K.R., Cleveland, J.N., & Hanscom, M.E. (2018). *Performance appraisal and management*. New Delhi: Sage Publications.
4. Rao, T.V. (2015). *Performance management: Toward organizational excellence*. New Delhi: Sage Publications.
5. Thorpe, R. (2015). *Performance management*. New Delhi: Palgrave Macmillan.

SUGGESTED READINGS:

1. Bhattacharyya, D. K. (2011). *Performance management systems and strategies*. New Delhi: Dorling Kindersley India Pvt. Ltd.
2. Daft, R.L. (2012). *Organizational theory and design* (7th ed.). Singapore: Thomson Asia Pvt. Ltd.
3. Deb, T. (2013). *Performance appraisal and management: Concepts, antecedents and implications*. New Delhi: Excel Books

SEMESTER IV

PLO 412: MARKETING PSYCHOLOGY AND CONSUMER BEHAVIOUR

Number of Credits	04
Teaching Hours	48 Hours
Marks	100 (40 ISA and 60 SEA)

Duration of Lecture 01 Hours

Duration of Examination 03 Hours

Course Objectives:

1. To develop conceptual knowledge related to the foundations of marketing psychology and consumer behaviour
2. To understand the effectiveness of marketing strategies and principles of marketing communication for organizations
3. To determine the role of psychology in understanding consumer behaviour

Learning Outcomes:

At the end of this course, the learner will be able to:

1. Explain conceptual knowledge related to the foundations of marketing psychology and consumer behavior.
2. Outline effectiveness of marketing strategies and principles of marketing communication for organizations
3. Apply psychology in understanding consumer behavior.

I – INTRODUCTION TO MARKETING PSYCHOLOGY (12 Hours)

1. Understanding marketing management: importance, scope, concepts
2. Developing marketing strategies: marketing and customer value, corporate and division strategic planning, business unit strategic planning, product planning
3. Scanning market environment: components of a modern marketing information system, internal records, marketing intelligence, analyzing the macro-environment, forecasting and demand measurement, marketing research, measuring market productivity

II – MARKETING IN ACTION (12 Hours)

1. Competitive strategies: competitive strategies for market leaders, product life cycle marketing strategies, marketing in an economic downturn
2. Launching new market offerings: new product options and challenges in development, organizational arrangements and managing the development process

3. Tapping into global markets: competing on a global basis, deciding which markets to enter and the program, country of origin effects

III – MARKETING COMMUNICATION

(12 Hours)

1. Designing and managing integrated marketing communications: role of marketing communications, developing effective communications, deciding on the marketing communications mix, managing the integrated marketing communications process
2. Managing mass communications: developing and managing an advertising program, deciding on media and measuring effectiveness, sales promotion, events, experiences and personal relations
3. Managing personal communications: direct marketing, interactive marketing, word of mouth, designing and managing the sales force

IV – CONSUMER BEHAVIOUR

(12 Hours)

1. Creating customer value and customer relationships: building customer value, satisfaction and loyalty, maximizing customer lifetime value, cultivating customer relationships
2. Analyzing consumer markets: factors influencing and psychological processes involved in consumer behavior
3. Buying decision process: 5 stage model, behavioral decision theory and behavioural economics

BOOKS FOR STUDY:

1. Chand, S. (2010). *Basics of marketing management: Theory and practice*. Amazon Asia-Pacific Holdings Private Limited
2. Kotler, P., & Keller, K. L. (2018). *Marketing management*. Harlow, United Kingdom: Pearson Education Limited.
3. Schiffmann, L.G., Wisenbilt, J.& Kumar. S.R. (2015). *Consumer behaviour*. (11th Edition). New Delhi: Pearson Education India.
4. Solomon, M. (2012). *Consumer behaviour* (10th Edition). New Jersey: Prentice Hall.

SUGGESTED READINGS:

1. Anderson, K. (2001). *Customer relationship management*. New York: McGrawHill

2. Bergeron B. (2002). *Essentials of CRM: A guide to customer relationship management*. John Wiley and Sons.
3. Underhill, P. (2008). *Why we buy: The science of shopping--updated and revised for the internet, the global consumer, and beyond*. New York: Simon & Schuster

SEMESTER IV

PLO 413: INNOVATION AND ENTREPRENEURSHIP

Number of Credits	04
Contact Hours	48 Hours
Marks	100 (40 ISA and 60 SEA)
Duration of Lecture	01 Hours
Duration of Examination	03 Hours

Course Objectives:

1. To develop knowledge of the concepts, theoretical insights and critical perspectives on innovation and entrepreneurship.
2. To understand the skills and strategies for innovative performance.
3. To analyze the interdependent, fast-changing, and diverse world of innovation and entrepreneurship.

Learning Outcomes:

At the end of this course, the learner will be able to:

1. Discuss the concepts, theoretical insights and critical perspectives on innovation and entrepreneurship.
2. Explain the skills and strategies for innovative performance.
3. Examine interdependent, fast-changing, and diverse world of innovation and entrepreneurship.

I - ENTREPRENEURSHIP: INTRODUCTION AND OVERVIEW (12 Hours)

1. Concept and Theories of entrepreneurship.

2. The Entrepreneur: Definitions, concepts, Entrepreneurial process and structure.
3. Entrepreneurial traits: Competencies, Characteristics, Qualities, Skills.
4. Growth of entrepreneurs: Role, Growth, Prospects and opportunities, Threats and challenges.
5. The entrepreneurial culture: Environment , Elements, Organization and cultural conformity, Business culture and culture of a society, Sub cultures , Organization's culture, Cultural change.

II - ENTREPRENEURSHIP DEVELOPMENT

(12 Hours)

1. Entrepreneurship training: Need and importance, Objectives, Designing an entrepreneurship training programme, Methods, Benefits.
2. Creating and starting a venture: Defining 'opportunity', Identifying a business opportunity, Sources of ideas, Steps in idea processing and selection, Establishment of an enterprise.
3. Project management: Concept, Project objectives and characteristics, Project classifications, The project cycle.
4. Intrapreneurs: Concept, Entrepreneurs versus Intrapreneurs.
5. Legal issues for entrepreneurs: Intellectual property, Legal issues in setting up the organization, Patents, Trademarks, Copyrights, Trade secrets, Licensing.

III - ENTREPRENEURIAL SUPPORT

(12 Hours)

1. Sources of finance: Internal and external sources, Norms for inventory and receivables, Financial management.
2. Incentives and subsidies: Concepts, Need for incentives, Central level subsidies and incentives, Subsidies and incentives in Goa, Self – employment schemes, Seed capital assistance.
3. Taxation benefits: Introduction, Taxation support for small scale sector industries, The taxation benefits to small scale sector industries.
4. Managing operation: Production management, Optimum selection of technology, Inventory control, Materials management, Purchasing.
5. Entrepreneurial marketing: Marketing management, Market research, Distribution channels, Problems of marketing, Institutionalized marketing for entrepreneurs.

IV - INNOVATION IN ENTREPRENEURSHIP

(12 Hours)

1. Innovation: Concept, Purposeful innovation, Principles, Sources, Characteristics of knowledge-based innovation.
2. Business incubation: Definition, Establishing business incubator, Types of incubators, Value framework of business incubators, Role of business incubators.
3. Corporate social responsibility: Concept, Corporate social responsibility in India, Changing views of management's responsibility, Social responsibilities of business towards different groups, Business ethic's core responsibilities of entrepreneurial performance.
4. Consumer protection in India: Introduction, Growth of market for consumers, Development of the consumer movement, Provisions of the consumer law, Consumer protection in India, Consumer protection in Goa.

BOOKS FOR STUDY:

1. Bagchi, S. (2016). *The high performance entrepreneur: Golden rules for success in today's world*. India: Penguin Random House.
2. Dervan, M. (2016). *To be an entrepreneur: Just get on with it*. UK: Panoma Press Limited.
3. Kuratko, D. F. (2017). *Entrepreneurship: Theory, process, and practice*. UK: Cengage Learning.
4. Pednekar, A. P. (2012). *Entrepreneurship*. Mumbai: Himalaya publishing house.
5. Wagner, T. (2012). *Creating innovators: The making of young people who will change the world*. NewYork: Scribner publications.

SUGGESTED READINGS:

1. Christensen, C. M., & Raynor, M. E. (2003). *The innovators solution: Creating and sustaining successful growth*. USA: Harvard Business School Publishing Corporation.
2. Desai, V. (2008). *Small scale industries and entrepreneurship*. (2nd ed.). Mumbai: Himalaya publishing house.
3. Desai, V. (2009). *The dynamics of entrepreneurial development and management: Planning for future sustainable growth*. (5th ed.). Mumbai: Himalaya publishing house.
4. Drucker, P. F. (2007). *Innovation and Entrepreneurship: Practice and principles*. London: Routledge Taylor & Francis Group.

SEMESTER III

PLO 414: BUSINESS AND MANAGERIAL COMMUNICATION

Number of Credits	04
Teaching Hours	48 Hours
Marks	100 (40 ISA and 60 SEA)
Duration of Lecture	01 Hours
Duration of Examination	03 Hours

Course Objectives:

1. To apply communication principles in a range of different business contexts.
2. To develop knowledge of effective strategies for written and oral communication.
3. To understand the key components of the job application process.

Learning Outcomes:

At the end of this course, the learner will be able to:

1. Utilize effective communication across cultures, ethical, global and technology contexts.
2. Identify effective strategies for oral and written communication i.e. persuasive written messages, business reports, media interviews, etc.
3. Demonstrate knowledge of the key components of the job application process i.e. writing *résumés*, *employment interviews*.

I – COMMUNICATION IN CONTEMPORARY ORGANIZATIONS (12 Hours)

1. Understanding the managerial communication process
2. Communicating across Cultures
3. Business Communication in Global and Technological Context
4. Business Communication and the Ethical Context

II - MESSAGE DESIGN AND PATTERNS (12 Hours)

1. Choosing the Best Process and Forms

2. Getting to the Point in Good - News and Neutral Messages
3. Maintaining Goodwill in Bad - News Messages
4. Persuasive Message and Proposals
5. Conducting a Winning Job Campaign

III – STRATEGIES FOR WRITTEN AND ORAL COMMUNICATION (12 Hours)

1. Written communication: Bad news and persuasive written messages, short and long reports, proposals, preparing informative and influential business reports, using visuals
2. Oral communication: Communicating effectively in business and group meetings and conversations, designing and delivering oral and online presentations, informative and persuasive speaking, press conference and media interviews

IV – PROFESSIONALISM AND THE JOB APPLICATION PROCESS (12 Hours)

1. Leveraging Technology for Better Writing
2. Conveying Professionalism through Correctness
3. Building careers and writing *résumés*
4. Employment interviews and follow up

BOOKS FOR STUDY:

1. Bovée, C. L., Thill, J. V., & Raina, R.L., (2016). *Business communication today* (13th ed.). Pearson.
2. Guffey, M. E., & Loewy, D., Almonte, R., (2018). *Essentials of business communication*. Nelson education.
3. Hynes, G. E., & Veltsos, J. R. (2018). *Managerial communication: Strategies and applications*. Sage Publications.
4. Kaul, A. (2014). *Effective business communication*. PHI Learning Pvt. Ltd.
5. Lesikar, R.V., Flatley, M.E., Rentz, K., Lentz, P., Pande, N., (2019) *Business Communication: Connecting in a Digital World*. McGraw Hill.

SUGGESTED READINGS:

1. Murphy, H.A., Hildebrandt, H.W. Thomas, J. P., (2008). *Effective business communication* (7th ed.). McGraw Hill.

2. Sengupta, S. (2011). *Business and managerial communication*. PHI Learning Pvt. Ltd.

SEMESTER IV

PLO 415: WORKPLACE COUNSELLING AND ETHICS

Number of Credits	04
Teaching Hours	48 hours
Marks	100 (40 Internal and 60 External)
Duration of Lecture	01 hour
Duration of Examination	03 hours

Course Objectives:

1. To develop an understanding of the fundamental concepts of workplace counselling.
2. To understand the stages and process of workplace counselling.
3. To examine the ethical principles underlying workplace counselling.

Learning Outcomes:

At the end of each course the learner will be able to:

1. Describe the nature, principles and models of workplace counselling.
2. Discuss the stages and process of workplace counselling.
3. Apply the ethical principles underlying workplace counselling.

I – UNDERSTANDING WORKPLACE COUNSELLING (12 Hours)

1. Definition, nature and principles of workplace counselling
2. Roles of workplace counsellors
3. Stress and workplace counselling
4. Impact of organizations on workplace counselling: individual and gender differences and their relevance to work

II – MODELS OF WORKPLACE COUNSELLING (12 Hours)

1. Individual Centric Models: counselling-orientation models, brief therapy models

2. Organization Centric Models: manager-based models, problem-focused models, work-oriented models, organizational-change
3. Wellness Centric models: welfare based model, internally based models, externally based models
4. Integrative model of workplace counselling

III – WORKPLACE COUNSELLING IN ACTION

(12 Hours)

1. Setting up Counselling in workplace
2. Evaluating workplace counselling
3. Training for workplace counselors
4. Supervising workplace counselling

IV – ETHICAL ISSUES IN WORKPLACE COUNSELLING

(12 Hours)

1. Ethical issues
2. Training in ethical decision making
3. Ethical principles for and to clients
4. Ethical principles for and to organizations

BOOKS FOR STUDY:

1. Cascio, W. F., & Aguinis, H. (2018). *Applied psychology in human resource management* (7th ed.). Pearson education.
2. French, R., Rayner, C., Rees, G., Rumbles, S. (2014). *Organization behaviour*. Hoboken, NJ: John Wiley & Sons.
3. Martin, J. & Fellenz, M.R. (2017). *Organizational behaviour and management*. Cengage Learning.
4. Wilson, F.M. (2017). *Organizational behaviour and gender*. London: Routledge.

SUGGESTED READINGS:

1. Bordeau, J., & Jesuthasan, R. (2011). *Transformative HR: how great companies use evidence based change for sustainable advantage*. Hoboken, NJ: John Wiley and Sons.
2. Carroll, M. (1996). *Workplace counselling: a systematic approach to employee care*. Sage publications.

3. Milne, A., (2010). *Counselling: Learn counseling skills for any situation* (4th ed.). John Murray Learning.

SEMESTER IV

PLO 416: SPECIALIZATION PRACTICUM

Number of Credits	04
Teaching Hours	48 hours
Marks	100 (40 Internal and 60 External)
Duration of Lecture	01 hour
Duration of Examination	03 hours

Course Objectives:

1. To develop planning and organization skills through interactive and experiential learning.
2. To analyze case studies with respect to problem identification and management plan.
3. To apply appropriate treatment goals in collaboration with the client.

Learning Outcomes:

At the end of each course the learner will be able to:

1. Demonstrate planning and organization skills by conducting workshops on selected topics related to mental health.
2. Examine case studies with respect to problem identification and management plan.
3. Implement appropriate treatment goals and clinical interventions in clinical settings

(FIELD SETTING TO BE SELECTED AS PER THE SPECIALIZATION)

I – THERAPEUTIC INTERVENTION: OVERVIEW (01 Credit, 12 Hours)

1. Rapport building and understanding client distress
2. Interventions (basic and advanced skills)
3. Formulating and executing the intervention plan
4. Case analysis and Case conferences

- Assessment will be conducted through simulated role-play exercises, movie reviews, group discussions

II – OBSERVATION IN FIELD SETTINGS

(01 Credit, 12 Hours)

1. Observation in various field settings: NGOs, schools, private practitioner clinics, companies and industrial/ corporate organizations.
2. Observation log book to be maintained.

III – CLIENT INTERACTION AND CASE WRITING

(02 Credits, 24 Hours)

10 cases to be assessed:

Clinical Psychology: child – 01, adolescents – 04, adults – 04, geriatric – 01

Counselling Psychology: child – 01, adolescents – 04, adults – 04, geriatric – 01

Human Resource Management: adults – 08, geriatric – 02

The student has to maintain a journal to include the following: Detailed case history, mental status examination, testing rationale with basic test details, test interpretation, points to consider, suggested interventions, prognosis

SEMESTER IV

PLO 417: DISSERTATION

SEMESTER IV	
Number of Credits	08
Marks	200 (80 ISA and 120 SEA)

Note:

OA-18A.4 Dissertation

1. Ordinarily, the Dissertation shall be spread over third and fourth Semesters and shall not generally constitute an entire Semester-equivalent of Credits. However, the DC/DFC may consider on case to case basis and reduce it to one Semester, if it involves full field-work or dissertation in other Institutes or Industries.

2. The DC/DFC shall decide at the end of the second Semester, the modalities relating to the dissertations, which shall be informed to the students.

3. Topics for dissertations shall be finalized by the student in consultation with the guiding teacher.

OA-18A.7 Evaluation of Dissertation

1. (a) The Dissertation shall be assessed by the Guide/Supervisor and by the DC/DFC. The student shall make a presentation of the work before the DC/DFC and students of the Department. The DC/DFC shall assess the work. Average of marks of all teachers attending the presentation shall be the evaluation of the dissertation which shall carry 60% of the total marks assigned for dissertation which shall be the SEA component.

(b) The Guide shall assess the Dissertation work independently for 40% marks which shall be the ISA component. The ISA shall be completed by the guide in the third semester based on the modalities decided by the concerned DC/DFC. If a student is willing to discontinue the dissertation due to poor performance in the ISA component, s/he shall be permitted to opt for required number of optional courses in the fourth semester.

ANNEXURE III

The Question Paper Format for a course paper of 4 credits (only theory) having SEA of 60 marks.

A. QUESTION PAPER FORMAT FOR SEA OF 60 MARKS:

Each unit will carry equal weightage of 15 marks as specified below:

QUESTION NO.	QUESTION TYPE	MARKS ALLOTTED
Q.NO. I (Based on Unit I only)	A. Short notes on <u>any two</u> out of three given. i) ii) iii)	<u>05</u>
	B. Essay type: answer <u>any one</u> out of the two given. i) ii)	<u>10</u>

Q.NO. II (Based on Unit II only)	A. Short notes on <u>any two</u> out of three given. i) ii) iii)	<u>05</u>
	B. Essay type: answer <u>any one</u> out of the two given. i) ii)	<u>10</u>
Q.NO. III (Based on Unit III only)	A. Short notes on <u>any two</u> out of three given. i) ii) iii)	<u>05</u>
	B. Essay type: answer <u>any one</u> out of the two given. i) ii)	<u>10</u>
Q.NO. IV (Based on Unit IV only)	A. Short notes on <u>any two</u> out of three given. i) ii) iii)	<u>05</u>
	B. Essay type: answer <u>any one</u> out of the two given. i) ii)	<u>10</u>
Total marks: 60		

D 3.3 Minutes of the Meeting of Board of Studies in Skill – Enhancement Courses held on 03/05/19.

Annexure I

Draft Syllabus

For

3 years CBCSBachelor of Science (Hons.) Interior Design Degree

B.Sc. Interior Design (Honors) Degree Program

Under CBCS w.e.f. 2019-20

Course Structure and List of papers

SEMESTER I

(F.Y. B.Sc.) ID

PAPER CODE	TITLE		CREDITS	TOTAL CREDITS
ID 101	Design Thinking	Theory	04	04
ID 102 GE	Anthropometry & Ergonomics	Theory	04	04
ID 103 A ID 103 B	Interior Design I – Fundamentals	Theory	03	06
		Practical	03	
ID 104 A ID 104 B	Construction Material I	Theory	03	06
		Practical	03	
ID 105 A ID 105 B	2D & 3D Graphics	Theory	03	06
		Practical	03	
AECC 1	Constitution of India & Human Rights	Theory	04	04

Total Credits	30
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[\(Back to Index\)](#) [\(Back to Agenda\)](#)

SEMESTER II

(F.Y. B.Sc.) ID

PAPER CODE	TITLE		CREDITS	TOTAL CREDITS
ID 201	History of Interior Design	Theory	04	04
ID 202 GE	Material Survey	Theory	04	04
ID 203 A ID 203 B	Interior Design II – Colors	Theory	03	06
		Practical	03	
ID 204 A ID 204 B	Construction Materials II	Theory	03	06
		Practical	03	
ID 205 A	Furniture Design I	Theory	03	06
		Practical	03	

ID 205 B				
AECC 2	Environmental Studies	Theory	04	04
Total Credits				30

SEMESTER III

(S.Y. B.Sc.) ID

PAPER CODE	TITLE		CREDITS	TOTAL CREDITS
ID 301	Interior Services I – Lighting	Theory	04	04
ID 302 GE	Visual Merchandising	Theory	04	04
ID 303 A ID 303 B	Interior Design III - Space Planning	Theory	03	06
		Practical	03	
ID 304 A	Construction & Detailing	Theory	03	06
		Practical	03	

ID 304 B				
ID 305 A	Furniture Design II	Theory	03	06
ID 305 B		Practical	03	
AECC 3	Indian History, Culture & Diversity	Theory	04	04
Total Credits				30

SEMESTER IV

(S.Y. B.Sc.) ID

PAPER CODE	TITLE		CREDITS	TOTAL CREDITS
ID 401	Interior Services II - Plumbing, Sanitation & Fire Safety	Theory	04	04
ID 402 GE	Art & Crafts of India	Theory	04	04

ID 403 A ID 403 B	Interior Design IV – Working Drawing	Theory	03	06
		Practical	03	
ID 404 A ID 404 B	CAD in Interiors I	Theory	03	06
		Practical	03	
ID 405 A SE ID 405 SE	SketchUp& V-Ray	Theory	03	06
		Practical	03	
AECC 4	Life Skills & Personality Development	Theory	04	04
Total Credits				30

SEMESTER V

(T.Y. B.Sc.) ID

PAPER CODE	TITLE		CREDITS	TOTAL CREDITS

ID 501	Interior Design V – ConstructionManagement	Theory	04	04
ID 502	Estimation, Costing & Specification for Interiors	Theory	04	04
ID 503 A ID 503 B	Textile & Accessories for Interiors	Theory	03	06
		Practical	03	
ID 504 A ID 504 B	Advanced CAD in Interiors	Theory	03	06
		Practical	03	
ID 505 A SE ID 505 SE	Model Making & Furniture Design	Theory	03	06
		Practical	03	
ID 506 DSE	Internship		04	04
Total Credits				30

SEMESTER VI

(T.Y. B.Sc.) ID

PAPER CODE	TITLE		CREDITS	TOTAL CREDITS
ID 601 GE	Interior Design VI – Professional Practice	Theory	04	04
ID 602	Sustainable / Environmental Design	Theory	04	04
ID 603 A ID 603 B	Interior Services III – Acoustics	Theory	03	06
		Practical	03	
ID 604 A ID 604 B	Portfolio Design for Interiors	Theory	03	06
		Practical	03	
ID 605 A ID 605 B	Interior Landscaping	Theory	03	06
		Practical	03	
ID 606 DSE	Project	Theory	04	04

Total Credits				30

Appendix B

Program: B.Sc. (Interior Design)

Course Code: ID 101 **Title of the Course : Design Thinking (Theory)**

Number of Credits: 4

Effective from AY: 2019-20

Prerequisites for the course	NIL		
Objectives	<ul style="list-style-type: none"> ❖ To introduce students to a new approach of innovative, fast and creative thinking ❖ To make students understand the importance of value creation. ❖ To make students exhibit required skills in problem solving and decision making. ❖ Time Management skills-tools to prioritize tasks. ❖ To make students understand the client behavior. 		
Content	Unit - 1 Why design thinking, The design process, concepts & terminology		8hrs
	Unit - 2 Design brief - intent, questions, target and data collection, Visualization& storytelling		8hrs
	Unit - 3		

	<p>Ethnography, Identifying insights, Journey mapping, Mind mapping, Observing natural habitats, Extracting patterns</p> <p>Unit - 4</p> <p>Developing design criteria, identifying end state of a project, Brainstorming, Generating fresh ideas</p> <p>Unit - 5</p> <p>Concept development - Choosing best ideas, assembling detail solutions, evaluating, summaries, Napkin pitch</p> <p>Unit - 6</p> <p>Assumption testing, Rapid prototyping, visual manifestation of concept</p> <p>Unit - 7</p> <p>Learning launches, Co creation, lead innovation, Quick & Inexpensive experiments, engaging stakeholders, development of new concepts</p>	<p>8hrs</p> <p>8hrs</p> <p>10 hrs</p> <p>10hrs</p> <p>8 hrs</p>
Pedagogy	Lectures/ Tutorials / Assignments / Team work / Self-Study	
References/Readings	<ol style="list-style-type: none"> 1. Charles Wallschlaeger & Synthia Busic Snyder, Basic Visual Concepts & Principles for artists, architects & designers, McGraw hill, USA, (1992). 2. Edward D. Mills - Planning the Architects Hand Book - Bitterworth, London, (1985). 3. Francis D.K. Ching - Architecture - Form Space and Order Van Nostrand Reinhold Co. (Canada), (1979) 4. Owen Cappleman & Michael Jack Kordan, Foundations in Architecture: An Annotated Anthology of beginning design projects, 	

	<p>Van Nostrand Reinhold, New York 2001).</p> <p>5. Paul Laseau, Graphic Thinking for Architects and Designers, John Wiley & Sons, New York, (2001).</p> <p>6. V.S.Pramar, Design fundamentals in Architecture, Somaiya Publications Pvt.Ltd., New Delhi, (1973).</p>
Learning Outcomes	<ul style="list-style-type: none"> ❖ Building confidence of handling a project with Analytical and out of box thinking methods with Design concepts and aesthetic detailing knowledge. ❖ Capability to go out in the field into any office and perform on par with professionals. ❖ Use of lighting (artificial and natural) considerations in design applications. ❖ The stages involved from client briefing to project execution and the stages of designing knowledge helps students understand the relevance of various subjects in interior designing.

Program: B.Sc. (Interior Design)

Course Code: ID 102 **Title of the Course : Anthropometry & Ergonomics(Theory)**

Number of Credits: 4

Effective from AY: 2019-20

Prerequisites for the course	NIL	
Objectives	<ul style="list-style-type: none"> ❖ To understand the relationship of human body with space ❖ To understand how different furniture design is adapted to suit the human body. ❖ Practical study on different spaces and circulation around 	
Content	<p>Unit – 1</p> <p>Introduction - Understanding human postures and dimensions, Survey on various workplace and study the design, Study on basic human activities.</p> <p>Unit – 2</p>	12 hrs

	<p>Design reference standards for residential space 1 - Living space: minimum requirements, planning considerations. Dining spaces- arrangements, criterion. kitchen space- types, circulation space, dimensions, storage spaces.</p> <p>Unit - 3</p> <p>Design reference standards for residential space 2 - Sleeping space: furniture clearances and arrangements, wardrobe and walk-in closet details, Bathroom spaces- planning data and fixture arrangements, Home theatre- planning audio visual space</p> <p>Unit – 4</p> <p>Planning and Design Interior spaces - Office Space seating, tables and circulation spaces. Food and Beverage – tables, seating arrangements, bar counter, stool. Public Spaces- circulation spaces, public bathrooms. Leisure and Recreational spaces, sports areas, gym, library.</p> <p>Unit - 5</p> <p>Standards for Disabled - Study on wheelchair accessibility at different workplaces by elderly and physically handicapped people.</p>	<p>12 hrs</p> <p>12 hrs</p> <p>12 hrs</p> <p>12 hrs</p>
Pedagogy	Lectures/ Tutorials/Assignments/Self-Study	
References/Readings	<p>1. Joseph DeChiara,J. Panero and M. Zelnik, Time-saver Standards for Interior Design and Space Planning by McGraw - Hill (1991).</p>	

	<p>2. Julius Panero and Martin Zelnik, Human Dimension & Interior Space-Ergonomia e Antropometria, Whitney Library of Design N.Y (1993)</p> <p>3. John F. Pile, A History of Interior Design, by Wiley Publication (2000)</p> <p>4. Jennifer Visocky O'Grady and Kenneth Visocky O'Grady, A Designer's Research Manual: Succeed in Design by Knowing Your Clients and What They Really Need by Rockport Publishers (2006)</p>
Learning Outcomes	<ul style="list-style-type: none"> ❖ Building confidence of handling a project on their own. ❖ Capability to go out in the field into any office and perform on par with professionals.

Program: B.Sc. (Interior Design)

Course Code: ID 103 A **Title of the Course :Interior Design I - Fundamentals (Theory)**

Number of Credits: 3

Effective from AY: 2019-20

Prerequisites for the course	NIL	
Objectives	<ul style="list-style-type: none"> ❖ To make students understand the technicalities of free hand drawing. ❖ To make them easily illustrate their interior designing ideas through different drawing and rendering mediums. ❖ To make the students visualize and execute their ideas manually. 	
Content	Unit - 1 Introduction to Interior Design - Importance and scope of	6 hrs

	<p>Interior design. Aspects of interior design, interior design as a profession, difference between interior design and decoration. Role of interior designer and decorator.</p> <p>Unit - 2</p> <p>Lines and Shapes in Design - Definition, meaning, purpose and types.</p> <p>Unit - 3</p> <p>Rule of Composition and Visual Thinking - Learning about negative and positive space through lines and using basic shapes, Rule of thirds. Visual thinking - learning to think creatively through free hand scribbling and finding out shapes of different furniture design</p> <p>Unit - 4</p> <p>Rendering mediums - Importance of rendering techniques, types of different types of rendering techniques, different mediums of rendering.</p> <p>Unit - 5</p> <p>Perspectives - Introduction to perspectives, different terms used, one-point perspective, two-point perspective and three-point perspective.</p>	<p>8hrs</p> <p>8hrs</p> <p>8hrs</p> <p>15 hrs</p>
Pedagogy	Lectures/ Tutorials/Assignments/Self-Study	
References/R	<p>1. Robert W. Gill, Rendering with Pen and Ink by The Thames & Hudson Manuals, (1984)</p>	

Readings	2. Francis D. K. Ching & Corky Binggeli, Interior Design Illustrated 3rd Edition by Library of Congress Cataloging-in- Publication (1943) 3. M PratapRao, Interior Design Principles & Practice by Standard Publishers Distributors (2015)
Learning Outcomes	<ul style="list-style-type: none"> ❖ Students would be successful in visual thinking using various sketching mediums. ❖ Students would understand making a good design composition. ❖ Students would understand the relevance of history of art and design in contemporary design world. ❖ Students would be well equipped with presentation strategies

Program: B.Sc. (Interior Design)

Course Code: ID 103 B **Title of the Course: Interior Design I – Fundamentals**

(Practical)

Number of Credits: 3

Effective from AY: 2019-20

Prerequisites for the course	NIL	
Objectives	<ul style="list-style-type: none"> ❖ To make students understand the technicalities of free hand drawing. ❖ To make them easily illustrate their interior designing ideas through different drawing and rendering mediums. ❖ To make the students visualize and execute their ideas manually. 	
Content	Unit - 1 Lines and shapes, Rule of composition - Drawing freehand lines, horizontals, verticals, diagonals, criss-cross lines, drawing, creating patterns with lines, basic shapes like square, rectangle, circles, triangles and ellipses, find shapes in objects, Learning about negative and positive space thorough lines and	9 hrs

	<p>using basic shapes, Rule of thirds</p> <p>Unit - 2</p> <p>Shading and Gradation, Basic object drawing with pencil - Grey scale with 3 different angles of line strokes for shading. Study of light and shadow in cone, sphere and cube (pencil shading). Visual thinking - learning to think creatively through free hand scribbling and finding out shapes of different furniture design</p> <p>Unit - 3</p> <p>Rendering techniques - Pen rendering - Tiles, Marbles, carpet, Rugs, Wood, Rocks, reflection, light source, water, grass, trees(big and small), fabrics. Pencil colour rendering - Tiles, Marbles, carpet, Rugs, Wood, Rocks, reflection, light source, water, grass, trees(big and small), fabrics</p> <p>Unit - 4</p> <p>Perspectives - 1-point perspective, 2-point perspective and 3-point perspective drawings.</p>	<p>9 hrs</p> <p>9 hrs</p> <p>18hrs</p>
Pedagogy	Lectures/ Tutorials/Assignments/Self-Study	
References/Readings	JD Institute Lab Manual	
Learning	<ul style="list-style-type: none"> ❖ Students would be successful in visual thinking using various sketching mediums. ❖ Students would understand making a good design composition. ❖ Students would understand the relevance of history of art and design in contemporary design world. 	

Outcomes	❖ Students would be well equipped with presentation strategies
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Program: B.Sc. (Interior Design)

Course Code: ID 104 A **Title of the Course : Construction Materials – I(Theory)**

Number of Credits: 3

Effective from AY: 2019-20

Prerequisites for the course	NIL	
Objectives	<ul style="list-style-type: none"> ❖ To make students understand the materials used in construction industry and interior designing with respect to the various properties and uses. ❖ To teach students the material symbols ❖ To impart knowledge using teaching aids like PPTs and material samples. ❖ To teach students the process of designing the interiors using various materials ❖ To introduce the materials in actual by various industry and store visits. 	
Content	Unit - 1 Bricks - Introduction, properties and application. Types of brick bonds, brick masonry, sizes of bricks, bricks in interiors. Unit - 2 Stones - Stone masonry - Introduction, properties and	8hrs 8hrs 6 hrs

	<p>applications. Types of stones, dressing of stones, finishes, application in interior.</p> <p>Unit - 3</p> <p>Cement and Mortar - Types of cement and mortar and its application</p> <p>Unit - 4</p> <p>Timber and its usage, properties, seasoning.</p> <p>Unit - 5</p> <p>Metals - Ferrous and Non-ferrous metals.</p> <p>Unit - 6</p> <p>Plastic and miscellaneous materials</p>	<p>8hrs</p> <p>9 hrs</p> <p>6 hrs</p>
Pedagogy	Lectures/ Tutorials/Assignments/Self-Study	
References/Readings	<ol style="list-style-type: none"> 1. Robert W. Gill, Rendering with Pen and Ink by The Thames & Hudson Manuals, (1984) 2. Francis D. K. Ching & Corky Binggeli, Interior Design Illustrated 3rd Edition by Library of Congress Cataloging-in- Publication (1943) 3. M PratapRao, Interior Design Principles & Practice by Standard Publishers Distributors (2015) 	

<p>Learning Outcomes</p>	<ul style="list-style-type: none"> ❖ Students would be successful in design thinking using various materials of construction of construction. ❖ Students are exposed to various materials; learn thinking needed to transform ideas to products. ❖ Students are exposed to various materials practically through store and industry visits.
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Program: B.Sc. (Interior Design)

Course Code: ID 104 B Title of the Course :Construction Materials - I (Practical)

Number of Credits: 3

Effective from AY: 2019-20

Prerequisites for the course	NIL	
Objectives	<ul style="list-style-type: none"> ❖ To make students understand the technicalities of free hand drawing. ❖ To make them easily illustrate their interior designing ideas through different drawing and rendering mediums. ❖ To make the students visualize and execute their ideas manually. 	
Content	<p>Unit - 1</p> <p>Bricks - Introduction, properties and applications. Types of bricks, traditional, wire cut, moulded bricks and its sizes, different types of bricks.</p> <p>Unit - 2</p> <p>Stones - Introduction, properties and application. Types of</p>	<p>8hrs</p> <p>8hrs</p>

	<p>stones, dressing of stones, finishes, application in interior.</p> <p>Unit - 3</p> <p>Cement and Mortar - types of cements - Portland, pozzdonaetc. types of mortar - lime mortar, cement mortar, concrete and admixtures. RCC and PCC.</p> <p>Unit - 4</p> <p>Timber and its usage in construction- Introduction and properties, timber as building material. Seasoning and presentation of timber. Hardwood and Softwood. Industrial timber - plywood, block board, fibre board etc. market survey - sizes, rates and brands.</p> <p>Unit - 5</p> <p>Ferrous and non-ferrous metals - Introduction and properties, alloys and its application in interiors. Steel and its application, steel alloys, Aluminium and its application in interiors.</p> <p>Unit - 6</p> <p>Plastic and miscellaneous materials - Introduction and properties. Types of plastics, uses of plastics in interiors. Fibre plastic, silicon and its usage</p>	<p>6 hrs</p> <p>8hrs</p> <p>9 hrs</p> <p>6 hrs</p>
Pedagogy	Lectures/ Tutorials/Assignments/Self-Study	
References/Readings	Lab Manual	

Learning Outcomes	<ul style="list-style-type: none"> ❖ Students would be successful in design thinking using various materials of construction of construction. ❖ Students are exposed to various materials; learn thinking needed to transform ideas to products.
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Program: B.Sc. (Interior Design)

Course Code: ID 105 A **Title of the Course :2D & 3D Graphics (Theory)**

Number of Credits: 3

Effective from AY: 2019-20

Prerequisites for the course	NIL	
Objectives	<ul style="list-style-type: none"> ❖ To make students understand the method of orthographic projection ❖ To develop skills to make various projections. 	
Content	<p>Unit - 1</p> <p>Introduction to graphic standards for architectural practice, their relevance in building design and detailing- graphic techniques for drawing views, plan, elevations and sections of building material and components as per standard architectural practice.</p> <p>Unit - 2</p> <p>General understanding of graphic design and integration with architecture. Role of graphic design in a building project.</p>	<p>8hrs</p> <p>6 hrs</p> <p>8hrs</p> <p>8hrs</p>

	<p>Unit - 3</p> <p>Drawing scaled graphics, Architectural material symbols.</p> <p>Unit - 4</p> <p>Orthographic projections in interior. Types, importance and application in design and development of surfaces.</p> <p>Unit – 5</p> <p>Perspectives and its uses in interior</p>	15 hrs
Pedagogy	Lectures/ Tutorials/Assignments/Self-Study	
References/Readings	<ol style="list-style-type: none"> 1. Maureen Mitton, Interior Design visual presentation: A guide to graphics, models and presentation techniques. 3rd edition by Wiley publishers (2007.) 2. Robert W. Gill, Rendering with Pen and Ink by The Thames & Hudson Manuals, (1984) 3. Francis D. K. Ching& Corky Binggeli, Interior Design Illustrated 3rd Edition by Library of Congress Cataloging-in- Publication (1943) 4. M PratapRao, Interior Design Principles & Practice by Standard Publishers Distributors (2015) 	
Learning Outcomes	<ul style="list-style-type: none"> ❖ Students would be successful in implementing their graphics techniques. ❖ Students would have the understanding of architectural graphics. ❖ Students would understand the method of orthographic projection and 3D Views. 	

Program: B.Sc. (Interior Design)

Course Code: ID 105 B **Title of the Course: 2D & 3D Graphics (Practical)**

Number of Credits: 3

Effective from AY: 2019-20

Prerequisites for the course	NIL	
Objectives	<ul style="list-style-type: none"> ❖ To make students understand the method of orthographic projection ❖ To develop skills to make various projections. 	
Content	<p>Unit - 1</p> <p>Introduction to graphic standards for architectural practice, their relevance in building design and detailing- graphic techniques for drawing views, plan, elevations and sections of building material and components as per standard architectural practice.</p> <p>Unit - 2</p> <p>General understanding of graphic design and integration with architecture. Role of graphic design in a building project.</p> <p>Unit - 3</p> <p>Drawing scaled graphics, Architectural material symbols.</p> <p>Unit - 4</p> <p>Orthographic projections in interior. Types, importance and application in design and development of surfaces.</p>	<p>8hrs</p> <p>6 hrs</p> <p>8hrs</p> <p>8hrs</p> <p>15 hrs</p>

	Unit - 5 Perspectives and its uses in interior	
Pedagogy	Lectures/ Tutorials/Assignments/Self-Study	
References/Readings	1. Lab Manuals	
Learning Outcomes	<ul style="list-style-type: none"> ❖ Students would be successful in implementing their graphics techniques. ❖ Students would have the understanding of architectural graphics. ❖ Students would understand the method of orthographic projection and 3D Views. 	

Program: B.Sc. (Interior Design)

Course Code: ID 106 **Title of the Course:Constitution of India & Human Rights**

(Theory)

Number of Credits: 4

Effective from AY: 2019-20

Prerequisites for the course	NIL	
Objectives	<ul style="list-style-type: none"> ❖ Acquire an awareness of the constitutional rights provided to citizens. ❖ Understanding about the Human Rights and protections. 	
Content	Unit-1	

	<p>Indian Constitutional Philosophy</p> <p>a) Features of the Constitution and Preamble</p> <p>b) Fundamental Rights and Fundamental Duties</p> <p>c) Directive Principles of State Policy</p> <p>Unit-2</p> <p>Union and State Executive, Legislature and Judiciary</p> <p>a) Union Parliament and State Legislature: Powers and Functions</p> <p>b) President, Prime Minister and Council of Ministers</p> <p>c) State Governor, Chief Minister and Council of Ministers</p> <p>d) The Supreme Court and High Court: Powers and Functions</p> <p>Unit-3</p> <p>Concept and Development of Human Rights</p> <ol style="list-style-type: none"> 1. Meaning Scope and Development of Human Rights 2. United Nations and Human Rights – UNHCR 3. UDHR 1948, ICCPR 1996 and ICESCR 1966 <p>Unit-4</p> <ol style="list-style-type: none"> 1. Human Rights in India 2. Protection of Human Rights Act, 1993 (NHRC and SHRC) 3. First, Second and Third Generation Human Rights 4. Judicial Activism and Human Rights 	<p>15 Hrs</p> <p>15 Hrs</p> <p>15 Hrs</p> <p>15 Hrs</p>
Pedagogy	Lectures/ Tutorials/Assignments/Self-Study	
	1. Dr B R Ambedkar, The Constitution of India by Govt. of India, Ministry of Law and Justice, (26 January 1950)	

References/Readings	2. Austin Granville, The Indian Constitution: Cornerstone of A Nation (Classic Reissue), Oxford Publisher (1999) 3. Durga Das Basu, Human Rights in Constitutional Law, Prentice – Hall of India Pvt. Ltd. New Delhi (2012) 4. Noorani, A.G., (South Asia Human Rights Documentation Centre), Challenges to Civil Right), Challenges to Civil Rights Guarantees in India, Oxford University Press (2012)
Learning Outcomes	❖ Students will learn skills required to research and analyze political issues and learn how to use those articles/ law provisional in applied situations such as working environment/ public places and careers that may involve human related problems and/or issues.

Semester II

Program: B.Sc. (Interior Design)

Course Code: ID 201 **Title of the Course : History of Interior Design (Theory)**

Number of Credits: 4

Effective from AY: 2019-20

Prerequisites for the course	NIL	
Objectives	❖ To make students understand the chronology of history of interior design. ❖ To enable them understand the evolution of design along with evolution of society, culture and art and the relevance of society, culture art into interior design.	
Content	Unit – 1 Pre -History - Egyptian civilization, Mesopotamian civilization, Greek civilization, roman civilization. Medieval period-Romanesque period, gothic period	15hrs

	<p>Unit - 2</p> <p>Renaissance period- Renaissance furniture design, colour scheme, interior design, material used. Post renaissance - Baroque period, rococo period, post renaissance Europe, style regency, neo classical period.</p> <p>Unit - 3</p> <p>Victorian period - Early Victorian, late Victorian. Modernism - Art furniture's, art and craft movement, art nouveau, art deco, cubism.</p> <p>Unit - 4</p> <p>Modern Furniture Movement - Prairie School, De Stijl, DeutscherWerkbund, Bauhaus. Mid-Century Modern furniture icons & classics - Eames Lounge and Ottoman, Tulip chairs – Eero Saarinen.</p>	<p>15 hrs</p> <p>15 hrs</p> <p>15 hrs</p>
Pedagogy	Lectures/ Tutorials/Assignments/Self-Study	
References/Readings	<ol style="list-style-type: none"> 1. Robbie G. Blakemore, History of Interior Design and Furniture: From Ancient Egypt to Nineteenth-Century Europe 2nd Edition by Wiley (2005). 2. Mario Praz, An Illustrated History of Interior Decoration: From Pompeii to Art Nouveau by Thames & Hudson (1981) 3. Buie Harwood, Bridget May and Curt Sherman, Architecture and Interior Design: An Integrated History to the Present (Fashion Series) 1st Edition by Pearson (2011) 	
Learning Outcomes	<ul style="list-style-type: none"> ❖ Students would be successful in understanding the chronology of history of interior design ❖ Students would have the understanding of making a better design composition by having a brief understanding of what had happened in history. ❖ Students would understand the relevance of history of art and culture, society in contemporary interior design world. 	

Program: B.Sc. (Interior Design)

Course Code: ID 202 **Title of the Course : Material Survey(Theory)**

Number of Credits: 4

Effective from AY: 2019-20

Prerequisites for the course	NIL	
Objectives	<ul style="list-style-type: none"> ❖ The students get to know more about each & every material, their properties, different varieties, various combinations, and get to explore the images of different interiors in commercial & residential interiors around the globe, through the world of internet. ❖ Explorations of local market, visiting the stores of international brands, will add to their practical knowledge about, the price range, the versatile choices, of different materials. ❖ The students will learn how to interact with the vendors and shopkeepers, for their future deals. 	
Content	<p>Unit - 1</p> <p>Upholstery & soft furnishing - Introduction, Fabric, and its use in interior, Carpet Details, Selection criteria, Installation of w/w carpets</p> <p>Unit - 2</p> <p>Draperies & Blinds - Intro & category, Different materials used for window Treatment, Guideline for selection, Accessories used</p> <p>Unit - 3</p> <p>False ceiling - Reasoning for False ceiling, Explain RFCP, Different material used, Different methods of construction, Different types of false ceiling</p> <p>Unit - 4</p> <p>Lights & Electrical fitting - Category of Artificial light,</p>	<p>7hrs</p> <p>7 hrs</p> <p>7 hrs</p> <p>7 hrs</p>

	<p>Devices used, Design concept, Electrical layout with symbol, Advanced Research</p> <p>Unit - 5</p> <p>Tiles (Flooring) - Types of Flooring (Hard & Resilient), Advantages & Disadvantages, Different material in both categories, Criteria for selection, Calculation on Quantity & cost. Stone (Wall Treatments) - Category of wall treatment (Hard & Soft), Different material in both categories, Selection of material</p> <p>Unit - 6</p> <p>Sanitary F & F - Progress of sanitation hygiene, Details of Bathroom, Wet area & Dry area, Wash basins in Details, Water closets in Details, Bathing in Details</p> <p>Unit - 7</p> <p>Hardware & Accessories - Introduction, Different hardware used in making of interiors. Accessories in wardrobe, door & Window, Bathroom & kitchen.</p> <p>Unit - 8</p> <p>Wall Treatments - Laminates, veneers, wooden flooring, Highlighters for interiors, Alabasters, solid surfaces, MDF, Materials for façade, Accessories in wardrobe.</p>	<p>7 hrs</p> <p>7 hrs</p> <p>8hrs</p> <p>10 hrs</p>
Pedagogy	Lectures/ Tutorials/Assignments/Self-Study	
References/Readings	<ol style="list-style-type: none"> 1. Rangawala, Building Construction;33rd Edition By Rangwala by Charotar Publishing House Pvt. Ltd (2016) 2. Sushil Kumar, Building Construction, Standard Publisher Dist.(2010) 3. M.K.Gupta, Practical Handbook on Building Construction by Nabhi Publications (2014) 4. Rangawala, Engineering Materials;43rd Edition by Charotar Publishing House Pvt. Ltd (2017) 5. McKay, Building Construction: Metric Volume 1, Fifth edition: Metric - 	

Effective from AY: 2019-20

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	<p>Unit - 2</p> <p>Color abstractions - Value, chroma, hue, contrast, saturation.</p> <p>Unit - 3</p> <p>Color wheel, Cool and Warm colors, tint, tones and shades.</p> <p>Unit - 4</p> <p>Color Schemes - Introduction, types of color schemes, use of color schemes in interior.</p> <p>Unit – 5</p> <p>Color psychology.</p>	<p>9hrs</p> <p>12 hrs</p> <p>10hrs</p>
Pedagogy	Lectures/ Tutorials/Assignments/Self-Study	
References/Readings	<ol style="list-style-type: none"> 1. Andrew J. Elliot, Mark D. Fairchil and Anna Franklin, Handbook of Color Psychology by Cambridge University Press, (2018) 2. Faber Birren, Color Psychology and Color Therapy by The Citadel Press (1961) 3. Regina Lee Blaszczyk, The Color Revolution by The MIT Press, Cambridge (2012) 4. Sandu, Color and Space by Gingko Press, Berkeley (2012) 5. LeatriceEiseman& Keith Recker, Pantone: The 20th Century in Color by Chronicle Books, San Francisco (2011) 	
Learning Outcomes	<ul style="list-style-type: none"> ❖ Students would understand color theory and implement those in their design ❖ Students would be well equipped with presentation strategies 	

Program: B.Sc (Interior Design)

Course Code: ID 203B Title of the Course : Interior Design II –Colors(Practical)

Number of Credits: 3

Effective from AY: 2019-20

Prerequisites for the course	NIL	
Objectives	<ul style="list-style-type: none"> ❖ To make students understand the color science. ❖ To make the students understand the color theory to better handle color in their interior space, and to visualize and execute their ideas manually 	
Content	<p>Unit - 1</p> <p>Sheet work for Color theory - practical guidance to color mixing and the visual effects of a specific color combination. Definitions (or categories) of colors based on the color wheel: primary color, secondary color, and tertiary color.</p> <p>Unit - 2</p> <p>Sheet work for Color abstractions - Value, chroma, hue, contrast, saturation.</p> <p>Unit - 3</p> <p>Sheet work for Color wheel, Cool and Warm colors, tint, tones and shades.</p> <p>Unit - 4</p> <p>Sheet work for Color Schemes - Introduction, types of color</p>	<p>8hrs</p> <p>5hrs</p> <p>10 hrs</p> <p>12 hrs</p> <p>10hrs</p>

	schemes, use of color schemes in interior.	
	Unit – 5 Sheet work for Color psychology.	
Pedagogy	Lectures/ Tutorials/Assignments/Self-Study	
References/Readings	Lab Manuals	
Learning Outcomes	<ul style="list-style-type: none"> ❖ Students would understand color theory and implement those in their design ❖ Students would be well equipped with presentation strategies 	

Program: B.Sc. (Interior Design)

Course Code: ID 204A **Title of the Course : Construction Materials II (Theory)**

Number of Credits: 3

Effective from AY: 2019-20

Prerequisites for the course	NIL
Objectives	<ul style="list-style-type: none"> ❖ To make students understand the materials used in construction industry and interior designing with respect to the various properties and uses. ❖ To teach students the material symbols ❖ To impart knowledge using teaching aids like PPTs and material samples. ❖ To teach students the process of designing the interiors using various materials

Content	Unit - 1	6 hrs
	Bricks - Bricks – Closers and bats, Bricks – Bonds, Introduction, Brief manufacturing process & sizes, Classification.	2hrs
	Unit - 2	
	Stones - Introduction, Classification of rocks & examples, Dressing of stones, Stone masonry.	3 hrs
	Unit - 3	
	Typical wall cross-sections - Terminologies used in buildings, Load bearing & non-load bearing walls.	6 hrs
	Unit - 4	6 hrs
	Stair-Case - Introduction & terminologies, Types of stairs.	
	Unit - 5	8hrs
	Arches - Introduction, Terminologies and types	
	Unit - 6	8hrs
	Doors - Introduction to types of doors, Terminologies	
	Unit - 7	3 hrs
	Windows - Introduction to types of doors, Terminologies	
	Unit - 8	3 hrs
	False ceilings - Introduction, Uses of false ceilings and materials used	

	Unit - 9 Partitions - Introduction- materials used & types.	
Pedagogy	Lectures/ Tutorials/Assignments/Self-Study	
References/Readings	1. Rangawala, Building Construction;33rd Edition By Rangwala by Charotar Publishing House Pvt. Ltd (2016) 2. Sushil Kumar, Building Construction, Standard Publisher Dist.(2010) 3. M.K.Gupta, Practical Handbook on Building Construction by Nabhi Publications (2014) 4. Rangawala, Engineering Materials;43rd Edition by CharotarPublishing House Pvt. Ltd (2017) 5. McKay, Building Construction: Metric Volume 1, Fifth edition: Metric - Vol. 1 by Pearson Education India; (2013)	
Learning Outcomes	❖ Students would be successful in design thinking using various materials of construction of construction. ❖ Students are exposed to various materials; learn thinking needed to transform ideas to products. ❖ Students are exposed to various materials practically through store and industry visits.	

Program: B.Sc. (Interior Design)

Course Code: ID 204B **Title of the Course : Construction Materials II(Practical)**

Number of Credits: 3

Effective from AY: 2019-20

Prerequisites for the course	NIL
	❖ To make students understand thematerials used in construction industry and interior designing with respect to the various

Objectives	properties and uses. ❖ To teach students the material symbols	
Content	<p>Unit - 1</p> <p>Bricks - Bricks – Closers and bats, Bricks – Bonds, Introduction, Brief manufacturing process & sizes, Classification. Importance of using closers and bats and preparation of drawing showing various closers and bats. Introduction to Brick masonry using various bonds (stretcher, header, English and Flemish bonds). Preparation of drawings of brick masonry using the bonds.</p> <p>Unit - 2</p> <p>Stones - Introduction, Classification of rocks & examples, Dressing of stones, Stone masonry. Introduction to various types of stone masonries (random rubble, squared rubbleAshlar masonries).</p> <p>Unit - 3</p> <p>Typical wall cross-sections - Terminologies used in buildings, Load bearing & non-load bearing walls. Drawing of typical wall cross section.</p> <p>Unit - 4</p> <p>Stair-Case - Introduction & terminologies, Types of stairs. Designing of a staircase.</p> <p>Unit - 5</p> <p>Arches - Introduction, Terminologies and types of arches.</p> <p>Unit - 6</p>	<p>6 hrs</p> <p>3 hrs</p> <p>3 hrs</p> <p>6 hrs</p> <p>6 hrs</p> <p>8hrs</p> <p>8hrs</p> <p>3 hrs</p> <p>2 hrs</p>

	<p>Doors - Introduction to types of doors, Terminologies. Drafting of different types of doors.</p> <p>Unit - 7</p> <p>Windows - Introduction to types of doors, Terminologies. Drafting of different types of windows.</p> <p>Unit - 8</p> <p>False ceilings - Introduction, Uses of false ceilings and materials used. Drafting of different types of false ceiling.</p> <p>Unit - 9</p> <p>Partitions - Introduction- materials used & types. Drafting of different types of partition.</p>	
Pedagogy	Lectures/ Tutorials/Assignments/Self-Study	
References/Readings	Lab Manuals	
Learning Outcomes	<ul style="list-style-type: none"> ❖ Students would be successful in design thinking using various materials of construction of construction. ❖ Students are exposed to various materials; learn thinking needed to transform ideas to products. ❖ Students are exposed to various materials practically through store and industry visits. 	

Program: B.Sc. (Interior Design)

Course Code: ID 205A **Title of the Course : Furniture Design I(Theory)**

Number of Credits: 3

Effective from AY: 2019-20

Prerequisites for the course	NIL	
Objectives	<ul style="list-style-type: none"> ❖ To learn history of furniture ❖ To understand standard sizes of furniture. ❖ To help students visualize and understand that each furniture piece has its definite use. ❖ To understand how conceptual designs, stand out in the furniture. ❖ To teach students how to represent final design with process drawings on theme, materials. 	
Content	<p>Unit - 1</p> <p>History of Furniture Design - Furniture designs during Egyptian, Greek, Roman, Romanesque, Gothic, Renaissance, and Industrial Revolution – Contributions in the beginning of the 20th century by the four pioneer architects in furniture design – Bauhaus & other modern furniture designs.</p> <p>Unit - 2</p> <p>Study on Famous Furniture Designers - Case study & Net study.</p> <p>Unit - 3</p> <p>Residential Furniture - Introduction to space, Human Factors - Study of Anthropometry & Design criteria involved in the design of Sofa, Study table, Dining tables, Chairs, settee, couch, etc. Cot, bedside lockers, wardrobes Cupboards, shelves Bunk beds, study table Display furniture.</p> <p>Unit - 4</p>	<p>8hrs</p> <p>3 hrs</p> <p>10hrs</p> <p>3 hrs</p>

	<p>Study on Wooden Joinery - Introduction, Types, usage.</p> <p>Unit - 5</p> <p>Principles of Design and Detailing - Form – Colour - Symbols Materials& finishes – Wood, Glass, Metal, Plastics and Upholstery - include various finishes. Fabrication Techniques involved Multiple Utility Oriented Approaches to Furniture Design.</p> <p>Unit - 6</p> <p>Room Planning and furniture arrangement - Types of furniture, Built in furniture, Movable furniture, Systems furniture, Readymade furniture, Modular, Knockdown & Economy Furniture. Traffic pattern and furniture layout for residence.</p>	<p>9 hrs</p> <p>12 hrs</p>
Pedagogy	Lectures/ Tutorials/Assignments/Self-Study	
References/ Readings	<ol style="list-style-type: none"> 1. Christophe Pourny& Jen Renzi,Furniture Bible : Everything You Need to Know to Identify, Restore and Care for Furniture by ARTISAN (2014) 2. Joseph Aronson,The Encyclopedia of Furniture by Random House USA Inc (1965) 3. Ben Uyeda, HomeMade Modern : Smart DIY Designs for a Stylish Home by Running Press,U.S. (2015) 4. Will Holman, Guerilla Furniture Design by Storey Publishing LLC, (2015) 5. Anna Yudina, Furnitecture : Furniture That Transforms Space by Thames & Hudson Ltd (2015) 6. Gary Rohrbacher, Anne Filson,Bill Young & Anna Kaziunas France, Design for CNC by O'Reilly Media, Inc, USA(2017) 	

Learning Outcomes	<ul style="list-style-type: none"> ❖ Students will have a clear understanding about the different furniture's, the functions and role it plays. ❖ Students would understand the method that goes behind making furniture, process drawings, conceptual sketches which are required for communication and the final measurements.
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Program: B.Sc (Interior Design)

Course Code: ID 205B **Title of the Course : Furniture Design I(Practical)**

Number of Credits: 3

Effective from AY: 2019-20

Prerequisites for the course	NIL	
Objectives	<ul style="list-style-type: none"> ❖ To learn history of furniture ❖ To understand the function and form of different types of furniture, soft furnishing, Lighting, Accessories & Art and Artifacts ❖ To help students visualize and understand that each furniture piece has its definite use. ❖ To understand how conceptual designs, stand out in the furniture. 	
Content	<p>Unit - 1</p> <p>History of Furniture Design - Sketch of Egyptian, Greek, Roman, Romanesque, Gothic, Renaissance, Bauhaus and modern furnitures.</p> <p>Unit - 2</p> <p>Study on Famous Furniture Designers - Report for Case study & Net study.</p> <p>Unit - 3</p>	<p>12hrs</p> <p>6 hrs</p> <p>12 hrs</p> <p>3hrs</p>

	<p>Residential Furniture - designing of Residential furnitures - Sofa, settee, couch, etc. Cot, bedside lockers, wardrobes Cupboards, Study table, Dining tables, Chairs, shelves Bunk beds, study table Display furniture.</p> <p>Unit - 4</p> <p>Study on Wooden Joinery - Drawing of different types of wooden joinery.</p> <p>Unit - 6</p> <p>Room Plan and furniture arrangement. Traffic pattern and furniture layout for residence.</p>	12 hrs
Pedagogy	Lectures/ Tutorials/Assignments/Self-Study	
References/Readings	Lab Manuals	
Learning Outcomes	<ul style="list-style-type: none"> ❖ Students will have a clear understanding about the different furniture's, the functions and role it plays. ❖ Students would understand the method that goes behind making furniture, process drawings, conceptual sketches which are required for communication and the final measurements with drafting 3D drawings and sketches. 	

Program: B.Sc. (Interior Design)

Course Code: ID 206 **Title of the Course:Environmental Studies(Theory)**

Number of Credits: 4

Effective from AY: 2019-20

Prerequisites for the course	NIL	
Objectives	<ul style="list-style-type: none"> ❖ Acquire an awareness of the environment as a whole and its related problems. ❖ Gain a variety of experiences and acquire a basic understanding and knowledge about the environment and its allied problems. 	
Content	<p>Unit - 1</p> <p>Introduction to Environmental Studies</p> <p>Multidisciplinary nature of environmental studies</p> <p>Scope and importance, concept of sustainability and sustainable development</p> <p>Unit - 2</p> <p>Ecosystem</p> <p>What is an ecosystem? Structure and functions of ecosystem, energy flow in an ecosystem; food chains, food webs and ecological succession. Case studies of the following ecosystems: Forest Ecosystem, Grassland Ecosystem, Desert Ecosystem, Aquatic Ecosystems (ponds, streams, lakes, rivers, oceans, estuaries)</p> <p>Unit - 3</p> <p>Natural Resources: Renewable & Non-Renewable Resources</p> <ol style="list-style-type: none"> 1. Land resources and land use change; Land degradation, soil erosion and desertification. 2. Deforestation; Causes and impacts due to mining, dam building on environment, forests, biodiversity and tribal populations. 3. Water; Uses and overexploitation of surface and 	<p>4hrs</p> <p>8hrs</p> <p>8 hrs</p>

	<p>groundwater, floods, draughts, conflicts over water (international & inter-state).</p> <p>4. Energy resources; Renewable and non renewable energy sources, use of alternate energy sources, growing energy needs, case studies.</p> <p>Unit - 4</p> <p>Biodiversity and Conservation</p> <ol style="list-style-type: none"> 1. Levels of biological diversity; genetic, species and ecosystem diversity; Biogeographic zones of India; Biodiversity patterns and global biodiversity hotspots. 2. India as a mega biodiversity nation; Endangered and endemic species of India. 3. Threats to biodiversity; Habitat loss, poaching of wildlife, man-wildlife conflicts, biological invasions, Conservation of biodiversity; <i>In-situ</i> and <i>Ex-situ</i> conservation of biodiversity. 4. Ecosystem and biodiversity services: Ecological, economic, social, ethical, aesthetic and informational value. <p>Unit - 5</p> <p>Environmental Pollution</p> <ol style="list-style-type: none"> 1. Environmental Pollution: types, causes, effects and controls' Air, water, soil and noise pollution. 2. Nuclear hazards and human health risks. 3. Solids waste management: Control measures of urban and industrial waste. 4. Pollution case studies. <p>Unit - 6</p> <p>Environmental Policies and Practices</p> <ol style="list-style-type: none"> 1. Climate change, global warming, ozone layer depletion, acid rain and impacts on human communities and agriculture. 2. Environmental Laws: Environmental Protection Act; Air (Prevention & Control of Pollution) Act; Water (Prevention & Control of Pollution) Act; Wildlife Protection Act; Forest Conservation Act, International agreements; Montreal and Kyoto protocols and Conservation on Biological Diversity (BD). 	<p>8 hrs</p> <p>8 hrs</p>
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	<p>3. Natural reserves, tribal populations and rights, and human wildlife conflicts in Indian context.</p> <p>Unit - 7</p> <p>Human Communities and the Environment</p> <ol style="list-style-type: none"> 1. Human population growth: Impacts on environment, human health and welfare. 2. Resettlement and rehabilitation of projects affected persons; case studies 3. Disaster Management: floods, earthquakes, cyclones and landslides. 4. Environmental movements; Chipko silent valley, Bishnois of Rajasthan. 5. Environmental ethics; Role of Indian and other religions and cultures in environmental conservation. 6. Environmental communication and public awareness, case studies (e.g. CNG vehicles in India) <p>Unit - 8</p> <p>Field Work</p> <ol style="list-style-type: none"> 1. Visit to an area to document the environmental assets river/forest/flora/fauna etc. 2. Visit to a local polluted site- Urban/Rural/Industrial/Agricultural. 3. Study of common plants, insects, birds and basics principles of identification. 4. Study of simple ecosystems, river, Delhi Ridge, etc 	<p>8 hrs</p> <p>8hrs</p>
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		8hrs
Pedagogy	Lectures/ Tutorials/Assignments/Self-Study	
References/Readings	<ol style="list-style-type: none"> 1. Carson R, Silent Springs, Houghton Mifflin Harcourt, (2002) 2. Gadgil M & Guha R, This Fissure Land: An Ecological History of India, Univ. of California Press, (1993). 3. Gleeson B and Low , Global Ethics and Environment, London Routledge, (1999) 4. Rosencranz Divan & Nobel M, Environmental Law and Policies in India, Tripathi (1992) 	
Learning Outcomes	<p>❖ Students will learn skills required to research and analyze environmental issues scientifically and learn how to use those skills in applied situations such as careers that may involve environmental problems and/or issues.</p>	

Draft Syllabus
For
3 years CBCSBachelor of Science (Hons.) Fashion & Apparel Design Degree

B.Sc.Fashion & Apparel Design (Honors) Degree Program
Under CBCS w.e.f 2019-20

Course Structure and List of papers

PAPER CODE	TITLE		CREDITS	TOTAL CREDITS
FD 101 A GE	Foundation Art	Theory	04	04
FD 102	Fashion Theory	Theory	04	04
FD 103 A FD 103 B	Fashion Illustration I	Theory Practical	03 03	06
FD 104 A FD 104 B	Fibre& Yarn Science	Theory Practical	03 03	06
FD 105 A FD 105 B	Introduction to Pattern Making & Draping	Theory Practical	03 03	06

AECC 1	Constitution of India & Human Rights	Theory	04	04
Total Credits				30

SEMESTER II

(F.Y. B.Sc.) ID

PAPER CODE	TITLE		CREDITS	TOTAL CREDITS
FD 201A	Fashion Illustration II	Theory	04	04
FD 202 GE	History of costumes	Theory	04	04
FD 203 A FD 203 B	Fabric Science and Analysis	Theory	03	06
		Practical	03	
FD 204 A	Pattern Making	Theory	03	06
		Practical	03	

FD 204 B	Garment Manufacturing Technology			
FD 205 A FD 205 B	Draping	Theory	03	06
		Practical	03	
AECC 2	Environmental Science	Theory	04	04
Total Credits				30

SEMESTER III

(S.Y. B.Sc.) ID

PAPER CODE	TITLE		CREDITS	TOTAL CREDITS
FD 301 GE	Fashion and Western Art Movement	Theory	04	04
FD 302	Pattern Making & Garment Manufacturing – III	Theory	04	04
FD 303 A	Fashion Illustration-II	Theory	03	06
		Practical	03	

FD 303 B				
FD 304 A	Traditional Indian Textiles & Yarn Craft	Theory	03	06
FD 304 B		Practical	03	
FD 305 A	Textile Wet Processing	Theory	03	06
FD 305 B		Practical	03	
AECC 3	Indian History, Culture & Diversity	Theory	04	04
Total Credits				30

SEMESTER IV

(S.Y. B.Sc.) ID

PAPER CODE	TITLE		CREDITS	TOTAL CREDITS
FD 401 SE	Apparel Production	Theory	04	04

FD 402	Fashion Merchandising	Theory	04	04
FD 403 A FD 403 B	Fashion Illustration-III (Men's Wear)	Theory	03	06
		Practical	03	
FD 404 A FD 404 B	Patternmaking and Garment Manufacturing Technology (Men's wear/ Indian wear)	Theory	03	06
		Practical	03	
FD 405 A FD 405 B	Computer Aided Design-I (CAD)-I	Theory	03	06
		Practical	03	
AECC 4	Life Skills & Personality Development	Theory	04	04
Total Credits				30

SEMESTER V

(T.Y. B.Sc.) ID

PAPER CODE	TITLE		CREDITS	TOTAL CREDITS
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FD 501 GE	Fashion Forecasting	Theory	04	04
FD 502 SE	Fashion Retail Management	Theory	04	04
FD 503 A FD 503 B	Fashion Accessories	Theory	03	06
		Practical	03	
FD 504 A FD 504 B	Computer Aided Design-II (CAD)-II	Theory	03	06
		Practical	03	
FD 505 A FD 505 B	Apparel Quality Control	Theory	03	06
		Practical	03	
FD 506 DES	Internship		04	04
Total Credits				30

SEMESTER VI

(T.Y. B.Sc.) ID

PAPER CODE	TITLE		CREDITS	TOTAL CREDITS
FD 601 GE	Entrepreneurship & Innovation	Theory	04	04
FD 602	Global Markets	Theory	04	04
FD 603	Fashion Business Management	Theory	04	04
FD 604	Clothing Culture & Communication	Theory	04	04
FD 605	Fashion Journalism	Theory	04	04
FD 606 DSE	Project/Fashion Show	Theory	10	10

Total Credits				30

Appendix B

Program: B.Sc. (Fashion & Apparel Design)

Course Code: FD 101 A

Title of the Course :Foundation Art (Theory)

Number of Credits: 4

Effective from AY: 2019-20

Prerequisites for the course	NIL		
Objectives	<ul style="list-style-type: none"> ❖ To introduce drawing as foundation skill. ❖ To explore and develop one's ability to think and draw. ❖ To be able to use drawing media effectively ❖ To understand the value of seeing. ❖ to understand the light and shadow effect on the object 		
Content	<p>Unit - 1</p> <p>Lines, Shapes- Exploration different grades of pencils on different kind of paper(bond sheet, ivory sheet and cartridge sheets). types of lines and expression through line</p> <p>Shapes - Exploration of line into shapes, different objects to be presented in 2D from with proper measurement and proportion and tonal rendering, still life drawing</p> <p>Unit - 2</p>		12 hrs

	<p>Art media And application - pencils , color pencils, water colors, fabric colors, markers, acrylic colors</p> <p>Unit - 3</p> <p>Perspective and its uses, Grid techniques of rendering</p> <p>Unit - 4</p> <p>Understanding different kinds of drapes</p> <p>Unit - 5 Outdoor study - Study of flora and fauna and other objects a study of different building structure in perspective view</p> <p>Unit - 6</p> <p>Final Project & Presentation</p>	<p>8 hrs</p> <p>10 hrs</p> <p>10 hrs</p> <p>5hrs</p> <p>15 hrs</p>
Pedagogy	Lectures/ Tutorials/Assignments/Self-Study	
References/Readings	<ol style="list-style-type: none"> 1. Giovanni Civardi, Drawing Human Anatomy – Cassell Illustrated Publisher(1998) 2. Giovanni Civardi, Drawing: A Complete Guide (Art of Drawing),Search Press (2010) 3. Giovanni Civardi, Art of Drawing: Drawing Hands & Feet: Form, Proportions, Gestures and Actions, Search Press (2005) 4. Giovanni Civardi, Art of Drawing: Drawing Portraits: Faces and Figures,Search Press (2002) 5. LironYanconsky, How To Draw Folds And Clothes: For the Extreme Beginner (2014) 	

	6. Michael Massen , The Artist's Guide to Drawing the Clothed Figure: A Complete Resource on Rendering Clothing and Drapery, Watson-Guptill (2011)
Learning Outcomes	<ul style="list-style-type: none"> ❖ To Facilitate effective use of drawing media ❖ to improve eye- hand coordination ❖ To understand scale, proportion, lighting , drapes and perspectives

Program: B.Sc. (Fashion & Apparel Design)

Course Code: FD 102 A

Title of the Course : Fashion Theory (Theory)

Number of Credits: 4

Effective from AY: 2019-20

Prerequisites for the course	NIL	
Objectives	<ul style="list-style-type: none"> ❖ To introduce students to the role of a designer ❖ To understand the principles and elements of design ❖ To introduce the students to fashion terminologies 	
Content	<p>Unit - 1</p> <p>Definition of Fashion,FAD, classic, Avant -Gardeect,</p> <p>Fashion Evolution,Adoption of fashion, Motives for consumer buying, Fashion forecasting, Design sources, Fashion services & resources, Fashion Magazines,etc</p> <p>Unit - 2</p> <p>knowledge of the customer- Consumer groups, customer</p>	8hrs

	profile, price, gender , location	6 hrs
	Unit - 3 Designing a successful garment - Silhouette, line color, texture, pattern, Design principles, - proportions, Balance, Emphasis, Unity, Rhythm	6 hrs
	Unit - 4 Importance of times, area & Linear trims, Fastenings, Types of collars, necklines, sleeves, pockets	6 hrs
	Unit - 5 Women's wear(Tops, blouses, Jackets, Skirts, Dresses- Evening, cocktail, casual) Men's wear Semiformal, Casual, Formal Indian Children's wear	6 hrs
	Unit - 6 Developing a line, Line selection, line presentation , developing a sample garment, costing of a garment, purchasing piece goods, patternmaking, production scheduling, spreading, cutting, garment assembly	8hrs
	Unit - 7 Role of Apparel Manufactures- Inside shop, contractor, shipping	
	Unit - 8 Role of a designer in production Final Project & Presentation	10hrs

		10hrs
Pedagogy	Lectures/ Tutorials/Assignments/Self-Study	
References/Readings	<ol style="list-style-type: none"> 1. Sharon Lee Tate, Inside fashion design 1 Edition , Canfield Press (1977) 2. Steven Faerm, Fashion Design Course: Principles, Practice, and Techniques: The Practical Guide for Aspiring Fashion Designers-2 edition, B.E.S. Publishing; (2017) 3. Fashionary, Fashionpedia - The Visual Dictionary Of Fashion Design, Publisher: Fashionary (2016) 4. Fashion Illustration & Design: Methods & Techniques for Achieving Professional Results, Promopress (2017) 5. Manuela Brambatti, Fashion Illustration & Design: Methods & Techniques for Achieving Professional Results, Promopress (2017) 6. Gini Stephens Frings, Fashion: From Concept to Consumer (9th Edition), Pearson;(2007) 	
Learning Outcomes	<ul style="list-style-type: none"> ❖ To create an understanding of the various aspects of a garment ❖ to develop an understanding of the industry ❖ To create an awareness of trims and their uses ❖ Students to create collages of various apparel categories and trims folder. 	

Program: B.Sc. (Fashion & Apparel Design)

Course Code: FD 103 A

Title of the Course : Fashion illustration I (Theory)

Number of Credits: 3

Effective from AY: 2019-20

Prerequisites for the course	NIL	
Objectives	<ul style="list-style-type: none"> ❖ To introduce Colors as a Foundation Skill ❖ To understand the color medium and color psychology ❖ To understand the human form 	
Content	<p>Unit - 1</p> <p>Introduction of color as an essential element of design, Pantone color, Color wheel, color value scale, grey scale, color scheme, color psychology, colors and emotions, color behaviour</p> <p>Unit - 2</p> <p>Study of human Form- 8 head, Front view, Detailed study of anatomy, Hands and feet, face study</p> <p>Unit - 3</p> <p>Face study front view, Introduction and meaning of fashion art, illustration, Block and muscular structure of body front view</p> <p>Unit - 4</p> <p>Introduction to Fashion Figure and Natural figure, Introduction to 10 head ball and joint</p> <p>Unit - 5</p> <p>Study of arms & hands, hand movements, legs and feet, different poses and footwear</p>	<p>10hrs</p> <p>8 hrs</p> <p>8 hrs</p> <p>8 hrs</p>

	Unit - 6 Torso Movement, Fashion faces Final Project & Presentation	6 hrs 5hrs
Pedagogy	Lectures/ Tutorials/Assignments/Self-Study	
References/Readings	1. Giovanni Civardi, Drawing Human Anatomy – Cassell Illustrated Publisher(1998) 2. Giovanni Civardi, Drawing: A Complete Guide (Art of Drawing),Search Press (2010) 3. Giovanni Civardi, Art of Drawing: Drawing Hands & Feet: Form, Proportions, Gestures and Actions, Search Press (2005) 4. Giovanni Civardi, Art of Drawing: Drawing Portraits: Faces and Figures,Search Press (2002) 5. LironYanconsky, How To Draw Folds And Clothes: For the Extreme Beginner (2014) 6. Michael Massen , The Artist's Guide to Drawing the Clothed Figure: A Complete Resource on Rendering Clothing and Drapery, Watson-Guptill (2011)	
Learning Outcomes	❖ Enable the students to create effective and interesting visual expression ❖ To develop approach towards ideation ❖ understanding and appreciation human body(both natural & Fashion Proportion)	

Program: B.Sc. (Fashion & Apparel Design)

Course Code: FD 103 B

Title of the Course : Fashion illustration I (Practical)

Number of Credits: 3

Effective from AY: 2019-20

Prerequisites for the course	NIL	
Objectives	<ul style="list-style-type: none"> ❖ To introduce Colors as a Foundation Skill ❖ To understand the color medium and color psychology ❖ To understand the human form ❖ to develop drawing skills ❖ To understand the proportions and contours of the human form 	
Content	<p>Unit - 1</p> <p>Introduction of color as an essential element of design,Pantone color, Color wheel, color value scale, grey scale, color scheme, color psychology,colors and emotions, color behavior</p> <p>Unit - 2</p> <p>Study of human Form- Measurements and proportions,form and structure of various body parts, behavior of various joints,Bone structure& muscled study of hand and feet in different motions. Bonestructure and muscled study of hands and feet in different motions</p> <p>Unit - 3</p> <p>Face study front view,drawing and shading of facial features medium in 6B, 8B,pencils</p>	<p>10 hrs</p> <p>10 hrs</p>

	Unit - 4 Introduction to Fashion Figure and Natural figure, Introduction to 10 head ball and joint Comparative study of the proportions and body size, 2 standing figures in both the proportions, muscle structure :¾ , side view, back view, (still and moving form)	8 hrs
	Unit - 5 Study of arms & hands, hand movements, legs and feet, different poses and footwear	8 hrs
	Unit - 6 Torso Movement, understanding the movement of body and muscle variation formation, Fashion face -Final Project & Presentation	4hrs
		5hrs
Pedagogy	Lectures/ Tutorials/Assignments/Self-Study	
References/Readings	<ol style="list-style-type: none"> 1. Giovanni Civardi, Drawing Human Anatomy – Cassell Illustrated Publisher(1998) 2. Giovanni Civardi, Drawing: A Complete Guide (Art of Drawing),Search Press (2010) 3. Giovanni Civardi, Art of Drawing: Drawing Hands & Feet: Form, Proportions, Gestures and Actions, Search Press (2005) 4. Giovanni Civardi, Art of Drawing: Drawing Portraits: Faces and Figures,Search Press (2002) 5. LironYanconsky, How To Draw Folds And Clothes: For the Extreme Beginner (2014) 6. Michael Massen , The Artist's Guide to Drawing the Clothed 	

	Figure: A Complete Resource on Rendering Clothing and Drapery, Watson-Guptill (2011)
Learning Outcomes	<ul style="list-style-type: none"> ❖ Enable the students to create effective and interesting visual expression ❖ To develop approach towards ideation ❖ understanding and appreciating human body(both natural & Fashion Proportion)

Program: B.Sc. (Fashion & Apparel Design)

Course Code: FD 104 A

Title of the Course :Fibre& yarn Science (Theory)

Number of Credits: 3

Effective from AY: 2019-20

Prerequisites for the course	NIL	
Objectives	<ul style="list-style-type: none"> ❖ To introduce students to the science of Textile Development ❖ To impart the knowledge of fibres, sources,their identification and properties ❖ To understand the process of developing fabric - fibres to weave 	
Content	Unit - 1 Introduction to textile fibers-Definition, Sources, Classification and properties of textile fibres Unit - 2	4 hrs

	<p>Cellulose fibers-Cotton, flax, kapok, hemp, ramie- Properties and end uses, Protein fibers- Silk, Wool – Properties and end uses</p> <p>Unit - 3</p> <p>Regenerated cellulose fibers- Viscose Rayon, Acetate Rayon, Tencel, Modal, Bamboo, Lyocel – production source, properties and end uses</p> <p>Unit - 4</p> <p>Synthetic fibers-Nylon, polyester, acrylic and modacrylic- properties and end uses, Polyethylene, polypropylene, olefin, Elastomeric fibers (spandex and lycra)- End uses.</p> <p>Unit-5</p> <p>Yarn manufacturing process for short staple fibers, Spinning Process: Ring and open end yarn spinning. Flowchart for manufacturing carded, combed yarn and folded yarn, Difference between Rotor, Ring spinning and Air jet spinning</p> <p>Unit-6</p> <p>Polymers - Polymerization, degree of Polymerization, different types of polymers- addition and condensation, orientation and crystallinity, characteristics of fiber forming polymers, general physical and chemical properties of fibers.</p> <p>Unit-7</p> <p>Texturisation - types (simplex and complex yarns) and uses, Blends- types, uses of blended yarns.</p> <p>Unit-8</p>	<p>4hrs</p> <p>6 hrs</p> <p>6 hrs</p> <p>10 hrs</p> <p>7hrs</p>
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Number of Credits: 3

Effective from AY: 2019-20

Prerequisites for the course	NIL	
Objectives	<ul style="list-style-type: none"> ❖ To introduce students to the science of Textile Development ❖ To impart the knowledge of fibres, sources, their identification and properties ❖ To understand the process of developing fabric - fibres to weave 	
Content	<p>Unit - 1</p> <p>Identification of different types of fibres by physical & chemical methods- cotton, viscoe, silk, wool, ployster, Nylon fibres</p> <p>Unit - 2</p> <p>Geometrical properties of yarn- Twist, Count of the yarns using different yarn numbering system</p> <p>Unit - 3</p> <p>Identification of yarns by physical method- spun & filament yarns, ply & novelty yarns</p> <p>Unit - 4</p> <p>Identification of varieties of Sewing threads & study of their properties like count, structure and twist</p>	<p>12 hrs</p> <p>12 hrs</p> <p>12 hrs</p> <p>9hrs</p>

Pedagogy	Lectures/ Tutorials/Assignments/Self-Study
References/Readings	<ol style="list-style-type: none"> 1. Gohl, E.P.G. Velensky, L.D. Textile Science, CBS Publishers and Distributors, (2003) 2. Hall, A.J. The standard hand book of Textiles, Wood head Publishing 8th edition, (2004) 3. Vidyasagar, P.V. Hand Book of Textiles, A. Mittal Publications, (2005) 4. Sara J. Kadolph, Textiles, Prentice Hall, 10th edition (2007) 5. Gordon Cook, J. Hand Book of Textile Fibres, Vol - II Man Made Fibers, Wood Head Publishing. (2007) 6. Bernard P. Corbman, Textiles Fiber to Fabric, McGrawhill Publications, 6th, Edition (1983) 7. Gilbert R. Merrill, Cotton and Picking, Universal Publishing Corporation, (1999) 8. Gilbert R. Merrill, Cotton Combing, Universal Publishing Corporation, (1999)
Learning Outcomes	<ul style="list-style-type: none"> ❖ To identify different kinds of fabric - composition , weave, etc ❖ to make informed choices while selecting fabrics for creating garments or other related products

Program: B.Sc. (Fashion & Apparel Design)

Course Code: FD 105 A

Title of the Course: Introduction to Pattern Making & Draping

Number of Credits: 3

Effective from AY: 2019-20

Prerequisites	NIL
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for the course											
Objectives	<ul style="list-style-type: none"> ❖ To introduce draping as an art of body packaging ❖ To employ the art/technique of draping to develop basic garments ❖ To introduce student to the basics of Pattern making ❖ To familiarize students with terminologies used in pattern making ❖ to Familiarize students with pattern making tools 										
Content	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%; padding: 5px;"> Unit - 1 Introduction to pattern making & garment construction, History of sewing machine , Parts of sewing machine, sewing machine needle - types, parts and functions, care and maintenance of sewing machine, sewing threads- function, performance , characteristics </td><td style="width: 20%; text-align: center; vertical-align: top; padding: 5px;">10 hrs</td></tr> <tr> <td style="padding: 5px;"> Unit - 2 Introduction to Tools used for Pattern Making and draping, </td><td style="text-align: center; vertical-align: top; padding: 5px;">5hrs</td></tr> <tr> <td style="padding: 5px;"> Unit - 3 Introduction to Basic hand stitches: Application of Temporary and permanent stitches, Methods, importance and application of basting, running, tacking, hand overcast , button, button hole, hemming stitches - plain and blind hemming, stitches and seams- Definition, terminologies, specifications ASTM standards, stitch properties, stitch types, seam dimensions </td><td style="text-align: center; vertical-align: top; padding: 5px;">10hrs</td></tr> <tr> <td style="padding: 5px;"> Unit - 4 Pattern Making Terminologies & symbols (nothes, punch/circles), pattern information (grain, part piece, cut symbols) seam allowance, fabric terms Comparison of draping and pattern development </td><td style="text-align: center; vertical-align: top; padding: 5px;">6 hrs</td></tr> <tr> <td style="padding: 5px;"> Unit - 5 Figure types & Figure analysis), body & garment relationship </td><td></td></tr> </table>	Unit - 1 Introduction to pattern making & garment construction, History of sewing machine , Parts of sewing machine, sewing machine needle - types, parts and functions, care and maintenance of sewing machine, sewing threads- function, performance , characteristics	10 hrs	Unit - 2 Introduction to Tools used for Pattern Making and draping,	5hrs	Unit - 3 Introduction to Basic hand stitches: Application of Temporary and permanent stitches, Methods, importance and application of basting, running, tacking, hand overcast , button, button hole, hemming stitches - plain and blind hemming, stitches and seams- Definition, terminologies, specifications ASTM standards, stitch properties, stitch types, seam dimensions	10hrs	Unit - 4 Pattern Making Terminologies & symbols (nothes, punch/circles), pattern information (grain, part piece, cut symbols) seam allowance, fabric terms Comparison of draping and pattern development	6 hrs	Unit - 5 Figure types & Figure analysis), body & garment relationship	
Unit - 1 Introduction to pattern making & garment construction, History of sewing machine , Parts of sewing machine, sewing machine needle - types, parts and functions, care and maintenance of sewing machine, sewing threads- function, performance , characteristics	10 hrs										
Unit - 2 Introduction to Tools used for Pattern Making and draping,	5hrs										
Unit - 3 Introduction to Basic hand stitches: Application of Temporary and permanent stitches, Methods, importance and application of basting, running, tacking, hand overcast , button, button hole, hemming stitches - plain and blind hemming, stitches and seams- Definition, terminologies, specifications ASTM standards, stitch properties, stitch types, seam dimensions	10hrs										
Unit - 4 Pattern Making Terminologies & symbols (nothes, punch/circles), pattern information (grain, part piece, cut symbols) seam allowance, fabric terms Comparison of draping and pattern development	6 hrs										
Unit - 5 Figure types & Figure analysis), body & garment relationship											

	<p>importance of body measurements</p> <p>Unit - 6</p> <p>Introduction to basic pattern - commercial and custom made pattern</p>	<p>6 hrs</p> <p>8 hrs</p>
Pedagogy	Lectures/ Tutorials/Assignments/Self-Study	
References/Readings	<ul style="list-style-type: none"> ❖ Pattern Making for Fashion Design by Helen Joseph – Armstrong (HJA) 1991) ❖ The Art of Fashion Draping – Connie Amaden Crawford 1991) ❖ Gerry Cooklin, Introduction to Clothing Manufacture, Blackwell Science, UK, (1991) ❖ Harold Carr & Barbara Latham, The Technology of Clothing Manufacture, Oxford Pub., USA, (1994) 	
Learning Outcomes	<ul style="list-style-type: none"> ❖ To Facilitate effective use of drawing media ❖ to improve eye- hand coordination ❖ To understand scale, proportion, lighting , drapes and perspectives 	

Program: B.Sc. (Fashion & Apparel Design)

Course Code: FD 105 B

Title of the Course :Introduction to Pattern Making & Draping (Practical)

Number of Credits: 3

Effective from AY: 2019-20

Prerequisites for the course	NIL	
Objectives	<ul style="list-style-type: none"> ❖ To introduce draping as an art of body packaging ❖ To employ the art/technique of draping to develop basic garments ❖ To introduce student to the basics of Pattern making ❖ To familiarize students with terminologies used in pattern Making ❖ to Familiarize students with pattern making tools 	
Content	<p>Unit - 1</p> <p>Sewing machine- different kinds-functions-uses-attachment-practice on paper, stitching on fabric (straight, curves, corners and circular)</p> <p>Unit - 2</p> <p>Sketching the Basic sewing machine and parts, threading the Single needle machine, loading bobbin and bobbin case, fixing and removing the needle, care and maintenance of sewing machines, oiling.</p> <p>Unit - 3</p> <p>Sewing techniques - Basic hand stitches- basting, running, tacking, hand overcast, buttonhole, hemming stitches - plain & blind hemming, slip stitch, tailor's tack</p> <p>Unit - 4</p>	<p>10hrs</p> <p>6hrs</p> <p>6hrs</p>

	<p>Seam & seam finishes- Plain, flat fell, French, turned & stitched, lapped, double top, pinked, over lock, & pinked and stitched</p> <p>Unit - 5</p> <p>Pattern preparation for women's basic blocks front, back, sleeve & skirt, Preparation of muslin basic blocks, test fitting, front, back, sleeve and skirt, pattern alterations</p> <p>Unit - 6</p> <p>Basic Draping Methods - Bodice Front & back, Skirt front & back</p>	<p>6hrs</p> <p>5hrs</p> <p>12 hrs</p>
Pedagogy	Lectures/ Tutorials/Assignments/Self-Study	
References/Readings	<ul style="list-style-type: none"> ❖ Pattern Making for Fashion Design by Helen Joseph – Armstrong (HJA) (1994) ❖ The Art of Fashion Draping – Connie Amaden Crawford (CAC) (1994) ❖ Gerry Cooklin, Introduction to Clothing Manufacture, Blackwell Science, UK, (1991) ❖ Harold Carr & Barbara Latham, The Technology of Clothing Manufacture, Oxford Pub., USA, (1994) 	
Learning Outcomes	<ul style="list-style-type: none"> ❖ To Facilitate effective use of drawing media ❖ to improve eye- hand coordination ❖ To understand scale, proportion, lighting , drapes and perspectives 	

Program: B.Sc. (Fashion & Apparel Design))

Course Code: FAD 106

Title of the Course:Constitution of India & Human Rights (Theory)

Number of Credits: 4

Effective from AY: 2019-20

Prerequisites for the course	NIL	
Objectives	<ul style="list-style-type: none"> ❖ Acquire an awareness of the constitutional rights provided to citizens. ❖ Understanding about the Human Rights and protections. 	
Content	<p>Unit-1</p> <p>Indian Constitutional Philosophy</p> <p>a) Features of the Constitution and Preamble</p> <p>b) Fundamental Rights and Fundamental Duties</p> <p>c) Directive Principles of State Policy</p> <p>Unit-2</p> <p>Union and State Executive, Legislature and Judiciary</p> <p>a) Union Parliament and State Legislature: Powers and Functions</p> <p>b) President, Prime Minister and Council of Ministers</p> <p>c) State Governor, Chief Minister and Council of Ministers</p> <p>d) The Supreme Court and High Court: Powers and Functions</p> <p>Unit-3</p>	<p>15Hrs</p> <p>15hrs</p> <p>15hrs</p>

	<p>Concept and Development of Human Rights</p> <ol style="list-style-type: none"> 1. Meaning Scope and Development of Human Rights 2. United Nations and Human Rights – UNHCR 3. UDHR 1948, ICCPR 1996 and ICESCR 1966 <p>Unit-4</p> <ol style="list-style-type: none"> 1. Human Rights in India 2. Protection of Human Rights Act, 1993 (NHRC and SHRC) 3. First, Second and Third Generation Human Rights 4. Judicial Activism and Human Rights 	15hrs
Pedagogy	Lectures/ Tutorials/Assignments/Self-Study	
References/Readings	<ol style="list-style-type: none"> 1. Dr B R Ambedkar, The Constitution of India by Govt. of India, Ministry of Law and Justice, 26 January (1950) 2. Austin Granville, The Indian Constitution: Cornerstone of A Nation (Classic Reissue), Oxford Publisher (1999) 3. Durga Das Basu, Human Rights in Constitutional Law, Prentice – Hall of India Pvt. Ltd., New Delhi (2012) 4. Noorani, A.G., (South Asia Human Rights Documentation Centre), Challenges to Civil Right), Challenges to Civil Rights Guarantees in India, Oxford University Press (2012) 	
Learning Outcomes	<p>❖ Students will learn skills required to research and analyze political issues and learn how to use those articles/law provisional in applied situations such as working environment/public places and careers that may involve human related problems and/or issues.</p>	

Semester II

Program: B.Sc. (Fashion & Apparel Design)

Course Code: FD 201 A

Title of the Course: Fashion Illustration II (Theory)

Number of Credits: 3

Effective from AY: 2019-20

Prerequisites for the course	NIL	
Objectives	<ul style="list-style-type: none"> ❖ To develop their rendering and detailing skills ❖ To help students to develop an illustration style ❖ To look at illustration in different contexts 	
Content	Unit - 1 Introduction to fashion illustration and brief history of fashion illustrations, study of two well-known fashion Illustrators	11hrs
	Unit - 2 Fashion psychology , role of clothing in physical , social, psychological and cultural scenario, human behavior and clothing, clothing and gender differentiation	11hrs
	Unit - 3 Fashion Designers, history and look into design concepts of fashion designers, both Indian and international	11hrs
	Unit - 4 Introduction to Fabric rendering different fabrics	12hrs

Pedagogy	Lectures/ Tutorials/Assignments/Self-Study
References/Readings	<ul style="list-style-type: none"> ❖ Allen and Seaman, “Fashion Drawing - The Basic Principles” B T Batsford, London, (1994) ❖ Drake and Ireland, Patrick <i>John</i>, "Fashion Design Drawing and Presentation", B. T, Batsford, London, (1996) ❖ Nicholas, "Fashion illustrations", Thames and Hudson. London, J (1994) ❖ Seamn, Julian, "Professional Fashion Illustration". B. T. Batsford, London, (1995) ❖ Fashion Illustration now - Thames & Hudson, (1995) ❖ Encyclopedia of Fashion Details - Patrick John Ireland (1995)
Learning Outcomes	<ul style="list-style-type: none"> ❖ To Facilitate fluency in the expression of fashion concepts ❖ To use illustration as a means to ideate ❖ To develop confidence in presenting work creatively

Program: B.Sc. (Fashion & Apparel Design)

Course Code: FD 201 B

Title of the Course :Fashion Illustration II (Practical)

Number of Credits: 3

Effective from AY: 2019-20

Prerequisites for the course	NIL
Objectives	<ul style="list-style-type: none"> ❖ To develop their rendering and detailing skills ❖ To help students to develop an illustration style ❖ To look at illustration in different contexts ❖ To widen the students exposure to the scope of Fashion art
	<p>Unit - 1</p> <p>Overview of the entire body structure and introduction of 10 -</p>

Content	<p>head figure, front and $\frac{3}{4}$ view, side and back view,</p> <p>Unit - 2</p> <p>Categorization of Women wear, Mood board creation, Color Palette</p> <p>Unit - 3</p> <p>Design interpretation & design development and draping a design on a croqui looseness/volume, Draping of garment - live sketching of different weights of fabric,</p> <p>Unit - 4</p> <p>Introduction to color media- rendering of skin and hair</p> <p>Unit - 5</p> <p>Depicting garment details - Pockets, collars , pleats, gathers, sleeves, cuts, yokes</p> <p>Unit -6</p> <p>Drawing of fashion silhouettes- Types of silhouettes, blouses, shirts, skirts, trousers, dress</p> <p>Unit-7</p> <p>Preparation of portfolio of five design each inspired by one Indian and one international designer</p>	<p>6hrs</p> <p>8 hrs</p> <p>6 hrs</p> <p>6 hrs</p> <p>6 hrs</p> <p>6 hrs</p> <p>7hrs</p>
Pedagogy	Lectures/ Tutorials/Assignments/Self-Study	

References/Readings	<ul style="list-style-type: none"> ❖ Allen and Seaman, Fashion Drawing - The Basic Principles, B T Batsford, London, (1994) ❖ Drake and Ireland, Patrick John, Fashion Design Drawing and Presentation, B. T, Batsford, London, (1996) ❖ Nicholas, "Fashion illustrations", Thames and Hudson. London, (1994) ❖ Seamn, Julian, "Professional Fashion Illustration". B. T. Batsford, London, (1995) ❖ Fashion Illustration now - Thames & Hudson (1995) ❖ Encyclopedia of Fashion Details - Patrick John Ireland (1995)
Learning Outcomes	<ul style="list-style-type: none"> ❖ To Facilitate fluency in the expression of fashion concepts ❖ To use illustration as a means to ideate ❖ To develop confidence in presenting work creatively

Program: B.Sc. (Fashion & Apparel Design)

Course Code: FD 202 A

Title of the Course :History of Costumes (Theory)

Number of Credits: 4

Effective from AY: 2019-2020

Prerequisites for the course	NIL	
Objectives	<ul style="list-style-type: none"> ❖ To look at costume of different civilization/ear as source of inspiration ❖ To be able to draw reference to costumes from different eras ❖ To understand the socio-economic factors that influences the transformation of costumes over Fashion ❖ To understand the evolution of fashion 	
Content	Unit - 1 Harappa civilization (river valley civilization), Ancient Egyptians, Ancient Greece- Background, clothing(men's & women's),	

	footwear, Jewelry, Beauty and grooming, hairs and hair dresses	10 hrs
	Unit - 2 Ancient Rome, Ancient Etruscans, The Byzantine period, The Cretan/Minoan Period - Background, clothing(men's & women's), footwear, jewelry, Beauty and grooming, hairs and hair dresses	10hrs
	Unit - 3 Middle age , Renaissance period -Background, clothing(men's & women's), footwear, jewelry, Beauty and grooming, hairs and hair dresses	10hrs
	Unit - 4 Late 15th-16th century -Renaissances period, 17th century -Baroque period 18th Century- Rococo 19th Century - The birth of Dandy- Background, Textiles, Costumes, Men & Women, jewelry, Make-up, Grooming Wigs, Corset, Hats & Fashion Magazines.	10hrs
	Unit - 5 1900-1909 - Down with the corset 1910-1919- Liberated body Edwardian Opulence 1920-1929 - Jazz look 1930-1939 - Return of Elegance 1940-1949 - Fashion is indestructible	10 hrs

Effective from AY: 2019-2020

Prerequisites for the course	NIL	
Objectives	<ul style="list-style-type: none"> ❖ To impart knowledge on woven fabrics ❖ to help students understand fabric formation process 	
Content	<p>Unit - 1</p> <p>Introduction on different method of fabric formation-Woven, Knitted and non woven fabrics, properties and end uses</p> <p>Unit 2</p> <p>Woven Fabric formation – weaving preparatory, objectives and brief study of process- winding, warping, sizing, Drawing and denting, Weft winding, Introduction to Khadi, Hand loom and power loom Fabrics. Classification of looms, Passage of material through loom, study of primary and secondary motions, Principle of Shuttleless loom viz., Multiple gripper, Rapier, Airjet, Waterjet looms. Advantages of unconventional looms over conventional looms</p> <p>Unit 3</p> <p>General Characteristics of woven fabrics and their importance– count of yarn, fabric grain, Thread density, Fabric width, Fabric weight and selvages.</p> <p>Unit 4</p> <p>Elementary weaves – Classification of woven fabrics. Glossary and characteristics, construction, salient features- of Plain weave – variation (rib and Basket), Twill weave – variation (RHT, LHT, Pointed and Herringbone) and Satin / Sateen weave – variation. Fabric Design and graphical representation of the above weaves. Introduction and salient features of Crepe</p>	<p>2 hrs</p> <p>10hrs</p> <p>6 hrs</p>

	fabrics like georgette, chiffons, Extra threads, Warp and weft pile and Brocade and damask, Terry pile structures.	12 hrs
	<p>Unit 5</p> <p>Introduction to Knitting – Classification, difference between warp and weft knitting, Basics of weft knitting, Loop diagram and properties of basic weft knitted structures, Modification of weft knitted structures.</p> <p>Unit 6</p> <p>Brief discussions of important fabric manufacturing clusters in India and their salient features- Kancheepuram, Arni, Kumbakonam, Chanderi, Maheshwari, Salem and Karur, Bangalore, Mysore, Illkal, Guledgudda, Kota, Banaras, Suhalkuchi, Santhipur, Beharampur of Orissa, Pochampalli and Panipat.</p>	8 hrs
		7hrs
Pedagogy	Lectures/ Tutorials/Assignments/Self-Study	
References/Readings	<ul style="list-style-type: none"> ❖ Corbmann, B.P Textiles : Fibre to fabric, McGraw Hill Inc. Singapore (1986) ❖ Grosicki, Z.J. Watson's Textile Design & Colour, 7th edition, Wood head Publication 1 ❖ Murphy, W.S. —Handbook of weaving, Abhishek Publication. (2003). ❖ Murphy, W.S. —Textile weaving & Design, Abhishek Publication, (2003). ❖ Pizzuto, J.J. Fabric Science 6th edition, Fairchild Publications. (2003). 	

	Spencer D.J. Knitting Technology, Pergamon Press, Oxford (1982)
Learning Outcomes	<ul style="list-style-type: none"> ❖ To introduce students to the science of textile development ❖ To understand the process of developing fabric - fibers to weave/knits

Program: B.Sc. (Fashion & Apparel Design)

Course Code: FD 203 B

Title of the Course: Fabric Science & Analysis (Practical)

Number of Credits: 3

Effective from AY: 2019-2020

Prerequisites for the course	NIL	
Objectives	<ul style="list-style-type: none"> ❖ To impart knowledge on woven fabrics ❖ to help students understand fabric formation process 	
Content	<p>Unit - 1 Analysis of different fabrics for clothing construction and weaves like Plain, twill, Sateen, satin honeycomb, herringbone and mock leno etc. and finding the particulars like fabric geometrical parameters and cover factor.</p> <p>Unit - 2 Analysis of different fabrics for clothing construction and weaves like Honeycomb, herringbone and mock leno etc. and finding the particulars like fabric geometrical parameters and cover factor.</p> <p>Unit - 3 Collection and portfolio preparation of 25 different commercial samples with different weaves and weight for apparels, furnishing, Household application, support material for garments and trims</p>	<p>15hrs</p> <p>15hrs</p>

		15hrs
Pedagogy	Lectures/ Tutorials/Assignments/Self-Study	
References/Readings	<ul style="list-style-type: none"> ❖ Corbmann, B.P Textiles : Fibre to fabric, McGraw Hill Inc. Singapore (1986) ❖ Grosicki, Z.J. Watson's Textile Design & Colour, 7th edition, Wood head Publication 1 ❖ Murphy, W.S. —Handbook of weaving, Abhishek Publication. (2003). ❖ Murphy, W.S. —Textile weaving & Design, Abhishek Publication, (2003). ❖ Pizzuto, J.J. Fabric Science 6th edition, Fairchild Publications. (2003). ❖ Spencer D.J. Knitting Technology, Pergamon Press, Oxford (1982) 	
Learning Outcomes	<ul style="list-style-type: none"> ❖ To introduce students to the science of textile development ❖ To understand the process of developing fabric - fibres to weave/knits 	

Program: B.Sc. (Fashion & Apparel Design)

Course Code: FD 204 A

Title of the Course: Garment Manufacturing Technique (Theory)

Number of Credits: 3

Effective from AY: 2019-2020

Prerequisites for the course	NIL	
Objectives	<ul style="list-style-type: none"> ❖ To introduce the concept of garment making ❖ To impart knowledge the skills required for garment components 	
	Unit-1 Fullness- Darts, pleats, tucks, gathers, Sleeves- Definition,	

Content	<p>terms, classification, types-basic sleeve, gathered, bell, kimono, raglan, leg of mutton & construction</p> <p>Unit - 2</p> <p>Dart Manipulation- conversion of darts to tucks, pleats, gathers, seam lines etc.</p> <p>Unit - 3</p> <p>Collars - Definition, terms, classification, and types</p> <p>Peter pan, sailor, Turtle collar, shawl, formal shirt collar, Mandarin, collar with stand & its variations & construction</p> <p>Unit - 4</p> <p>Yokes-Definitions, purpose, types-with fullness & without fullness, Shapes & construction.</p> <p>Unit-5</p> <p>Pockets- Definitions, purpose, Patch pockets, Patch pockets with flap, Seam pockets, welt pockets & variations</p> <p>Unit-6</p> <p>Neck line Finishes- piping, facing (bias facing, shaped facing). Plackets- definition, types Self, front placket, continuous bound placket, two piece sleeve placket and shirt placket</p> <p>Unit 7</p> <p>Skirts – Basic-flared, circular, gathered, pleated, basic waist band application</p> <p>Unit 8</p>	<p>4 hrs</p> <p>4 hrs</p> <p>2hrs</p> <p>3hrs</p> <p>4 hrs</p> <p>8hrs</p>
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	<p>Dress categories: with waistline without waist line, silhouettes, torso dress, princess, panel & drafting.</p> <p>Unit 9</p> <p>Sleeves – definition, terminologies, types- Sleeves along with bodice and set in sleeves.</p> <p>Unit -10</p> <p>Fasteners- press buttons, hook & eye, shirt button, button holes, concealed zippers & zips</p>	6 hrs
		6 hrs
		4 hrs
		4 hrs
Pedagogy	Lectures/ Tutorials/Assignments/Self-Study	
References/Readings	<p>❖ Helen J. Armstrong, Pattern making for fashion design, Prentice Hal (2000)</p> <p>Winfred Aldrich, Metric Pattern Cutting, Black Well Science, UK, (2000)</p>	
Learning Outcomes	<p>❖ To introduce Pattern Making as a vital tool in creating garments</p> <p>❖ To introduce the student to the basic technique of pattern Making</p>	

Program: B.Sc. (Fashion & Apparel Design)

Course Code: FD 204 B

Title of the Course:Pattern Making Garment Manufacturing Technique

(Practical)

Number of Credits: 3

Effective from AY: 2019-20

Prerequisites for the course	NIL	
Objectives	❖ To introduce the concept of garment making ❖ To impart knowledge the skills required for garment components	
Content	<p>Unit - 1</p> <p>Fullness – gathers, pleats, ruffles, tucks, godets, etc.</p> <p>Unit - 2</p> <p>Dart Manipulation- conversion of darts to tucks, pleats, gathers, seamlines, etc.</p> <p>Unit - 3</p> <p>Sleeves- plain, gathered, raglan, kimono</p> <p>Unit - 4</p> <p>Collars- peter pan, turtle neck, Chinese, shawl, shirt</p> <p>Unit -5</p> <p>Yokes-With and without fullness style lines</p>	<p>3 hrs</p> <p>6 hrs</p> <p>6 hrs</p> <p>6 hrs</p>

	<p>Unit - 6</p> <p>Pockets-Patch pockets, Patch pockets with flap, Seam pockets.</p> <p>Unit - 7</p> <p>Finishes- neckline finishes- facing, shaped facing and piping/binding.</p> <p>Unit - 8</p> <p>Plackets and finishing- continuous/ one piece, bound/ two piece placket Zippers- applications lapped zip, centered zip, concealed zip, fly zip</p>	<p>6 hrs</p> <p>6 hrs</p> <p>6 hrs</p> <p>6 hrs</p>
Pedagogy	Lectures/ Tutorials/Assignments/Self-Study	
References/Readings	<ol style="list-style-type: none"> 1. Helen J. Armstrong, Pattern making for fashion design Prentice Hall, (1995) 2. Winfred Aldrich, Metric Pattern Cutting , Black Well Science, UK (2000) 	
Learning Outcomes	<ul style="list-style-type: none"> ❖ To introduce Pattern Making as a vital tool in creating garments ❖ To introduce the student to the basic technique of pattern Making 	

Program: B.Sc. (Fashion & Apparel Design)

Course Code: FD 205 A

Title of the Course :Draping (Theory)

Number of Credits: 3

Effective from AY: 2019-2020

Prerequisites for the course	NIL	
Objectives	<ul style="list-style-type: none"> ❖ To introduce the concept of garment making ❖ To impart knowledge the skills required for garment components 	
Content	Unit - 1 Draping Terminology – Apex, Balance, Plumb line, Trueing, Blocking, Blending, Princess line, Clipping and marking.	12 hrs
	Unit - 2 Draping- Principles of Draping, Fitting methods	12 hrs
	Unit - 3 Basic draping Techniques- Bodice front, Bodice back, basic skirt, Dart Manipulation Techniques	12 hrs
	Unit - 4 Draping techniques- dresses- Bias, Princess line, neckline- cowl, collar mandarin, petterpan, sleeve yokes- shoulder, midriff, hip line	12 hrs
		9 hrs

Pedagogy	Lectures/ Tutorials/Assignments/Self-Study
References /Readings	<ul style="list-style-type: none"> ❖ Connie Amaden Crawford, The Art of Fashion and Design, Fairchild Publications, (2000) ❖ Jaffe, Hilde and Relis, Nurie, Draping for fashion design, Pearson Prentice Hall, (1995).
Learning Outcomes	<ul style="list-style-type: none"> ❖ To introduce Pattern Making as a vital tool in creating garments ❖ To introduce the student to the basic technique of pattern Making

Program: B.Sc. (Fashion & Apparel Design)

Course Code: FD 205 B

Title of the Course: Draping II (Practical)

Number of Credits:3

Effective from AY: 2019-2020

Prerequisites for the course	NIL	
Objectives	<ul style="list-style-type: none"> ❖ To introduce the concept of garment making ❖ To impart knowledge the skills required for garment components 	
Content	Unit – 1 Tools & Equipment used in Draping	8 hrs
	Unit - 2 Basic Draping methods- Bodice Front & back, Skirt Front and back	8 hrs
	Unit - 3 Draping - Collars, Convertible collar, mandarin collar, Peter pan	

	Unit - 4 Skirts- Flared, 6 gore skirt, circular skirt with hip yoke Unit - 5 Dresses- Bustier dress, bias cut slip dress Unit - 6 Creative drapes- Traditional Indian clothes and historical drapes	8 hrs 5 hrs 8 hrs 8 hrs
Pedagogy	Lectures/ Tutorials/Assignments/Self-Study	
References /Readings	❖ Connie Amaden Crawford, The Art of Fashion and Design, Fairchild Publications, (2000) ❖ Jaffe, Hilde and Relis, Nurie, Draping for fashion design, Pearson Prentice Hall, (1995).	
Learning Outcomes	❖ To introduce Draping as a vital tool in creating garments ❖ To introduce the student to the basic technique of Draping	

Program: B.Sc. (Fashion & Apparel Design)

Course Code: FAD 206 **Title of the Course:Environmental Studies (Theory)**

Number of Credits:4

Effective from AY: 2019-20

Prerequisites for the course	NIL	
Objectives	<ul style="list-style-type: none"> ❖ Acquire an awareness of the environment as a whole and its related problems. ❖ Gain a variety of experiences and acquire a basic understanding and knowledge about the environment and its allied problems. 	
Content	<p>Unit-1</p> <p>Introduction to Environmental Studies</p> <p>Multidisciplinary nature of environmental studies</p> <p>Scope and importance, concept of sustainability and sustainable development</p> <p>Unit-2</p> <p>Ecosystem</p> <p>What is an ecosystem? Structure and functions of ecosystem, energy flow in an ecosystem; food chains, food webs and ecological succession. Case studies of the following ecosystems: Forest Ecosystem, Grassland Ecosystem, Desert Ecosystem, Aquatic Ecosystems (ponds, streams, lakes, rivers, oceans, estuaries)</p> <p>Unit-3</p> <p>Natural Resources: Renewable & Non-Renewable Resources</p> <p>5. Land resources and land use change; Land degradation, soil erosion and desertification.</p> <p>6. Deforestation; Causes and impacts due to mining, dam building on environment, forests, biodiversity and tribal populations.</p> <p>7. Water; Uses and overexploitation of surface and</p>	<p>4hrs</p> <p>8 hrs</p> <p>8 hrs</p>

	<p>groundwater, floods, draughts, conflicts over water (international & inter-state).</p> <p>8. Energy resources; Renewable and non renewable energy sources, use of alternate energy sources, growing energy needs, case studies.</p> <p>Unit-4</p> <p>Biodiversity and Conservation</p> <p>5. Levels of biological diversity; genetic, species and ecosystem diversity; Biogeographic zones of India; Biodiversity patterns and global biodiversity hotspots.</p> <p>6. India as a mega biodiversity nation; Endangered and endemic species of India.</p> <p>7. Threats to biodiversity; Habitat loss, poaching of wildlife, man-wildlife conflicts, biological invasions, Conservation of biodiversity; <i>In-situ</i> and <i>Ex-situ</i> conservation of biodiversity.</p> <p>8. Ecosystem and biodiversity services: Ecological, economic, social, ethical, aesthetic and informational value.</p> <p>Unit-5</p> <p>Environmental Pollution</p> <p>5. Environmental Pollution: types, causes, effects and controls' Air, water, soil and noise pollution.</p> <p>6. Nuclear hazards and human health risks.</p> <p>7. Solids waste management: Control measures of urban and industrial waste.</p> <p>8. Pollution case studies.</p> <p>Unit-6</p> <p>Environmental Policies and Practices</p> <p>4. Climate change, global warming, ozone layer depletion, acid rain and impacts on human communities and agriculture.</p>	<p>8 hrs</p> <p>8 hrs</p>
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	<p>5. Environmental Laws: Environmental Protection Act; Air (Prevention & Control of Pollution) Act; Water (Prevention & Control of Pollution) Act; Wildlife Protection Act; Forest Conservation Act, International agreements; Montreal and Kyoto protocols and Conservation on Biological Diversity (BD).</p> <p>6. Natural reserves, tribal populations and rights, and human wildlife conflicts in Indian context.</p> <p>Unit-7</p> <p>Human Communities and the Environment</p> <p>7. Human population growth: Impacts on environment, human health and welfare.</p> <p>8. Resettlement and rehabilitation of projects affected persons; case studies</p> <p>9. Disaster Management: floods, earthquakes, cyclones and landslides.</p> <p>10. Environmental movements; Chipko silent valley, Bishnois of Rajasthan.</p> <p>11. Environmental ethics; Role of Indian and other religions and cultures in environmental conservation.</p> <p>12. Environmental communication and public awareness, case studies (e.g. CNG vehicles in India)</p> <p>Unit-8</p> <p>Field Work</p> <p>5. Visit to an area to document the environmental assets river/forest/flora/fauna etc.</p> <p>6. Visit to a local polluted site- Urban/Rural/Industrial/Agricultural.</p> <p>7. Study of common plants, insects, birds and basics principles of identification.</p> <p>8. Study of simple ecosystems, river, Delhi Ridge, etc</p>	<p>8 hrs</p> <p>8 hrs</p>
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		8 hrs
Pedagogy	Lectures/ Tutorials/Assignments/Self-Study	
References /Readings	<ol style="list-style-type: none"> 1. Carson R, Silent Springs, Houghton Mifflin Harcourt, (2002) 2. Gadgil M and Guha R, This Fissure Land: An Ecological History of India, Univ. of California Press, (1993). 3. Gleeson B and Low, Global Ethics and Environment, London Routledge, (1999) 4. Rosencranz Divan and Nobel M, Environmental Law and Policies in India, Tripathi (1992) 	
Learning Outcomes	Students will learn skills required to research and analyze environmental issues scientifically and learn how to use those skills in applied situations such as careers that may involve environmental problems and/or issues.	

ORDINANCE OC-XX RELATING TO B.SC(HONS) FASHION & APPAREL DESIGN & BSC(HONS) INTERIOR DESIGN PROGRAMME OF GOA UNIVERSITY (effective from the academic year 2019-2020)

OC-XX.1 GENERAL

OC- XX.1.1 Degree to be awarded

The Degree to be awarded shall be **Bachelor of Science (HONS)FASHION & APPAREL DESIGN AND Bachelor of Science (HONS)INTERIOR DESIGN**

OC-XX.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-XX.1.3 Duration of the Programme

- (i) The B.Sc. Programme shall be of a duration of 3 years full-time. 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-XX.1.4 Eligibility and Admission

(i) Eligibility (First Year)

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) Eligibility (Second Year under Lateral Entry to BSc (Fashion & Apparel Design)

A student 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 student 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-XX.2
OC-XX.2.1**

PROGRAMME STRUCTURE

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 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-XX.2.2

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 4 or 6 Credits and may consist of Theory component and a Practical component, in which case the **Theory** component will be of **3 Credits** and the **Practical** component will be of **3 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

3.1 (a) 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 **4 Credits** as prescribed by BoS and approved by the Academic Council.

3.1 (b) 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 A. Internship

An Internship work of 4 Credits is compulsory in V Semester. DSE Course in Semester V 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 an Internship under the guidance of a teacher/faculty member. The topic for the Internship work shall be given in Semester V. The candidate shall be required to carry out work for the Internship during 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. DSE Course in Semester VI 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.

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, and may consist of only Theory component, or Theory and Practical component, in which case, the Theory component will be of 3 Credits and the Practical component will be of 3 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 (AECC) Courses and Skill Enhancement (SE) Courses.

4.1 AEC Courses are 4 credit courses and are based on the content that leads to knowledge enhancement and AEC Courses are mandatory.

4.2 SE Courses are value-based and/or skill-based and are aimed at providing hands on-training, competencies, skills. Each Course will be of 4 Credits.

OC-XX.3 Course Structure

Subject	Course Code	I	II	III	IV	V	VI	Total
Subject 1	CC	4	4	4	4	6	4	26
Subject 2	CC	6	6	6	6	6	4	34
Subject 3	CC	6	6	6	6	6	4	34
Subject 4	CC	6	6	6	6		4	28
Subject 5	CC							
AECC	AECC	4	4	4	4			16
Subject in SY/TY	GE	4	4	4		4	4	20
Subject in SY	SEC				4	4		8
Subject in TY Internship	DSE					4		4
+ Project (Compulsory)	DSE						10	10

Total		30	30	30	30	30	30	180
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NOTE:

(i) Roman numbers in the first row refers to Semester. Subjects refer to specializations in Fashion & Apparel Design and Interior Design.

(ii) The Codes in the second column refer to the type of Courses [Core Course (CC), Discipline Specific Elective (DSE) Course, Generic Elective (GE) Course, Ability Enhancement Compulsory (AEC) Course and Skill Enhancement (SE) Course].

(iii) Each Course is of 6 Credits (including Practical wherever applicable) except AECC, and Skill Enhancement Course which are of 4 Credits each.

(iv) An Internship is compulsory SE; the Credits are not shown here separately.

(vi) A Project is in lieu of a DSE, the Credits are not shown here separately.

1. SEMESTER-I

There shall be:

(i) Five Compulsory Core Courses from each specialization in Fashion & Apparel Design and Interior Design (CC).

(ii) One Compulsory Courses 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) Five 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 CompulsoryCore Course from specialization in Fashion & Apparel Design and Interior Design
- (ii) One Courses of Discipline Specific Elective (DSE).
- (iii) One Course of Generic Elective (GE).

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 Course from specialization in Fashion & Apparel Design and Interior Design

(ii) One Course of Discipline Specific Elective (DSE).

(iii) One Course from Generic Elective (GE).

The Five Courses in (i), (iii)) 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-XX.4 Scheme of Examination

1. (a) A Course of only Theory carrying 100 marks shall have component of SEE component of 60 marks and Practical 40 marks.

2.(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, 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-VI 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) 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

(i). 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.

(ii) 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.

(iii) The Chairperson shall personally hand over the sealed set of question papers and answer keys to the Controller of Examinations in the prescribed manner.

(iv) Photocopies of this key and the marking scheme for each of the Course of the concerned Semester I to VI shall be given to the examiners assessing the papers.

(g) The duration of SEE Theory Course carrying Theory Course carrying 60 marks shall be of two hours, Practical examination of 40 marks shall be of three hours duration.

3.(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 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.
- (b)** 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.
- (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.
- 4.(a) (i)** A Project Course 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.
- (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.
- (c)** 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).
- (d)** 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.

5.(a) (i) Revaluation of answer books of the candidates at Semesters I to VI shall be permitted as per the existing provisions of for revaluation/ verification. However, 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.

6. A supplementary examination shall be conducted, preferably after 15 days from the declaration of results of Semesters I to VI examinations. Students who have a backlog of any, or all of the Courses (Theory / Practical) of Semesters I to VI are eligible to appear for this examination.

7.(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-XX.5 GRIEVANCE COMMITTEE

There shall be a College Grievance Committee in accordance with the General Ordinance of the University

OC-XX.6 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 < 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 < 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 & D	Second Class
Grade F	Failed

OC-XX.7 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-XX.8 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 be 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 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.		
6	Whether the exercises were spelt out in specific terms (such as Problem Numbers, Case Title,		

	etc.) in the Course Outline.		
7	Whether these exercise 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.

1. Documents required are in the footnote (3).

The Process to be adopted is outlined in the footnote (4).

2. Original shall be filed in the AAC File of the Batch, one Copy for the Subject File, one copy for the Instructor.

3. 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

4. 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-XX.9 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.

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D 4.1 Goa Medical College and Hospital

D 4.1.1 Continuation of affiliation for M.D. General Medicine program for the academic year 2019-20.

Annexure I

Date of visit.	31/05/2019
Name of the College. / Institution.	Goa Medical College and Hospital, Bambolim, Goa.
NAAC Accreditation.	
If Yes, Grade and Year.	
Research funding received by college last year.	
Programme being reviewed by AIC.	MD. General Medicine.
Programme fee per year per student.	
Is financial position of the programme as per SC-1 ?	

Faculty (add more rows in the table below if needed)

Number of faculty members sanctioned for the programme.	18.
Number of faculty positions filled.	17.
Faculty Member 1. Name.	Dr. Edwin J. J. B. M. Gomes.
Highest Qualification.	MBBS. MD. General Medicine.
Qualified as per UGC. / MCI.	Yes. / Professor.
Nature of Appointment.	Permanent.
Salary.	L – 13 1,18,500/-
Faculty Member 2. Name.	Dr.AnarKhadeparkar.
Highest Qualification.	MBBS. MD. General Medicine.
Qualified as per UGC. / MCI.	Yes. / Associate Professor.
Nature of Appointment.	Permanent.
Salary.	L – 11 67,700 /-
Faculty Member 3. Name.	Dr.SunandaAmonkar.
Highest Qualification.	MBBS. MD. General Medicine.
Qualified as per UGC. / MCI.	Yes. / Associate Professor.
Nature of Appointment.	Permanent.
Salary.	L – 11 67,700 /-
Faculty Member 4. Name.	Dr.VirajKhandeparkar.
Highest Qualification.	MBBS. MD. General Medicine.
Qualified as per UGC. / MCI.	Yes. / Associate Professor.
Nature of Appointment.	Permanent.
Salary.	L – 11 67,700 /-
Faculty Member 5. Name.	Dr.Rachita Gupta E Velho.
Highest Qualification.	MBBS. MD. General Medicine.
Qualified as per UGC. / MCI.	Yes. / Associate Professor.
Nature of Appointment.	Permanent.
Salary.	L – 11 67,700 /-

Faculty Member 6. Name.	Dr. Carmen Pereira.
Highest Qualification.	MBBS. MD. General Medicine.
Qualified as per UGC. / MCI.	Yes. / Associate Professor.
Nature of Appointment.	Permanent.
Salary.	L – 11 67,700 /-
Faculty Member 7. Name.	Dr.Nicasia Furtado.
Highest Qualification.	MBBS. MD. General Medicine.
Qualified as per UGC. / MCI.	Yes. / Assistant Professor.
Nature of Appointment.	Permanent.
Salary.	L – 11 67,700 /-
Faculty Member 8. Name.	Dr.KedareswarNarvencar.
Highest Qualification.	MBBS. MD. General Medicine.
Qualified as per UGC. / MCI.	Yes. / Assistant Professor.
Nature of Appointment.	Permanent.
Salary.	L – 11 67,700 /-
Faculty Member 9. Name.	Dr.SavitaGraca Pinto Da Silva.
Highest Qualification.	MBBS. MD. General Medicine.
Qualified as per UGC. / MCI.	Yes. / Assistant Professor.
Nature of Appointment.	Permanent.
Salary.	L – 11 67,700 /-
Faculty Member 10. Name.	Dr.Ramnath Nevrekar.
Highest Qualification.	MBBS. MD. General Medicine.
Qualified as per UGC. / MCI.	Yes. / Lecturer.
Nature of Appointment.	Permanent.
Salary.	L – 10 56,100/-
Faculty Member 11. Name.	Dr.Sumeet Juwarkar.
Highest Qualification.	MBBS. MD. General Medicine.
Qualified as per UGC. / MCI.	Yes. / Lecturer.
Nature of Appointment.	Permanent.
Salary.	L – 10 56,100/-
Faculty Member 12. Name.	Dr.Rukma Kolwalkar.
Highest Qualification.	MBBS. MD. General Medicine.
Qualified as per UGC. / MCI.	Yes. / Lecturer.
Nature of Appointment.	Permanent.
Salary.	L – 10 56,100/-
Faculty Member 13. Name.	Dr. Marina Vaz.
Highest Qualification.	MBBS. MD. General Medicine.
Qualified as per UGC. / MCI.	Yes. / Lecturer.
Nature of Appointment.	Permanent.
Salary.	L – 10 56,100/-
Faculty Member 14. Name.	Dr.Gauri Naik.
Highest Qualification.	MBBS. MD. General Medicine.
Qualified as per UGC. / MCI.	Yes. / Lecturer.
Nature of Appointment.	Permanent.
Salary.	L – 10 56,100/-
Faculty Member 15. Name.	Dr.Raghoba Gaonkar.

Highest Qualification.	MBBS. MD. General Medicine.
Qualified as per UGC. / MCI.	Yes. / Lecturer.
Nature of Appointment.	Permanent.
Salary.	L – 10 56,100/-
Faculty Member 16. Name.	Dr.Aparna Pai.
Highest Qualification.	MBBS. MD. General Medicine.
Qualified as per UGC. / MCI.	Yes. / Lecturer.
Nature of Appointment.	Permanent.
Salary.	L – 10 56,100/-
Faculty Member 17. Name.	Dr.Shashank Prabhudessai.
Highest Qualification.	MBBS. MD. General Medicine.
Qualified as per UGC. / MCI.	Yes. / Lecturer.
Nature of Appointment.	Permanent.
Salary.	Lump Sum. 95,000/-

No. of applications received for admission to the programme during the last 3 academic years.

Academic Year.	No of applications.	No. of seats sanctioned.	No of seats filled.
2015 – 2016.	Not applicable.	05	05
2016 – 2017.	Not applicable.	05	05
2017 – 2018.	Not applicable.	05	05
2018 – 2019.	Not applicable.	14	14

Number of applications not applicable as admissions are based on merit.

Infrastructure.

Classrooms available to the programme and area of each classroom.	Two seminar rooms of a seating capacity of 40 persons.
Teaching aids available for the programme.	LCD projector. Laptop. Blackboard. Teaching couch for patient to lie on.
Special Equipment used in the programme.	Echocardiography. Stress Test Machine. Temporary Pace Maker Implanation. Cardiac Catheter Laboratory. Nerve Conduction Studies. Electro Encephalogram Studies. Dialyses Machines.
Availability of staffroom to teachers.	Yes.
Availability of common room to students.	Not needed. The students are junior residents and have to learn by working in the wards. Duty rooms for junior residents in each ward available.
Library facilities available to the programme.	Yes.

Sports facilities available to the programme.	Yes in the resident doctors hostel. (GARD).
Canteen Facilities.	Yes. Both in the hospital and hostel.
Health Facilities. Counselling etc. Available to the programme.	Yes. Each PG student has a guide.
Description of facilities that have been added since the last AIC visit.	<ol style="list-style-type: none"> 1. Classroom of 60 sitting capacity in the faculty block on 2nd floor. 2. E – Text Books. 3. Two month rotation posting in the superspeciality departments.

Data on placements of last 3 batches.

Batch. 2015 – 2018.

Sr No.	Name of the student.	Placement
01.	Dr. Gajanan Kamat.	Senior Resident in Medicine.
02.	Dr. Tabitha Lobo.	Senior Resident in Medicine.
03.	Dr. Anura Kantak.	Senior Resident in Medicine.
04.	Dr. Vishwas T.	Senior Resident in Medicine.
05.	Dr. Fawas T.T.	Did not clear MD general medicine.

Batch. 2014 – 2017.

Sr No.	Name of the student.	Placement
01.	Dr. Rukma Narkar.	DM in endocrinology
02.	Dr. Saphallya Kamat.	Senior Resident in Medicine.
03.	Dr. Livin Skaria.	Senior Resident in Neurology.
04.	Dr. Nitin Wathore.	DNB in Cardiology.
05.	Dr. Jeren Peters.	Left the seat.

Batch. 2013 – 2016.

Sr No.	Name of the student.	Placement
01.	Dr. Ana Soraya Moteiro.	DM in endocrinology
02.	Dr. Nakul Tikare.	Preparing for superspeciality.
03.	Dr. Chandra Bhushan Prasad.	Preparing for superspeciality.
04.	Dr. Bhanu Mishra.	DNB in Nephrology.
05.	Dr. Lijesh K. V.	Preparing for superspeciality.

SC – 1(iii) 1 (k)	CONSTITUTION OF i) Managing Body.	
SC – 1 7 (b)	ii) Local Managing Committee.	
SC – 1 2.1	Registration of Society / Trust.	

SC – 19 (XII) (8)	MUSTER ROLL OF FACULTY AND NON TEACHING STAFF. <ul style="list-style-type: none"> i) Verify whether the strength shown tallies with those on the master roll. (Department Wise). ii) Leave orders to ascertain that the leave is granted as per the provision of the Statute. 	
SC – 1 4 (d), (e) & (g).	MEETING WITH THE FACULTY AND NON TEACHING STAFF. To ascertain whether. <ul style="list-style-type: none"> i) Appointment is approved by the Goa University. ii) Salary is paid as per the norms of the U.G.C./Directorate of Higher Education and is paid in time. iii) All deductions in salary are done and the amount remitted accordingly including the income tax. iv) Adequate facilities are available to the faculty for teaching etc. 	
SC – 1 4 (a). SC – 1 4 (h).	MEETING WITH THE STUDENTS. To ascertain whether. <ul style="list-style-type: none"> i) Teaching is done as per approved syllabus and as per Time Table. ii) Adequate facilities are available in terms of required books in the library including book bank facility and computers in the computer lab. iii) Fees are charged as notified and approved by the Authorities. 	

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D 4.1.2 Continuation of affiliation for M.D. Preventive & Social Medicine program for the academic year 2019-20.

Annexure I

Date of visit	31/05/2019
Name of the College/Institution	Goa Medical College, Bambolim
NAAC Accreditation	NA
If yes, Grade and year	
Research funding received by college last year	No
Programme being reviewed by AIC	Postgraduate programme (PSM): 1. MD (PSM) 2. Diploma in Public Health (DPH)
Programme fee per year per student	MD: Rs. 24000/- per year DPH: Rs. 24000/- per year
Is financial position of the programme as per SC-1?	Information with Academic Section

Faculty (add more rows in the table below if needed)

Number of faculty members sanctioned for programme	
Number of faculty positions filled	9 (PG Guides)
Faculty Member 1	Name: Dr. Jagadish A. Cacodcar
Highest qualification	MD, Goa University
Qualified as per UGC?	Yes/ No
Nature of Appointment	Perm/ Contract/Lecture basis
Salary	PB4(37400-67000) GP 10000
	Gross salary: 2,75,000/-
Faculty Member 2	Name: Dr. A.M. Ferreira
Highest qualification	MD, Bombay University
Qualified as per UGC?	Yes/ No
Nature of Appointment	Perm/ Contract/Lecture basis
Salary	PB4(37400-67000) GP 10000
Faculty Member 3	Name: Dr. Vanita Pinto
Highest qualification	MD, Goa University
Qualified as per UGC?	Yes/ No
Nature of Appointment	Perm/ Contract/Lecture basis
Salary	PB4(37400-67000) GP 8700

Faculty Member 4	Name: Dr. Hemangini K. Shah
Highest qualification	MD, Goa University
Qualified as per UGC?	Yes/ No
Nature of Appointment	Perm/ Contract / Lecture basis
Salary	PB4(37400-67000) GP 8700
Faculty Member 5	Name: Dr. Delia D'Souza
Highest qualification	MD, Karnataka University
Qualified as per UGC?	Yes/ No
Nature of Appointment	Perm/ Contract / Lecture basis
Salary	PB4(37400-67000) GP 8700
Faculty Member 6	Name: Dr. Nadia Pinto
Highest qualification	MD, Goa University
Qualified as per UGC?	Yes/ No
Nature of Appointment	Perm/ Contract / Lecture basis
Salary	PB4(37400-67000) GP 8700
Faculty Member 7	Name: Dr. Amit Dias
Highest qualification	MD, Goa University
Qualified as per UGC?	Yes/ No
Nature of Appointment	Perm/ Contract / Lecture basis
Salary	PB4(37400-67000) GP 8700
Faculty Member 8	Name: Dr. Nitin Dhupdale
Highest qualification	MD, Goa University
Qualified as per UGC?	Yes/ No
Nature of Appointment	Perm/ Contract / Lecture basis
Salary	PB3(15600-39100) GP 6600

No. of applications received for admission to the programme during last 3 academic years

Academic year	No. of applications	No. of seats sanctioned	No. of seats filled
2015-16	-	2 MD + 2 DPH	2 MD + 2 DPH
2016-17	-	5 MD + 2 DPH	5MD + 1 DPH
2017-18	-	5 MD + 2 DPH	5 MD + 2 DPH

Infrastructure

Classrooms available to the programme and area of each classroom	Yes 30 sq.m.
Teaching aids available for the programme	Yes
Laboratories used by the programme and area of each laboratory	Yes 1. Departmental Lab 220 sq.m.

	2. Research Lab 100 sq.m.
	List attached Annexure - I
Availability of staffroom to teachers	Separate rooms for each teacher is available 21 sq.m. room : 4 10 sq.m. room : 5
Availability of common room to students	Yes
Library facilities available to the programme	Yes Central Library: 1622 books, 3 Foreign and 9 Indian Journals pertaining to the department Departmental Library:- Book/Journals 101 books/ WHO Gratis publications
Sports facilities available to the programme	Yes
Canteen facilities	Yes
Health facilities, Counseling, etc. available to the programme	Yes
Description of facilities that have been added since the last AIC visit.	1. LCD Projector (4) 2. Computer and Printer (1) 3. Potable Audio System 4. Over Head Projector

SC-1 (iii) 1 (k)	CONSTITUTION OF i) Managing Body ii) Local Managing Committee	Available with college
SC-1 7 (b)		
SC-1 2.1	Registration of Society/Trust	N.A.
SC-19 (XII) (8)	MUSTER ROLL OF FACULTY AND NON-TEACHING STAFF i) Verify whether the strength shown tallies with those on the Master Roll (Department-wise) ii) Leave orders to ascertain that the leave is granted as per the previous of the Statute.	Maintained
SC-1 4 (d), (e) & (g)	MEETING WITH THE FACULTY AND NON-TEACHING STAFF to ascertain whether: i) Appointment is approved by the Goa University. ii) Salary is paid as per the norms of U.G.C./Directorate of Higher Education and is paid in time. iii) All deductions is salary are done and the amount remitted accordingly including income tax. iv) Adequate facilities are available to the Faculty for teaching etc.	Conducted regularly
SC-1 4 (a) SC-1 4 (h)	METTING WITH THE STUDENTS to ascertain whether: i) Teaching is done as per approved syllabus and as per the Time Table. ii) Adequate facilities are available in terms of required books in the library including book bank facility and	Conducted regularly

	computers in the computer labs. iii) Fees are charged as notified and approved by the Authorities.	
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Availability of common room to students	yes
Library facilities available to the programme	yes
Sports facilities available to the programme	yes
Canteen facilities	yes
Health facilities, Counseling, etc. available to the programme	yes
Description of facilities that have been added since the last AIC visit	

Data on placements of last 3 batches:

Batch: 2013-15 (DPH) 2013-16 (MD)

Sr.No	Students Name	Placement
01	Dr. Shraddha Chodankar (MD)	MO District Hospital, Asilo
02	Dr. Uma Sadekar (MD)	MO RMNCH + A , DHS
03	Dr. Mrudul Naik (DPH)	MO District Hospital, Asilo
04	Dr. Vijeta Kalekar (DPH)	Private Practice

Batch: 2014-16 (DPH) 2014-17 (MD)

Sr.No	Students Name	Placement
01	Dr. Shane Rodrigues (MD)	Medical Officer, DHS Awaiting Posting
02	Dr. Vijay S. (MD)	Moved to Native place for career prospects
03	Dr. Nikhita Quadros (DPH)	Medical Officer, DHS
04	Dr. Liviea Colaco (DPH)	Medical Officer, DHS

Batch: 2015-17 (DPH) 2015-18 (MD)

Sr.No	Students Name	Placement
01	Dr. Dipashree Talaulikar (MD)	MO, ART Centre, GMC (Bond Service)
02	Dr. Nikhil Akarker (MD)	Medical Officer, DHS
03	Dr. Saili S. Pradhan (MD)	Medical Officer at CHC Valpoi
04	Dr. Mellisa Dias (MD)	MO ART Hospicio District Hosp , DHS (Bond Service)
06	Dr. Elvira Noronha (MD)	Medical Officer, Sub-District Hospital , Ponda
07	Dr. Nilam Gaude (DPH)	Registered for MD (PSM) (Presently undergoing PG Course)

Current Batch: 2016-18 (DPH) 2016-19 (MD)

Sr.No	Students Name	Placement
01	Dr. Abhishek Bicholkar (MD)	Junior Resident (presently undergoing PG Course)
02	Dr. Prajakta Naik (MD)	Junior Resident (presently undergoing PG Course)

		Course)
03	Dr. Mithila Nadkarni (MD)	Junior Resident (presently undergoing PG Course)
04	Dr. Shefalee Pai Vernekar (MD)	Junior Resident (presently undergoing PG Course)
06	Dr. Von Mascharenhas (MD)	Junior Resident (presently undergoing PG Course)
07	Dr. Akshaya Naik (DPH)	JR, Registered for MD (PSM) in 2017

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Department of PSM

Sr. No	Name	Qualifications/University		Joining Date	Pay Scale	Nature of appointment	Workload Breakup	Receipt of Recognized Awards
1.	Dr. Jagadish A. Cacodcar &HOD	MBBS, 1992 MD 1996	Goa	30.01.1997	37400-67000+10000 and allowances	Permanent	1)Planning & Administration as controlling Officer of UG/PG teaching, Examinations, RHTC Mandur, UHC St Cruz & PHC Sanquelim 2)Engaging Under Graduate Lecturers (MBBS, PG, Bsc Nursing, B.P.T.) 3)Engaging Post Graduate Seminars and Teaching Programme & PG Guide 4)Officer In-charge of Academic Section GMC	10 Awards 1- International 3- National 6- State Level (All Medical/commu nity service)
2.	Dr. A.M. Ferreira Associate Professor	MBBS 1988 MD 1990	Mumbai	8.01.1986	37400-67000+10000 and Allowances	Permanent	1)Engaging Under Graduate Lecturers 2) Engaging Post Graduate Seminars & Teaching	

							Programme and PG Guide	
							3)Consultant ICDS Scheme	
3.	Dr. Vanita Pinto da Silva Asst. Professor	MBBS, 1994 MD 1999	Goa	27.3.1999	37400- 67000+8700 and Allowances	Permanent	1) Engaging under Graduate Lectures 2) Engaging Pot Graduate Seminars & Teaching Programme and PG Guide 3) Consultant ICDS Scheme	
4.	Dr. M.S. Kulkarni Associate Professor in Demography	M.Sc 1988 PHD 2007	Karnatak a YCMOU	9.08.1994	37400- 67000+ 8700 & Allowances	Permanent	1)Engaging Under Graduate Lectures 2)Engaging Post Graduate Research Guidance to PG & Staff	
6.	Dr. H.K. Shah Assistant Professor	MBBS, 1990 MD,1995 DHA, 1997	Goa	30/10/2002	37400 67000+8700 and allowances	Permanent	1)Engaging Under Graduate Lectures & Community Postings (Medical & Nursing) 2)Engaging Post Graduate Seminars and Teaching Programme & PG Guide 3) Co-ordinator PG Training Programme 4) In charge Rural Health Training Centre Mandur	
7.	Dr. Delia D'Souza	MBBS, 1991 MD 1997	Karnatak a	1.10.1994	37400- 67000+8700	Permanent	1)Engaging Under Graduate Lectures &	(FAIMER) Fellowship

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	Lecturer				and allowances		Community postings 2)Engaging PG teaching Programme & PG Guide 3)Co-ordinator of Undergraduate Teaching Programme	
8.	Dr. Nadia R Pinto Lecturer	MBBS 1998 MD 1993 DNB 1994	Goa	11.8.1994	37400-67000+8700 and allowances	Permanent	1)Engaging Under Graduate Lectures & Community Postings 2) Engaging Post Graduate Teaching Program & PG Guide	
9.	Dr. Amit Dias Lecturer	MBBS, 1997 MD 2002	Goa	16.07.2001	37400-67000+8700 and allowances	Permanent	1)Engaging Under Graduate Lectures & Community Postings 2)In charge Urban Health Training Centre Mandur 3)PG Guide	1 - National
10.	Dr. Nitin Dhupdale Lecturer	MBBS, 1996 MD 2001	Goa	09.8.2002	15600-39100+6600 and allowances	Permanent	1)Engaging Under Graduate Lectures & community Postings 2)I/C Sankhalim PHC St. Cruz 3)Co-ordinator PG Training Program & PG Guide	
11.	Dr. Frederick Vaz Assistant Lecturer	MBBS, 1998 MD 2003 DNB(PSM)	Goa	16.7.2001	15600 39100+6600 and Allowances	Permanent	1) Teaching Undergraduate MBBS Students, Nursing Students & AHS students	

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							2)Surveillance of Vector Borne Disease Control Programme	
12.	Dr. Somnath Perni Assistant Lecturer	MBBS 1995 MD 2003	Goa	27.1.2006	15600-39100+6600 and allowances	Permanent	1)Teaching Undergraduate MBBS students, Nursing students & AHS students 2)Surveillance of Vector Borne Disease Control Programme	
13.	Dr. Umesh Kamat Assistant Lecturer	MBBS, 2002 MD 2006	Goa	09.11.2006	15600-39100+6600 and allowances	Permanent	1)Teaching Undergraduate MBBS students, Nursing students. 2)Co-ordinator & Trainer in Bio-Medical Waste Disposal for GMC Staff	1)Dr. S. Radhakrishnan Award for Medical Teacher 2012 2)Diabetes Education innovation award 2014
14.	Dr. Archana Desai Assistant Lecturer	MBBS 1999 MD 2004	Goa	13.9.2007	15600-39100+5400 and allowances	Permanent	1) Teaching & conduct of Practicals of Under Graduate MBBS Students	
15.	Dr. Shreya Pirankar Assistant	MBBS 2010 DPH 2012	Goa	9.9.2013	15600-39100+5400 and	Permanent	1) Teaching & conduct of Practicals of Under Graduate MBBS	

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	Lecturer				allowances		Students 2) Posted at Rural Health Training Centre St.Cruz	
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Dr. Nitin Dhupdale Lecturer	MBBS, 1996 MD 2001	Goa	09.8.2002		15600- 39100+6600 and allowances	Permanent	1) Engaging Under Graduate Lectures & community Postings 2) I/C Urban Health Training Centre St. Cruz 3) PG Guide	
Dr. Frederick Vaz Assistant Lecturer	MBBS, 1998 MD 2003 DNB(PSM)	Goa	16.7.2001		15600 39100+6600 and Allowances	Permanent	1) Teaching Undergraduate MBBS Students, Nursing Students 2) Surveillance of Vector Borne Disease Control Programme	
Dr. Somnath Perni Assistant Lecturer	MBBS 1995 MD 2003	Goa	27.1.2006		15600- 39100+6600 and	Permanent	1) Teaching Undergraduate	

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					allowances		MBBS students, Nursing students 2) Surveillance of Vector Borne Disease Control Programme	
Dr. Umesh Kamat Assistant Lecturer	MBBS, 2002 MD 2006	Goa	09.11.2006		15600-39100+6600 and allowances	Permanent	1) Dr Radhakrishnan Award for Medical Teacher 2012 2) Diabetes 3) Trainer In Medical Waste Disposal for GMC Staff	

Dr. Archana Dessai Assistant Lecturer	MBBS 1999 MD 2004	Goa	13.9.2007	15600-39100+5400 and allowances	Permanent	3) Practicals of Under Graduate Students 4) Posted at Rural Health Training Centre St. Cruz	
Dr. Shreya Pilankar Assistant Lecturer	MBBS 2010 DPH 2012	Goa	9.9.2013	15600-39100+5400 and allowances	Permanent	5) Practicals of Under Graduate Students 6) Posted at Rural	

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						Health Training Centre St.Cruz	
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D 4.1.3 Continuation of affiliation for M.S. Anatomy program for the academic year 2019-20.

Annexure I

Date of visit	30/05/2019
Name of the college/Institution	Goa Medical College
NAAC Accreditation	Nil
If yes, Grade and year	<u>Not Applicable</u>
Research funding received by college last year	<u>Nil</u>
Programme being reviewed by AIC	MS, Anatomy
Programme fee per year per student	Rs. 29,000/-
Is financial position of the programme as per SC-1 ?	<u>Not Applicable</u>

Faculty (add more rows in the table below if needed)

Number of faculty members sanctioned for programme	Two
Number of faculty positions filled	Two
Faculty Members 1	Name. Dr. P.E.Natekar
Highest qualification	MS Anatomy
Qualified as UGC ?	Yes
Nature of Appointment	Permanent
Salary	Level 14 Pay
Faculty Member 2	Name. Dr.Fatima De Souza
Highest qualification	MS Anatomy
Qualified as per UGC	Yes
Nature of Appointment	Permanent
Salary	Level 13 Pay Rs

No. of applications received for admission to the programme during last 3 academic years

Academic year	No. of applications	No of seats sanctioned	No of seats filled
2016-2017	Nil	4	Nil
2017-2018	Nil	4	Nil
2018-2019	1	5	1

Infrastructure

Classrooms available to the programme and area of each classroom	Yes LH- adequate size Seminar room – adequate Demonstration room -04 Preparation room - 02
Teaching aids available for the	Yes OHP, LCD

programme	
Laboratories used by the programme and area of each laboratory	Not Applicable
Special equipment used in the programme	OHP, LCD, Demonstration microscope, charts ,Model - 03
Availability of staffroom to teachers	Yes

Availability of common room to students	Yes
Library facilities available to the programme	Yes
Sports facilities available to the programme	Yes
Canteen facilities	Yes
Health facilities, Counseling, etc available to the programme	Yes
Description of facilities that have been added since the last AIC visit.	None

Data on Placements of last 3 batches:

Batch

Sr. No	Name of the student	placement
1	Dr. Abhishek Kavlekar	PG student cum Jr
2		
3		

SC-1(iii) 1 (k)	CONSTITUTION OF 1)Managing Body	
SC-17 (b)	2)Local Managing Body	
SC-12.1	Registration of Society /Trust	
SC-19 (XII) (8)	MUSTER ROLL OF FACULTY AND NON –TEACHING STAF i) Verify whether the strength shown tallies with those on the Master Roll (Department wise) ii) Leave orders to be ascertain that the leave is granted as per the provisions of the Statute.	
SC-14 (d), (e) & (g)	MEETING WITH THE FACULTY AND NON-TEACHING STAFF To ascertain whether i) Appointment is approved by the Goa University. ii) Salary is paid as per the norms of UGC/Directorate of Higher Education and is paid in time iii) All deductions in salary are done and the amount remitted accordingly including income tax. iv) Adequate facilities are available to the Faculty for teaching etc.	
SC-14 (a)	MEETING WITH THE STUDENTS To ascertain whether:	

SC-14 (h)	<p>i)Teaching is done as per approved syllabus and as per the Time Table</p> <p>ii) Adequate facilities are available in terms of required books in the Library including book facility and computers in the computer labs.</p> <p>iii) Fees are charged as notified and approved by the Authorities.</p>	
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D 4.1.4 Continuation of affiliation for M.D. Pulmonary Medicine program for the academic year 2019-20.

Annexure I

Date of visit.	31/05/2019
Name of the College. / Institution.	Goa Medical College and Hospital, Bambolim, Goa.
NAAC Accreditation.	
If Yes, Grade and Year.	
Research funding received by college last year.	
Programme being reviewed by AIC.	MD. Pulmonary Medicine.
Programme fee per year per student.	
Is financial position of the programme as per SC-1 ?	

Faculty

Number of faculty members sanctioned for programme	7
Number of faculty positions filled	6
Faculty member 1	Dr. Durga Lawande
Highest Qualification	MD in Pulmonary Medicine, Bombay University, Passed , A
Qualified as per UGC	N.A.
Nature of Appointment	Permanent
Salary	289,913/-
Faculty member 2	Dr. Uday C. Kakodkar
Highest Qualification	MD in Pulmonary Medicine, Goa University, Passed , A
Qualified as per UGC	N.A.
Nature of Appointment	Permanent
Salary	289,913/-

No. of applications received for admission to the programme during last 3 academic years

Academic year	No. of applications	No. of seats sanctioned	No. of seats filled
2018	6	6	6
2017	4	4	4
2016	4	4	4

Infrastructure

Classrooms available to the programme and area of each classroom	4	3 ----- 4x3m 1 ----- 8x6m
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Teaching aids available for the programme	LCD Projector
Laboratories used by the programme and area of each laboratory	Pathology Lab --- Two rooms 6x4 m each
Special equipment used in the programme	Arterial Blood Gas Analyser, Bronchoscopy, Thoracoscopy
Availability of staffroom to teachers	Yes
Availability of common room to students	Yes
Library facilities available to the programme	Yes
Sports facilities available to the programme	No
Health facilities, Counseling , etc., available to the programme	Yes
Description of facilities that have been added since the last AIC visit	Thoracoscope, Arterial Blood Gas Analyser Machine

Data on placements of last 3 batches :

Sr. No.	Name & Designation	Joined in the year	Placement
1.	Dr. Ashwini Pednekar	2016	Pulmonary Medicine Unit II
2.	Dr. Chetan Kerkar	2016	Pulmonary Medicine Unit I
3.	Dr. Anika Parrikar	2017	Pulmonary Medicine Unit II
4.	Dr. Afshan Shaik	2018	Pulmonary Medicine Unit I

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D 4.1.5 Continuation of affiliation for M.D. Pharmacology program for the academic year 2019-20.

Annexure I

Date of visit	04/06/2019
Name of the College/institution	GOA MEDICAL COLLEGE
NAAC Accreditation	
If Yes, Grade and year	
Research funding received by college last year	
Programme being reviewed by A/C	POSTGRADUATE DEGREE IN PHARMACOLOGY
Programme fee per year per student	Rs.24000/per year for 3 years
Is financial position of the programme as per SC-1?	YES

Faculty

Number of faculty members sanctioned for programme	6
Number of faculty positions filled	6
Faculty Member 1	Name: Dr. SUSHAMA A. BHOUNSULE
Highest qualification	M.D. Pharmacology Bombay University
Qualified as per UGC?	Yes
Nature of Appointment	PERMANENT
Salary	Rs. 289913
Faculty Member 2	Name: Dr. PADMA N. BHANDARE
Highest qualification	M.D. Pharmacology Bombay University
Qualified as per UGC?	YES
Nature of Appointment	PERMANENT
Salary	Rs. 289913

Faculty Member 3	Name: Dr. PADMANABH V. RATABOLI
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Highest qualification	M.D. Pharmacology Goa University
Qualified as per UGC?	YES
Nature of Appointment	PERMANENT
Salary	Rs. 275613

Faculty Member 4	Name: Dr. SUNITA B. DE SA
Highest qualification	M.D. Pharmacology Goa University
Qualified as per UGC?	YES
Nature of Appointment	PERMANENT
Salary	Rs. 242690
Faculty Member 5	Name: Dr. IAN A. PEREIRA
Highest qualification	M.D. Pharmacology Goa University
Qualified as per UGC?	YES
Nature of Appointment	PERMANENT
Salary	Rs. 216120
Faculty Member 6	Name: Dr. YOGEEETA S.C. WALKE
Highest qualification	M.D. Pharmacology Goa University
Qualified as per UGC?	YES
Nature of Appointment	PERMANENT
Salary	Rs. 216120

No. of applications received for admission to the programme during last 3 academic years

Academic year	No. of applications	No. of seats sanctioned	No. of seats filled
2018	3	6	3
2017	4	6	4
2016	4	6	4

Infrastructure

Classrooms available to the programme and area of each classroom	YES – DEMONSTRATION ROOMS (TWO) 81 SQ.M. And 63 sq.mt. SEMINAR ROOM -66 SQ.M.
Teaching aids available for the programme	YES-LCD OVERHEAD PROJECTOR, TV SET MODELS, CHARTS-SPECIMENS
Laboratories used by the programme and Area of each laboratory	DEPARTMENT RESEARCH LABORATORY – AREA: 65 Sq.m. CLINICAL PHARMACY LAB: 225 Sq.m. Experimental Pharmacology lab-225 sq.mt. ANIMAL HOUSE : 125 Sq.m.
Special equipment used in the programme	SEE-Annexure
Availability of staffroom to teachers	YES
Availability of common room to students	YES
Library facilities available to the programme	YES-Central Departmental
Sports facilities available to the programme	YES-Students use facilities from Indoor stadium, Sports complex, Govt. of Goa, Panaji
Canteen facilities	YES
Health facilities, counselling etc. available to the programme	YES
Description of facilities that have been added Since the last AIC visit	Not applicable

Data on placements of last 3 batches:

Batch: Passed in 2018

Sr.No.	Students Name	Placement
1	Dr.Greeshma Upendra	To serve Government bond posting
2	Dr. Maria Barretto	To serve Government bond posting
3	Dr.Sneha Kandolkar	To serve Government bond posting

4	Dr.Rupchandra Navelkar	To serve Government bond posting
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Batch: Passed in 2017

Sr.No.	Students Name	Placement
1	Dr. Jonathan Gouveia	Asst. Lecturer (Bond) Goa Medical College
2	Dr. Rajal Narvekar	Asst. Lecturer (Bond) Goa Medical College

Batch: Passed in 2016

Sr.No.	Students Name	Placement
1	Dr. Kalyani Pai	Medical Officer-Health Services
2	Dr. Sanam Naik	Medical Officer-Health Services

FacultyName	HighestQualification	Marks or Grade	Designation	Pay	Nature of Appointment	Is Qualified as UGC
1) Dr. Sushama A.Bhounsule	M.D.(Pharmacology)	–	Professor & Head	289913/-	Permanent	Yes
2) Dr. Padma N.Bhandare	M.D.(Pharmacology)	–	Associate Professor	289913/-	Permanent	Yes
3) Dr. P.V. Rataboli	M.D.(Pharmacology)	–	Associate Professor	275613/-	Permanent	Yes
4) Dr. Sunita B.De Sa	M.D.(Pharmacology)	–	Assistant Professor	242690/-	Permanent	Yes
5) Dr. Ian A. Pereira	M.D.(Pharmacology)	–	Lecturer	216120/-	Permanent	Yes
6) Dr.Yogeeta S.C.Walke	M.D.(Pharmacology)	–	Lecturer	216120/-	Permanent	Yes

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D 4.1.6 Continuation of affiliation for M.D. Dermatology, Venerology and Leprosy program for the academic year 2019-20.

Annexure I

Date of visit	04/06/2019
Name of the College/institution	GOA MEDICAL COLLEGE
NAAC Accreditation	
If Yes, Grade and year	
Research funding received by college last year	
Programme being reviewed by A/C	POSTGRADUATE DEGREE IN Dermatology, Venerology and Leprosy
Programme fee per year per student	Rs.24000/per year for 3 years
Is financial position of the programme as per SC-1?	YES

Faculty (add more rows in the table below if needed)

Other Faculty member are not fulfilling criteria for PG Guides.

Dr. Prachi Bhandare	MD Skin (DVL) 2007 Goa University Permanent Experience 10 years
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No. of applications received for admission to the programme during last 3 academic years.

Academic Year	No. of Applications	No. of seats sanctioned	No. of Seats filled
2017-18	On merit	5	5
2016-17	On merit	5	5
2015 – 16	On merit	5	5

Infrastructure

Classrooms available to the programme and area of each classroom	<p>one – Seminar room in skin ward</p> <p>$4 \times 3.43 = 13.72 \text{ m}^2$</p> <p>one – Museum cum Demonstration room[skin ward] $4 \times 3.43 = 13.72 \text{ m}^2$</p> <p>one– Tutorial room classroom in OPD</p> <p>$3.27 \times 6.77 = 22.13 \text{ m}^2$</p>
Teaching aids available for the programme	<p>Blackboard & chalk.</p> <p>White board with pen</p> <p>Ohp projector, slide projector</p> <p>Computers</p> <p>Microscope –</p>
Laboratories used by the programme and area of each laboratory	<p>$3.15 \times 2.46 = 7.75 \text{ m}^2$ at skin ward</p> <p>$3.27 \times 4.82 = 15.76 \text{ m}^2$ at skin o.p.d</p>
Special equipment used in the programme	<p>Phototherapy unit</p> <p>Long pulse NDYog laser machine</p> <p>Cryo cautery with Cryogun</p> <p>Electrocautery Machine</p> <p>radiofrequency</p>
Availability of staffroom to Teachers	Yes
Availability of common room to students	Yes
Library facilities available to the programme	Central library of GMC & Departmental library at GMC
Sports facilities available to the programme	Goa Indoor Stadium
Canteen facilities	2 canteens
Health facilities, Counseling, etc. available to the programme	Yes

Description of facilities that have been added since the last AIC visit	Chemical peelings radiofrequency
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Data on placement of last 3 batches

2012 – 15 – Dr. Minu Oommen Mary –

Dr. Shubhlaxmi Pednekar – Senior Resident in Goa Medical College.

Dr. Sajjad Vhora – Private Practice

2013-16 :- Dr. Shivani Saini – Serving Bond

Dr. Amruta Dinkar

Dr. Manjita Chari – Serving Bond

2014 – 17 – Dr. Taruna Gupta – Senior Resident in Goa Medical College

Dr. Harshal Ranglani

Dr. Girisha Y. H.

Dr. Krupeksha Naik

Dr. Diksha Phadke

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D 4.2 Gomantak Ayurveda Mahavidyalaya & Research Centre, Shiroda-Goa.

D 4.2.1 Affiliation for MD Ayurveda Medicine (Ayurveda Vachaspati-Kayachikitsa) program for the year 2019-20

Annexure I

Date of visit	06/06/2019
Name of the college/Institution	BHARATEEYA SANSKRITI PRABODHINI'S GOMANTAK AYURVEDA MAHAVIDYALAYA & RESEARCH CENTRE, VAJEM, SHIRODA – GOA 403103
NAAC Accreditation	No
If Yes, Grade and year	---
Research funding received by college last year	No
Programme being reviewed by AIC	Yes. Ayurveda Vachaspati-Kayachikitsa
Programme fee per student per year	Rs. 4.5 lakhs per student per year
Is financial position of the programme as per SC-1?	Yes

Faculty:

Number of faculty members sanctioned for programme : Professor- 03, Reader - 01 , Lecturer - 02 = 06

Number of faculty position filled : Professor- 03, Reader - 01 , Lecturer - 02 = 06

Sr. No.	Faculty Member	Highest Qualification		Qualif ied as per UGC	Nature of appointment	Salary
		Name	Degree, University	% marks or Grade	Yes/ No	Perm/ Contract/ Lecture- basis
1.	Dr. Anura P. Bale (Principal)	BAMS Pune University M.D.(Sharir Kriya) Ph.D. Pune University	Ph.D Pass M.D. Pass	Yes	Permanent	Rs.16,000 x 1.72 With AGP Rs.10,000
2.	Dr. Anil Panse (Professor)	BAMS University of Poona M.D.(Kayachikitsa) University of Pune M.A.Sanskrit	M.D. Pass M.A. Pass	Yes	Permanent	Rs.16,000 x 1.72 With AGP Rs.10,000
3.	Dr. Basil Savio Menino Cardozo (Professor)	BAMS Bharati Vidyapeeth Deeme University M.D.(Kayachikitsa) Gujarat Ayureda University	M.D. Pass	Yes	Permanent	Rs. 12,000 x 1.72 With AGP Rs. 9000

4.	Dr. Mithun Bondre (Associate Professor)	BAMS Goa University M.D.(Kayachikitsa) Rajiv Gandhi University of Health Science, Karnataka	M.D. Pass	Yes	Permanent	Rs.12,000 x 1.72 With AGP Rs. 8000
5.	Dr Somnath Hebli (Assistant Professor)	BAMS Pune University Diploma in Rasayan Vajeekaran Pune University	Diploma Pass	Yes	Permanent	Rs. 8,000 x 1.72 With AGP Rs. 6000
6.	Dr. Durgude Mayur Sanjay (Assistant Professor)	BAMS, MUHS, Nashik M.D., PDEA's CARC, Pune	M.D. Pass	Yes	Permanent	Rs. 10,000/- Consolidated

Existing Teaching Staff

Sr.No	Department	Professor	Associate Professors / Readers	Assistant Professors/ Lecturers	Total
01	Kayachikitsa	3	1	2	6

No. of applications received for admission to the programme during last 3 academic years

Academic year	No. of applications received	No. of seats sanctioned	No. of seats filled
2016- 17	Not Applicable	No student admitted for PG	
2017- 18	Not Applicable		
2018- 19	Not Applicable		

Infrastructure

Classrooms available to the programme and area of each classroom	3 Classrooms are available and its total area is 800 Sq. meters.
Teaching aids available for the programme	1. LCD Projector & Screen - 4 2. Laptops - 4 3. Computer - 28 4. Library books - 10739
Laboratories used by the programme and area of each laboratory	3 Laboratories used and its area is 302.17 Sq. meters.
Special equipment used in the programme	List Enclosed
Availability of staffroom to teachers	Yes
Availability of common room to students	Yes
Library facilities available to the programme	Yes

Sports facilities available to the programme	Yes
Canteen facilities	Yes
Health facilities, Counseling, etc. available to the programme	Yes
Description of facilities that have been added since the last AIC visit	List Enclosed

Data on placements of last 3 batches:

Batch : from 2015-16, 2016-17, 2017-18- Not Applicable

Sr. No.	Students Name	Placement
1.		
2.		

INFRASTRUCTURE

Special Equipment used in the Programme

Pathology Laboratory Equipments

Sr. No.	PARTICULARS	QUANTITY
	Centrifuge	1
	Refrigerator	1
	Auto analyser	1
	Unilab Microscope	20
	Wintrob's ESR tubes	20
	Wintrob's ESR Stand	20
	Westergren's pipettes	20
	Westergren's Stand	20
	Stopwatch	1
	Glass reagent bottle	6
	1 ml pipette	10
	2 ml pipette	10
	5 ml pipette	10
	10 ml pipette	10
	0.1 ml pipette	10
	Petridish	9
	100 ml beaker	10
	250 ml beaker	1
	50 ml beaker	7
	5 ml Test tubes	100
	15 ml Test tubes	40
	Test tube Holder	28
	Urino meter	1

	Plastic Centrifuge tubes	28
	WBC Pipettes	20
	Hb Pipettes	20
1.	Hb Tubes	20
2.	Dropper Without Teats	30
3.	Neubars Chamber	12
4.	Brush	10
5.	Steel Rack	2
6.	Hemometer	10
7.	Wire Gauze	4
8.	PH paper	5
9.	Needle	95
10.	Cell counter	01
11.	Slides	10 boxes
12.	Cover Sliops	6 boxes
13.	Filter paper	1 box
14.	Micro Tips Yellow	750
15.	Micro Tips Blue	600
16.	Micro pipettes 1000	2
17.	Micro pipettes 50	1
18.	Micro pipettes 10	1
19.	RBC pipette	18
20.	Needle Incinartor	1
21.	Mispa 2	1
22.	Spirit lamp	10
23.	Litmus paper	1
24.	Capillary tubes	15 boxes
25.	500 ml Beaker	2

Department of Kayachikitsa

Laboratory Equipments

Sr. No.	Equipments	Quantity
1.	X-Ray view box	01
2.	BP Apparatus	02
3.	Stethoscope	04
4.	Examination Table	01
5.	Thermometer	04
6.	Tongue Depressor	05
7.	Torch	02
8.	Gloves	Available
9.	Measuring Tape	01
10.	Weight & Height Measuring stand	01
11.	Knee Hammer	02

Kamakshi Arogyadham - BED ALLOTMENT

S.No.	Name of the Departments	No. of Existing beds for UG	Additional Bed For existing PG(Clinical Dept) : bed ratio 1:4	Total no of available beds
1.	Kayachikitsa (Panchkarma Rasayan & Manasrog etc)	38	24	62

No. of OPD Patients

S.No	Name of the Dept.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Dept. Total
1.	Kayachikitsa	2015	1970	2037	1643	1784	1887	1967	1753	1649	1998	1723	1841	22267

No. of IPD Patients

S.No	Name of the Dept	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Dept. Total
1.	Kayachikitsa (Rasayan & Manasroga etc)- Kayachikitsa	65	51	55	66	63	30	64	68	61	83	105	88	799

Details of Total Bed Days Occupied

S.No	Name of the Dept.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Dept. Total
1.	Kayachikitsa (Rasayan & Manasrog etc)	401	358	457	489	459	267	427	485	465	659	689	540	5696

INFRASTRUCTURE

Description of Facilities have been added since the last AIC visit

- Institution have applied and **received approval** on 30/10/2018 for Post Graduate Programme in 2 subjects viz, Kayachikitsa and Rasashastra & Bhaishajya Kalpana to Ministry of AYUSH, Government of India.
- White boards in classes are introduced, new desks and chairs are procured in all classes, Library is renovated and new books are purchased.
- We have organized National & International Conferences.
- Hostel – New land have been already purchased of 2000 sq. mtr. adjacent to college plot.
- Sports – T.T, Carom, Chess & other indoor games are available in college.
- For Badminton, Cricket & other outdoor games local Panchayat playground is hired.
- Audio visual presentation – every class has audio visual projector setups which are regularly utilized by Faculty members.
- Digital Library – With Local Area Network, the library and other areas of Institute are under 24 X 7 internet connectivity for the regular updation of knowledge. New Library books are added.
- OPD shifted to new premises for proper facilities to the patients.
- Auditorium has been upgraded with motorized screen, HD projector & sound system.
- Administrative block is renovated with Wi-Fi & LAN Internet connection with modern amenities such as 2 All-in-One printers purchased.
- Transport facilities provided to the students.
- 2 New Vehicles have been purchased.
- Departments like Sanskrit Samhita & Siddhant, Kaumarbhritya, Rog Nidan Evam Vikruti Vigyan are renovated with well equipped infrastructure.
- Research instruments have been purchased for the Research Unit.
- New beds are purchased for the Hospital.
- Paediatrics Beds have been procured for paediatric ward.
- Auto analyser is purchased.
- Pathology Lab is equipped with modern equipments like cell counter.
- New Equipments are purchased for Physiotherapy Unit.
- Quality testing laboratory:-

Fully fledged quality testing laboratory alongwith required instruments is available. There is ongoing research project in collaboration with Goa College of Pharmacy by 3 M.Pharm students.

-Animal House & Central Research Laboratory:-

Regarding animal house we have executed MOU with (RIPER); Raghavendra Institute of Pharmaceutical Education & Research. The research work on 3 formulations is in process.

-Central Research Laboratory is available with full equipped instruments, Glassware & Reagents

List of Equipments & Instruments of Central Research Laboratory & Quality testing laboratory

Sr. No.	Equipments	Quantity
1	Laboratory Water Bath Digital	1 nos
2	Soxhlet apparatus set of 3	1 nos
3	Tablet Disintegration test app	1 nos
4	Tablet Hardness tester	1 nos
5	Melting point apparatus Digital	1 nos
6	Hot air oven Digital	1 nos
7	UV Chamber	1 nos
8	Hot plate Digital	3 nos
9	Spectrophotometer	1 nos
10	Photoelectric colorometer	1 nos
11	Distillation Unit	1 nos
12	Desiccator	1 nos
13	Thin layer Chromatography	1 nos
14	Paper chromatography Cabinet-ascending-descending	1 nos
15	Ph meter	1 nos
16	Digital Cup type moisture	1 nos
17	Refractometer	1 nos
18	Essential oil determination unit	1 nos
19	Muffle furnace	1 nos
20	Specific gravity hydro meter	1 nos
21	Soxhlet extraction apparatus	1 nos
22	Water still 4 Ltr./hr.	1 nos

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D 4.2.2 Affiliation for MD Ayurved Pharmaceuticals (Ayurveda Vachaspati-Rasashastra & Bhaisajya) program for the year 2019-20.

Annexure I

REPORT OF THE AFFILIATION INQUIRY COMMITTEE

Part -1

Date of visit	06/06/2019
Name of the college/Institution	BHARATEEYA SANSKRITI PRABODHINI'S GOMANTAK AYURVEDA MAHAVIDYALAYA & RESEARCH CENTRE, VAJEM, SHIRODA – GOA 403103
NAAC Accreditation	No
If Yes, Grade and year	---
Research funding received by college last year	No
Programme being reviewed by AIC	Yes Ayurveda Vachaspati-Rasashastra & Bhaisajya
Programme fee per student per year	Rs. 3.5 lakhs per student per year
Is financial position of the programme as per SC-1?	Yes

Faculty:

Number of faculty members sanctioned for programme : Professor- 02, Reader - 02 , Lecturer - 02 = 06

Number of faculty position filled : Professor- 02, Reader - 02 , Lecturer - 02 = 06

Sr. No.	Faculty Member	Highest Qualification		Qualif ied as per UGC	Nature of appointment	Salary
	Name	Degree, University	% marks or Grade	Yes/ No	Perm/ Contract/ Lecture-basis	
7.	Dr. Anura P. Bale (Principal)	BAMS Pune University M.D.(Sharir Kriya) Ph.D. Pune University	Ph.D Pass M.D. Pass	Yes	Permanent	Rs.16,000 x 1.72 With AGP Rs.10,000
8.	Dr. Yeriswamy Jambana Gowd H. (Professor)	BAMS , BSAM Karnataka University M.D.(Rasashastra & Bhaishajyakalpana) Gujarat Ayurveda University, Jamnagar	M.D. Pass	Yes	Permanent	Rs.16,000 x 1.72 With AGP Rs.10,000

9.	Dr. Sudhindra A. N. (Associate Professor)	BAMS, Bangalore University Karnataka M.D.(Rasashastra & Bhaishajyakalpana) Rajiv Gandhi University of Health Sciences, Bangalore Karnataka	M.D. Pass	Yes	Permanent	Rs. 12,000 x 1.72 With AGP Rs. 9000
10.	Dr. Aditya Arvind Samant (Associate Professor)	BAMS, Goa University M.D.(Rasashastra Bhaishajyakalpana) Rajiv Gandhi University of Health Science, Karnataka	M.D. Pass	Yes	Permanent	Rs. 12,000 x 1.72 With AGP Rs. 9000
11.	Dr. Reshma Prakash Yaranal (Assistant Professor)	BAMS, Goa University M.D.(Rasashastra) KLE University, Belgaum	M.D. Pass	Yes	Permanent	Rs. 8,000 x 1.72 With AGP Rs. 6000
12.	Dr. Bhakti Mankar (Assistant Professor)	BAMS, Goa University M.D.(Rasashastra) Maharashtra University of Health Science- Nashik	M.D. Pass	Yes	Permanent	Rs. 10,000/- Consolidated

Existing Teaching Staff

Sr.No	Department	Professor	Associate Professors / Readers	Assistant Professors/ Lecturers	Total
01	Rasashastra & Bhaishajya Kalpana	2	2	2	6

No. of applications received for admission to the programme during last 3 academic years

Academic year	No. of applications received	No. of seats sanctioned	No. of seats filled
2016- 17	Not Applicable	No student admitted for PG	
2017- 18	Not Applicable		
2018- 19	Not Applicable		

Infrastructure

Classrooms available to the programme and area of each classroom	3 Classrooms are available and its total area is 800 Sq. meters.
Teaching aids available for the programme	5. LCD Projector & Screen - 4 6. Laptops - 4

	7. Computer - 28 8. Library books - 10739
Laboratories used by the programme and area of each laboratory	3 Laboratories used and its area is 302.17 Sq. meters.
Special equipment used in the programme	List Enclosed
Availability of staffroom to teachers	Yes
Availability of common room to students	Yes
Library facilities available to the programme	Yes
Sports facilities available to the programme	Yes
Canteen facilities	Yes
Health facilities, Counseling, etc. available to the programme	Yes
Description of facilities that have been added since the last AIC visit	List Enclosed

Data on placements of last 3 batches:

Batch : from 2015-16, 2016-17, 2017-18 – **Not Applicable**

Sr. No.	Students Name	Placement
3.		
4.		

INFRASTRUCTURE

Department of Rasashastra & Bhaishajya Kalpana

Laboratory Equipments

Sr. No.	Equipments	Quantity
1.	Khalva Yantra- small	10
2.	Khalva Yantra- medium	10
3.	Khalva Yantra- porcelain	10
4.	Khalva Yantra- Tapta Khalva Yantra	02
5.	Heating Device- Gas Stove	Available
6.	Electronic Balance	01
7.	Heating Device- Hot plate	Available
8.	Heating Device- Chulla (Charcoal)	Available
9.	Vessels- Frying Pan	Available
10.	Vessels- Steel Vessel	Available
11.	Vessels-Spatula	Available
12.	Vessels- Ladies & Spoons	Available
13.	Vessels- Knife	Available
14.	Vessels- Plates	Available
15.	Vessels- Samdamsa Yantra (Tongs)	Available
16.	Measuring Equipments Different	Available

	Size(Glass)	
17.	Big Vessels & Containers- Brass	Available
18.	Big Vessels & Containers- Copper	Available
19.	Big Vessels & Containers- Steel etc.	Available
20.	Balance (Different Capacities)- Physical	03
21.	Balance (Different Capacities)- Chemical	01
22.	Pounding Apparatus (Ulukhala Yantra)	01
23.	Sieves (Assorted Numbers & Size)	Available
24.	Wet Grinder	01
25.	Mixi	01
26.	Juice Extractor	01
27.	Putas (Different kind)	05
28.	Pyrometer	Available
29.	Thermometer	Available
30.	Pressure Cooker	Available
31.	Moosha (Crucibles)	30
32.	Koshti with Blower	02
33.	Refrigerator	01
34.	Jars (Porcelain) Fermentation Purpose	Available
35.	Dola Yantra	01
36.	Valuka Yantra	01
37.	Pithara Yantra	01
38.	Bhudhara Yantra etc.	01
39.	Distillation Apparatus & Arka Yantra	03
40.	Enamels Trays	Available
41.	Spirit Lamp	Available
42.	Earthen Vessels-Pots	Available
43.	Kupipakva Bhatti	01
44.	Almiras & Rack for storage	Available

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10	Photoelectric colorometer	1 nos
11	Distillation Unit	1 nos
12	Desiccator	1 nos
13	Thin layer Chromatography	1 nos
14	Paper chromatography Cabinet-ascending-descending	1 nos
15	Ph meter	1 nos
16	Digital Cup type moisture	1 nos
17	Refractometer	1 nos
18	Essential oil determination unit	1 nos
19	Muffle furnace	1 nos
20	Specific gravity hydro meter	1 nos
21	Soxhlet extraction apparatus	1 nos
22	Water still 4 Ltr./hr.	1 nos

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D 4.3 Shree Rayeshwar Institute of Engineering & I.T., Shiroda.

D 4.3.1 Continuation of affiliation for (i) B.E. Information Technology (ii) B.E. Computer Engineering(iii) B.E. Electronics Telecommunication Engineering programmes.

Annexure I

BE Programme in Electronics & Telecommunication Engineering

Date of visit	07/06/2019
Name of the College/Institution	Shree Rayeshwar Institute of Engineering and Information Technology
NAAC Accreditation	--
If Yes, Grade and year	Not yet Applied
Research funding received by college last year	Applied to AICTE
Programme being reviewed by AIC	N/A
Programme fee per year per student	Refer Annexure-1
Is financial position of the programme as per SC-1?	Yes – fulfilled as per AICTE Norms

Faculty Branch: Electronics & Telecommunication Engineering

Number of faculty members sanctioned for programme	09 (As per AICTE Approval Regulations 2018-19 Norms)		
Number of faculty positions filled	10		
Faculty Member 1	Mr. Mayur Gambhir – Assistant Professor		
Highest qualification	Degree M.E. Electronics Communi. & Instrumentation	University Goa	% marks/grade 7.22
Qualified as per UGC?	Yes		
Nature of Appointment	Permanent		
Salary	66,074/-		
Faculty Member 2	Mr. Shreeyank Jambhale - Assistant Professor		
Highest qualification	Degree M.E. Electronics Communi. & Instrumentation	University Goa	% marks/grade 6.12
Qualified as per UGC?	Yes		
Nature of Appointment	Permanent		
Salary	63,374/-		
Faculty Member 3	Ms. Sunaya Shirodkar - Assistant Professor		

Highest qualification	Degree M.E. Electronics Communi. & Instrumentation	University Goa	% marks/grade 6.91
Qualified as per UGC?	Yes		
Nature of Appointment	Permanent		
Salary	55,142/-		
Faculty Member 4	Mr. Vishwaraj Naik Parrikar - Assistant Professor		
Highest qualification	Degree M.Tech. VLSI Design	University MNIT Jaipur	% marks/grade 8.51
Qualified as per UGC?	Yes		
Nature of Appointment	Probation (Deputed for PhD Research Programme)		
Salary	43,803/-		
Faculty Member 5	Mrs. Veena Gaonkar - Assistant Professor		
Highest qualification	Degree M.E. Microelectronics	University Goa	% marks/grade 7.53
Qualified as per UGC?	Yes		
Nature of Appointment	Probation		
Salary	45,042/-		
Faculty Member 6	Mr. Chilton Fernandes - Assistant Professor		
Highest qualification	Degree M.E Microelectronics	University Goa	% marks/grade 7.62
Qualified as per UGC?	Yes		
Nature of Appointment	Probation		
Salary	45,042/-		
Faculty Member 7	Ms. Vishakha Naik Dessai - Assistant Professor		
Highest qualification	Degree M.E. Electronics Communi. Instrumentation	University Goa	% marks/grade 7.57
Qualified as per UGC?	Yes		
Nature of Appointment	Temporary		
Salary	27,000/-		
Faculty Member 8	Ms. Froila Valency Rodrigues - Assistant Professor		
Highest qualification	Degree M.E. Microelectronics	University Goa	% marks/grade 8.48
Qualified as per UGC?	Yes		

Nature of Appointment	Contract
Salary	26,000/-
Faculty Member 9	Ms. Diksha Gaonkar - Assistant Professor
Highest qualification	Degree University % marks/grade M.E. Electronic Communi. Goa 7.98 & Instrumentation
Qualified as per UGC?	Yes
Nature of Appointment	Temporary
Salary	26,000/-
Faculty Member 10	Ms. Shruti Naik - Assistant Professor
Highest qualification	Degree University % marks/grade M.E. Industrial Automation & Goa 7.73 Radio Frequency Engg.
Qualified as per UGC?	Yes
Nature of Appointment	Temporary
Salary	26,000/-

First Year Common Faculties (Department of General Engineering)

Number of faculty members sanctioned for programme	09 (As per AICTE Approval Regulations 2018-19 Norms)		
Number of faculty positions filled	09		
Faculty Member 1	Mrs. Veda Kamat – Assistant Professor		
Highest qualification	Degree University % marks/grade M. Sc Chemistry Goa 63		
Qualified as per UGC?	Yes		
Nature of Appointment	Permanent		
Salary	51,662/-		
Faculty Member 2	Mr. Sandesh Mardolkar – Assistant Professor		
Highest qualification	Degree University % marks/grade B.E. Civil Engg. Bombay 61.26%		
Qualified as per UGC?	Yes		
Nature of Appointment	Permanent		
Salary	45,532/-		
Faculty Member 3	Mrs. Akila E – Assistant Professor		
Highest qualification	Degree University % marks/grade M.E. Power Systems Annamalai University 9.51		

Qualified as per UGC?	Yes
Nature of Appointment	Probation
Salary	53,624/-
Faculty Member 4	Mr. Viren Pereira – Assistant Professor
Highest qualification	Degree University % marks/grade Power & Energy System Goa 6.9
Qualified as per UGC?	Yes
Nature of Appointment	Permanent
Salary	55,142/-
Faculty Member 5	Mr. Jateen Shet Shirodkar – Assistant Professor
Highest qualification	Degree University % marks/grade M.E. Industrial Engg. Goa 7.24
Qualified as per UGC?	Yes
Nature of Appointment	Probation
Salary	45,042/-
Faculty Member 6	Mrs. Aradhana Bandekar – Assistant Professor
Highest qualification	Degree University % marks/grade M.Sc Mathematics Goa 83% Pursuing Ph.D
Qualified as per UGC?	--
Nature of Appointment	Temporary
Salary	50,000/-
Faculty Member 7	Mrs. Avani Talkatkar – Assistant Professor
Highest qualification	Degree University % marks/grade M.SC Physics Goa 65.44%
Qualified as per UGC?	--
Nature of Appointment	Temporary
Salary	31,000/-
Faculty Member 8	Mrs. Loveena Coelho e Dias – Assistant Professor
Highest qualification	Degree University % marks/grade M.A English Literature Goa 56%
Qualified as per UGC?	--
Nature of Appointment	Temporary
Salary	20,000/-

Faculty Member 9	Mrs. Pallavi Bhatkande – Assistant Professor		
Highest qualification	Degree M.SC Mathematics	University Karnataka	% marks/grade 50%
Qualified as per UGC?	--		
Nature of Appointment	Visiting		
Salary	20,000/-		

College Director of Physical Education

Faculty Member 01 Mr. Nandesh Gaonkar – College Director of Physical Education

Highest qualification	Degree M. P. Ed	University Solapur	% marks/grade 74.58
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Qualified as per UGC? --

Nature of Appointment Temporary

Salary 25,000/-

Industry Adjunct Faculty Members as per AICTE Approval Guidelines 2016-17

Sr. No	Name of the Staff	Designation	Qualification	Status of Appointment
1	Mr. Prajot Mainkar	Industry Adjunct Visiting Faculty	B.E. (Comp) M.E. (Software System)	Visiting Faculty
2	Mr. Ashwin Kunkolienkar	Industry Adjunct Visiting Faculty	B.E. (I.T.)	Visiting Faculty
3	Mr. Dattprasad Shet Kurtarkar	Industry Adjunct Visiting Faculty	B.E. Comp	Visiting Faculty
4	Mr. Sachin Kale	Industry Adjunct Visiting Faculty	B.E. (Comp) M.E. (I.T.)	Visiting Faculty

No. of applications received for admission to the programme during last 3 academic years

a) No. of Seats are filled through Directorate of Technical Education

Electronics & Telecommunication Engineering

Year	No. of applications received for the programme	No. of seats sanctioned	No. of seats
-------------	---	--------------------------------	---------------------

filled

2016-17	The Admission through Centralised Admission Process by Directorate of Technical Education, Govt. of Goa	45 + 3	48
2017-18	The Admission through Centralised Admission Process by Directorate of Technical Education, Govt. of Goa	45 + 3	48 + 8*
2018-19	The Admission through Centralised Admission Process by Directorate of Technical Education, Govt. of Goa	45 + 3	12

* Seats of Management Quota are filled through Directorate of Technical Education during Third round of admission.

b) No. of Application received through Management Admission Quota

Year	No. of applications received for the programme (Under Management quota)	No. of seats sanctioned	No. of seats filled
2016-17	44	15	11
2017-18	06	15	02
2018-19	08	15	01

Infrastructure

Classrooms available to the programme and area of each classroom	Class Room	Area in Sqm
	CR-07	95.45
	CR-08	95.45
	CR-09	95.45
Teaching aids available for the programme	LCD Projectors, Over Head Projectors, Electronics Slats, Online Course Material, Digital Library	
Laboratories used by the programme and area of each laboratory	Laboratory Details	Area in Sqm
	Electrical & Control System Lab	95.45
	Microprocessor Lab	63.75
	Analog Digital Comm. Lab	95.45

	VLSI & Embedded Lab	144.3
	Basic Electronics Lab	63.75
	First Year and Common Laboratories	
	Engineering Workshop	211.78
	Chemistry Lab	64.00
	BCM Lab	139
	Physics Lab	63.75
	Drawing Hall	134.30
	Computer Center	150
Special equipment used in the programme	<u>Please Refer Annexure-II</u>	
Availability of staffroom to teachers	Faculty Cabins along with one HoD Cabin and Department Office are available.	
Availability of common room to students	Common Facility	Area in Sqm
	Girls Common Room	128.10
	Boys Common Room	75.70
Library facilities available to the programme	Resource	Total Number available
	Books (ETC Dept.)	5736
	Titles (ETC Dept.)	1196
	No. of Copies of Print National Journals (All Branches)	1195
	No. of International Journals (Online Subscription) – All Branches	1250
	Computers for Library Automation	03
	Multimedia Computers	09
Sports facilities available to the programme	Yes: Available.	
Canteen facilities	Yes : Available	

Health facilities, Counseling, etc. available to the programme	Yes: Available
Description of facilities that have been added since the last AIC visit	<p>Microsoft Softwares (90 Users) - Microsoft Desktop Education All Lng License/Software Assurance Pack Academic Open Value 1 License Level E Enterprise 1 Year – 45 Faculty Licenses (Part Number: 2UJ-00011, Agreement Number: V1583169)</p> <p>Autodesk Softwares (125 Users) - An Educational <i>Multiseat Stand-alone</i> license for <i>Education Master Suite 2015</i> (Order Number:7054731131, Contract Number: 110000869196, Renewal Date: 2017, Customer Reference Number: ARC-7229234642001, Sold To Number: 5070143979) [Please Refer <u>ANNEXURE-III</u> (List of Equipments & Licensing Software's Added)]</p>

Data on placements of last 3 batches:

List of Placed Candidates – 2017-18 Batch

Sr. No	Name	Branch	Company
1	Mr. Brosnan Gomes	ETC	Sankalp Semiconductors
2	Mr. Sachin Kolambkar	ETC	Numadic
3	Ms. Vishvapriya Shirodkar	ETC	Kodework

List of Placed Candidates – 2016-17 Batch

Sr. No	Name	Branch	Company
1	Rachelle Cardozo	ETC	Amazon
2	Rachelle Cardozo	ETC	IBM
3	Gail Pereira	ETC	IBM
4	Sujeet Prabhu Velguenkar	ETC	Amazon

5	Richelle Rocha	ETC	Amazon
6	Ankita Sawant Bhosle	ETC	Amazon
7	Vibhuti Verlekar	ETC	Amazon

List of Placed Candidates – 2015-16 Batch

Sr. No	Name	Branch	Company
1	Ritika Balasamanta	ETC	Tata Consultancy Services
2	Harsha Bandekar	ETC	Tata Consultancy Services
3	Teja Pawar	ETC	Tata Consultancy Services
4	Nivedita Malik	ETC	Tata Consultancy Services
5	Avinash Gore	ETC	Tata Consultancy Services
6	Ankita Azgaonkar	ETC	Tata Consultancy Services
7	Shreya Bhagat	ETC	Tata Consultancy Services
8	Angel George	ETC	Tata Consultancy Services
9	Diksha Gaonker	ETC	IBM

BE Programme in Computer Engineering

Date of visit	07/06/2019
Name of the College/Institution	Shree Rayeshwar Institute of Engineering and Information Technology
NAAC Accreditation	--
If Yes, Grade and year	Not yet Applied
Research funding received by college last year	Applied to AICTE
Programme being reviewed by AIC	N/A
Programme fee per year per student	Refer Annexure-1
Is financial position of the programme as per SC-1?	Yes – fulfilled as per AICTE Norms

Faculty Branch: Computer Engineering

Number of faculty members sanctioned for programme	09 (As per AICTE Approval Regulations 2018-19 Norms)		
Number of faculty positions filled	09		
Faculty Member 1	Dr. Anurag Jain - Professor		
Highest qualification	Degree Ph.D Computer Science & Engineering	University CMJ University Shiilong Meghalaya	% marks/grade -
Qualified as per UGC?	Yes		
Nature of Appointment	Permanent		
Salary	1,06,075/-		
Faculty Member 2	Mr. Shailendra Aswale – Associate Professor		
Highest qualification	Degree M.Tech Computer Science & Engg. Pursuing Ph.D	University Visvesvaraya Tech. University Belgaum	% marks/grade 75%
Qualified as per UGC?	Yes		
Nature of Appointment	Permanent		
Salary	1,32,134/-		
Faculty Member 3	Mrs. Sweta Kamat – Assistant Professor		
Highest qualification	Degree M.E. Internet Technology	University Goa	% marks/grade 7.3
Qualified as per UGC?	Yes		
Nature of Appointment	Permanent		
Salary	66,074/-		
Faculty Member 4	Mrs. Poonam Sinai Kenkre – Assistant Professor		
Highest qualification	Degree M.E. Internet Technology	University Goa	% marks/grade 8.15
Qualified as per UGC?	Yes		
Nature of Appointment	Permanent		
Salary	65,214/-		
Faculty Member 5	Mrs. Pratiksha Shetgaonkar – Assistant Professor		
Highest qualification	Degree M.E. Internet Technology	University Goa	% marks/grade 7.5

Qualified as per UGC?	Yes
Nature of Appointment	Permanent
Salary	66,074/-
Faculty Member 6	Mr. Vijaykumar Naik Powar – Assistant Professor
Highest qualification	Degree University % marks/grade M.Tech. Computer Visvesvaraya Techn. 78% Science & Engg. University Belgaum
Qualified as per UGC?	Yes
Nature of Appointment	Probation
Salary	45,042/-
Faculty Member 7	Mrs. Harsha Chari – Assistant Professor
Highest qualification	Degree University % marks/grade M.E. Internet Technology Goa 76%
Qualified as per UGC?	Yes
Nature of Appointment	Probation
Salary	42,600/-
Faculty Member 8	Mr. K.M. Chaman Kumar – Assistant Professor
Highest qualification	Degree University % marks/grade M.E. Internet Technology Goa 7.38
Qualified as per UGC?	Yes
Nature of Appointment	Probation
Salary	45,042/-
Faculty Member 9	Ms. Deepmala Kale – Assistant Professor
Highest qualification	Degree University % marks/grade M.E. Computer Manipal 83.5% Science & Information Security
Qualified as per UGC?	Yes
Nature of Appointment	Probation
Salary	45,042/-

First Year Common Faculties (Department of General Engineering)

Number of faculty members sanctioned for programme	09 (As per AICTE Approval Regulations 2018-19 Norms)
Number of faculty positions filled	09

Faculty Member 1	Mrs. Veda Kamat – Assistant Professor		
Highest qualification	Degree M. Sc Chemistry	University Goa	% marks/grade 63%
Qualified as per UGC?	Yes		
Nature of Appointment	Permanent		
Salary	51,662/-		
Faculty Member 2	Mr. Sandesh Mardolkar – Assistant Professor		
Highest qualification	Degree B.E. Civil Engg.	University Bombay	% marks/grade 61.26%
Qualified as per UGC?	Yes		
Nature of Appointment	Permanent		
Salary	45,532/-		
Faculty Member 3	Mrs. Akila E – Assistant Professor		
Highest qualification	Degree M.E. Power Systems	University Annamalai University	% marks/grade 9.51
Qualified as per UGC?	Yes		
Nature of Appointment	Probation		
Salary	53,624/-		
Faculty Member 4	Mr. Viren Pereira – Assistant Professor		
Highest qualification	Degree Power & Energy System	University Goa	% marks/grade 6.9
Qualified as per UGC?	Yes		
Nature of Appointment	Permanent		
Salary	55,142/-		
Faculty Member 5	Mr. Jateen Shet Shirodkar – Assistant Professor		
Highest qualification	Degree M.E. Industrial Engg.	University Goa	% marks/grade 7.24
Qualified as per UGC?	Yes		
Nature of Appointment	Probation		
Salary	45,042/-		
Faculty Member 6	Mrs. Aradhana Bandekar – Assistant Professor		
Highest qualification	Degree M.Sc Mathematics Pursuing Ph.D	University Goa	% marks/grade 83%
Qualified as per UGC?	--		

Nature of Appointment	Temporary		
Salary	50,000/-		
Faculty Member 7	Mrs. Avani Talkatkar – Assistant Professor		
Highest qualification	Degree M.SC Physics	University Goa	% marks/grade 65.44%
Qualified as per UGC?	--		
Nature of Appointment	Temporary		
Salary	31,000/-		
Faculty Member 8	Mrs. Loveena Coelho e Dias – Assistant Professor		
Highest qualification	Degree M.A English Literature	University Goa	% marks/grade 56%
Qualified as per UGC?	--		
Nature of Appointment	Temporary		
Salary	20,000/-		
Faculty Member 9	Mrs. Pallavi Bhatkande – Assistant Professor		
Highest qualification	Degree M.SC Mathematics	University Karnataka	% marks/grade 50%
Qualified as per UGC?	--		
Nature of Appointment	Visiting		
Salary	20,000/-		

College Director of Physical Education

Faculty Member 01	Mr. Nandesh Gaonkar – College Director of Physical Education		
Highest qualification	Degree M. P. Ed	University Solapur	% marks/grade 74.58
Qualified as per UGC?	--		
Nature of Appointment	Temporary		
Salary	25,000/-		

Industry Adjunct Faculty Members as per AICTE Approval Guidelines 2016-17

Sr. No	Name of the Staff	Designation	Qualification	Status of Appointment
1	Mr. Prajot Mainkar	Industry Adjunct Visiting Faculty	B.E. (Comp) M.E. (Software System)	Visiting Faculty
2	Mr. Ashwin Kunkolienkar	Industry Adjunct Visiting Faculty	B.E. (I.T.)	Visiting Faculty
3	Mr. Dattprasad Shet Kurtarkar	Industry Adjunct Visiting Faculty	B.E. Comp	Visiting Faculty
4	Mr. Sachin Kale	Industry Adjunct Visiting Faculty	B.E. (Comp) M.E. (I.T.)	Visiting Faculty

No. of applications received for admission to the programme during last 3 academic years

c) No. of Seats are filled through Directorate of Technical Education

Computer Engineering

Year	No. of applications received for the programme	No. of seats sanctioned	No. of seats filled
2016-17	The Admission through Centralised Admission Process by Directorate of Technical Education, Govt. of Goa	45 + 3	48
2017-18	The Admission through Centralised Admission Process by Directorate of Technical Education, Govt. of Goa	45 + 3	48 + 1*
2018-19	The Admission through Centralised Admission Process by Directorate of Technical Education, Govt. of Goa	45 + 3`	17

* Student is admitted in First year Computer Engineering from Jammu & Kashmir under AICTE's Prime Minister Special Scholarship Scheme.

d) No. of Application received under Management Quota

Year	No. of applications received for the programme (Under Management quota)	No. of seats sanctioned	No. of seats filled
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2016-17	43	15	15
2017-18	15	15	09
2018-19	14	15	11

Infrastructure

Classrooms available to the programme and area of each classroom	Class Room	Area in Sqm
	CR-01	95.45
	CR-02	95.45
	CR-03	95.45
Teaching aids available for the programme	LCD Projectors, Over Head Projectors, Electronics Slats, Online Course Material, Digital Library	
Laboratories used by the programme and area of each laboratory	Laboratory Details	Area in Sqm
	Software Engg. Lab	102.59
	Advance Computing Lab	68.39
	DBMS Lab	63.75
	Internet & Network Lab	95.45
	First Year and Common Laboratories	
	Engineering Workshop	211.78
	Chemistry Lab	64.00
	BCM Lab	139
	Physics Lab	63.75
	Drawing Hall	134.30
	Computer Center	150
Special equipment used in the programme	<u>Please Refer Annexure-II (List of Lab Equipments)</u>	
Availability of staffroom to teachers	Faculty Cabins, one HoD Cabin and Department Office are available.	
Availability of common room to	Common Facility	Area in Sqm

students	Girls Common Room	128.10
	Boys Common Room	75.70
Library facilities available to the programme	Resource	Total Number available
	Books (Comp. Dept.)	5578
	Titles (Comp Dept.)	1188
	No. of Copies of Print National Journals (All Branches)	1195
	No. of International Journals (Online Subscription) – All Branches	1250
	Computers for Library Automation	03
	Multimedia Computers	09
Sports facilities available to the programme	Yes: Available.	
Canteen facilities	Yes : Available	
Health facilities, Counseling, etc. available to the programme	Yes: Available	
Description of facilities that have been added since the last AIC visit	<p>Microsoft Softwares (90 Users) - Microsoft Desktop Education All Lng License/Software Assurance Pack Academic Open Value 1 License Level E Enterprise 1 Year – 45 Faculty Licenses (Part Number: 2UJ-00011, Agreement Number: V1583169)</p> <p>Autodesk Softwares (125 Users) - An Educational <i>Multiseat Stand-alone</i> license for <i>Education Master Suite 2015</i> (Order Number:7054731131, Contract Number: 110000869196, Renewal Date: 2017, Customer Reference Number: ARC-7229234642001, Sold To Number: 5070143979)</p> <p>[Please Refer ANNEXURE-III (List of Equipments & Licensing Software's Added)]</p>	

List of Placed Candidates – 2017-18 Batch

Sr. No	Name	Branch	Company
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1	Ms. Aishwarya Joshi	COMP	DJUBO
2	Ms. Vaishnavi Sutar	COMP	DJUBO
3	Mr. Riyaz Gilani	COMP	DJUBO, Prototype & Online Productivity Services
4	Mr. Roger Peter Sequeira	COMP	DJUBO
5	Mr. Akash Kumar Sharma	COMP	DJUBO
6	Mr. Suraj Morgaonkar	COMP	Online Productivity Services
7	Ms. Snehal Volvoikar	COMP	Inertia
8	Mr. Nashville Fernandes	COMP	Genora Infotech
9	Ms. Shubhada Naik	COMP	Remote Software Solution
10	Ms. Aishwarya Joshi	COMP	Numadic
11	Mr. Vikas Sharma	COMP	Numadic
12	Ms. Kamaxi Bhat	COMP	Numadic
13	Mr. Ratis Raikar	COMP	Mond Art

List of Placed Candidates – 2016-17 Batch

Sr. No	Name	Branch	Company
1	Reeya Malik	COMP	IBM
2	Vivek Shetye	COMP	Amazon
3	Vivek Shetye	COMP	OS3 InfoTech
4	Sunidhi Desai	COMP	OS3 InfoTech
5	GopalKrishna Raj	COMP	OS3 InfoTech
6	Prasanjit Naik	COMP	OS3 InfoTech
7	Aditya Parab	COMP	OS3 InfoTech

8	Diksha Baadkar	COMP	OS3 InfoTech
9	Yogesh Raut	COMP	Genora Infotech Pvt. Ltd.
10	Selwyn Samuel	COMP	Genora Infotech Pvt. Ltd.
11	Kusum Pal	COMP	Genora Infotech Pvt. Ltd.

List of Placed Candidates – 2015-16 Batch

Sr. No	Name	Branch	Company
1	Jyoti Kumari	COMP	Tata Consultancy Services
2	Rinisha Khader	COMP	Tata Consultancy Services
3	Poonam Naik	COMP	Tata Consultancy Services
4	Aloyson Decosta	COMP	Tata Consultancy Services
5	Clency Fernandes	COMP	Tata Consultancy Services
6	Shivani Naik	COMP	Tata Consultancy Services
7	Sanju More	COMP	Persistent Systems Limited
8	Jyoti Kumari	COMP	Persistent Systems Limited
9	Aloyson Decosta	COMP	Persistent Systems Limited
10	Mr. G. Sitarama Reddy	COMP	Amazon.com
11	Ms. Shreya Marathe	COMP	Amazon.com
12	Ms. Rima Mascarenhas	COMP	Amazon.com

BE Programme in Information Technology

Date of visit	07.06.2019
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Name of the College/Institution	Shree Rayeshwar Institute of Engineering and Information Technology
NAAC Accreditation	--
If Yes, Grade and year	Not Applied
Research funding received by college last year	Applied to AICTE
Programme being reviewed by AIC	N/A
Programme fee per year per student	Refer Annexure-1
Is financial position of the programme as per SC-1?	Yes – fulfilled as per AICTE Norms

Faculty Branch: Information Technology

Number of faculty members sanctioned for programme	09 (As per AICTE Approval Regulations 2018-19 Norms)		
Number of faculty positions filled	10		
Faculty Member 1	Mr. Rudresh Shirwaikar – Associate Professor		
Highest qualification	Degree M.E. Information Technology Pursuing Ph.D	University Goa	% marks/grade 7.53
Qualified as per UGC?	Yes		
Nature of Appointment	Permanent		
Salary	92,699/-		
Faculty Member 2	Mrs. Manjusha Sanke – Assistant Professor		
Highest qualification	Degree M.E. Internet Technology	University Goa	% marks/grade 8.85
Qualified as per UGC?	Yes		
Nature of Appointment	Permanent		
Salary	72,981/-		
Faculty Member 3	Mr. Saiesh N. Prabhu Verlekar – Assistant Professor		
Highest qualification	Degree M.E. Internet Technology	University Goa	% marks/grade 7.36
Qualified as per UGC?	Yes		
Nature of Appointment	Permanent		
Salary	66,074/-		
Faculty Member 4	Ms. Shweta Redkar – Assistant Professor		
Highest qualification	Degree M.E. Computer Science & Engg. Pursuing Ph.D	University Goa	% marks/grade 7.14

Qualified as per UGC?	Yes		
Nature of Appointment	Permanent (Deputed for PhD Research Work)		
Salary	42,600/- [Deputed for Higher Studies without Remuneration]		
Faculty Member 5	Mrs. Nilam Shetye		
Highest qualification	Degree M.E. C.S.E.	University Goa	% marks/grade 7.15
Qualified as per UGC?	Yes		
Nature of Appointment	Temporary		
Salary	30,000/-		
Faculty Member 6	Mrs. Prajakta Tanksali		
Highest qualification	Degree M.E. I.T.	University Goa	% marks/grade 6.97
Qualified as per UGC?	Yes		
Nature of Appointment	Temporary		
Salary	27,000/-		
Faculty Member 7	Mr. Bipin Naik		
Highest qualification	Degree M.E. Computer Sci & Engg.	University Goa	% marks/grade 6.88
Qualified as per UGC?	Yes		
Nature of Appointment	Temporary		
Salary	27,000/-		
Faculty Member 8	Mrs. Steffy Alisha Fernandes – Assistant Professor		
Highest qualification	Degree M.E. I.T.	University Goa	% marks/grade 6.67
Qualified as per UGC?	Yes		
Nature of Appointment	Temporary		
Salary	27,000/-		
Faculty Member 09	Ms. Melancy Mascarenhas– Assistant Professor		
Highest qualification	Degree M.E. Computer Sci & Engg.	University Goa	% marks/grade 6.66
Qualified as per UGC?	Yes		
Nature of Appointment	Temporary		
Salary	26,000/-		
Faculty Member 10	Mrs. Arishma Rane		
Highest qualification	Degree	University	% marks/grade

	M.Tech Comp Sci Visvesvaraya Technological University	70.5%
Qualified as per UGC?	Yes	
Nature of Appointment	Temporary	
Salary	26,000/-	

First Year Common Faculties (Department of General Engineering)

Number of faculty members sanctioned for programme	09 (As per AICTE Approval Regulations 2018-19 Norms)		
Number of faculty positions filled	09		
Faculty Member 1	Mrs. Veda Kamat – Assistant Professor		
Highest qualification	Degree M. Sc Chemistry	University Goa	% marks/grade 63
Qualified as per UGC?	Yes		
Nature of Appointment	Permanent		
Salary	51,662/-		
Faculty Member 2	Mr. Sandesh Mardolkar – Assistant Professor		
Highest qualification	Degree B.E. Civil Engg.	University Bombay	% marks/grade 61.26%
Qualified as per UGC?	Yes		
Nature of Appointment	Permanent		
Salary	45,532/-		
Faculty Member 3	Mrs. Akila E – Assistant Professor		
Highest qualification	Degree M.E. Power Systems	University Annamalai University	% marks/grade 9.51
Qualified as per UGC?	Yes		
Nature of Appointment	Probation		
Salary	53,624/-		
Faculty Member 4	Mr. Viren Pereira – Assistant Professor		
Highest qualification	Degree Power & Energy System	University Goa	% marks/grade 6.9
Qualified as per UGC?	Yes		
Nature of Appointment	Permanent		
Salary	55,142/-		

Faculty Member 5	Mr. Jateen Shet Shirodkar – Assistant Professor		
Highest qualification	Degree M.E. Industrial Engg.	University Goa	% marks/grade 7.24
Qualified as per UGC?	Yes		
Nature of Appointment	Probation		
Salary	45,042/-		
Faculty Member 6	Mrs. Aradhana Bandekar – Assistant Professor		
Highest qualification	Degree M.Sc Mathematics Pursuing Ph.D	University Goa	% marks/grade 83%
Qualified as per UGC?	--		
Nature of Appointment	Temporary		
Salary	50,000/-		
Faculty Member 7	Mrs. Avani Talkatkar – Assistant Professor		
Highest qualification	Degree M.SC Physics	University Goa	% marks/grade 65.44%
Qualified as per UGC?	--		
Nature of Appointment	Temporary		
Salary	31,000/-		
Faculty Member 8	Mrs. Loveena Coelho e Dias – Assistant Professor		
Highest qualification	Degree M.A English Literature	University Goa	% marks/grade 56%
Qualified as per UGC?	--		
Nature of Appointment	Temporary		
Salary	20,000/-		
Faculty Member 9	Mrs. Pallavi Bhatkande – Assistant Professor		
Highest qualification	Degree M.SC Mathematics	University Karnataka	% marks/grade 50%
Qualified as per UGC?	--		
Nature of Appointment	Visiting		
Salary	20,000/-		

College Director of Physical Education

Faculty Member 01	Mr. Nandesh Gaonkar – College Director of Physical Education
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Highest qualification	Degree M. P. Ed	University Solapur	% marks/grade 74.58
Qualified as per UGC?	--		
Nature of Appointment	Temporary		
Salary	25,000/-		

Industry Adjunct Faculty Members as per AICTE Approval Guidelines 2016-17

Sr. No	Name of the Staff	Designation	Qualification	Status of Appointment
1	Mr. Prajot Mainkar	Industry Adjunct Visiting Faculty	B.E. (Comp) M.E. (Software System)	Visiting Faculty
2	Mr. Ashwin Kunkolienkar	Industry Adjunct Visiting Faculty	B.E. (I.T.)	Visiting Faculty
3	Mr. Dattprasad Shet Kurtarkar	Industry Adjunct Visiting Faculty	B.E. (Comp)	Visiting Faculty
4	Mr. Sachin Kale	Industry Adjunct Visiting Faculty	B.E. (Comp) M.E. (I.T.)	Visiting Faculty

No. of applications received for admission to the programme during last 3 academic years

a) No. of Seats are filled through Directorate of Technical Education

Information Technology

Year	No. of applications received for the programme	No. of seats sanctioned	No. of seats filled
2016-17	The Admission through Centralised Admission Process by Directorate of Technical Education, Govt. of Goa	45 + 3	48 + 2*
2017-18	The Admission through Centralised Admission Process by Directorate of Technical Education, Govt. of Goa	45 + 3	28
2018-19	The Admission through Centralised Admission Process by Directorate of Technical Education, Govt. of Goa	45 + 3	11

* Seats of Management Quota are filled through Directorate of Technical Education during Third round of admission.

b) No. of Application received Under Management Quota

Year	No. of applications received for the programme (Under Management quota)	No. of seats sanctioned	No. of seats filled
2016-17	41	15	12
2017-18	03	15	03
2018-19	04	15	03

Infrastructure

Classrooms available to the programme and area of each classroom	Class Room	Area in Sqm
	CR-01	95.45
	CR-02	95.45
	CR-03	95.45
Teaching aids available for the programme	LCD Projectors, Over Head Projectors, Electronics Slats, Online Course Material, Digital Library	
Laboratories used by the programme and area of each laboratory	Laboratory Details	Area in Sqm
	Basic Computing Lab	102
	Multimedia Lab	68.39
	Project Lab	95.45
	First Year Common Laboratories	
	Engineering Workshop	211.78
	Chemistry Lab	64.00
	BCM Lab	139
	Physics Lab	63.75
	Drawing Hall	134.30

	Computer Center	150
Special equipment used in the programme	<u>Please Refer Annexure-II (List of Lab Equipments)</u>	
Availability of staffroom to teachers	Faculty Cabins along with one HoD Cabin and Department Office are available.	
Availability of common room to students	Common Facility	Area in Sqm
	Girls Common Room	128.10
	Boys Common Room	75.70
Library facilities available to the programme	Resource	Total Number available
	Books (IT Dept.)	5692
	Titles (IT Dept.)	1182
	No. of Copies of Print National Journals (All Branches)	1195
	No. of International Journals (Online Subscription) – All Branches	1250
	Computers for Library Automation	03
	Multimedia Computers	09
Sports facilities available to the programme	Yes: Available.	
Canteen facilities	Yes : Available	
Health facilities, Counseling, etc. available to the programme	Yes: Available	
Description of facilities that have been added since the last AIC visit	<p>Microsoft Softwares (90 Users) - Microsoft Desktop Education All Lng License/Software Assurance Pack Academic Open Value 1 License Level E Enterprise 1 Year – 45 Faculty Licenses (Part Number: 2UJ-00011, Agreement Number: V1583169)</p> <p>Autodesk Softwares (125 Users) - An Educational <i>Multiseat Stand-alone</i> license for <i>Education Master Suite 2015</i> (Order Number:7054731131, Contract Number: 110000869196, Renewal Date: 2017, Customer Reference Number: ARC-7229234642001, Sold To Number: 5070143979)</p>	

	[Please Refer <u>ANNEXURE-III</u> (List of Equipments & Licensing Software's Added)]
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Data on placements of last 3 batches:**List of Placed Candidates – 2015-16 Batch**

Sr. No	Name	Branch	Company
1	Pooja Singh	IT	Tata Consultancy Services
2	Neha Pangam	IT	Tata Consultancy Services
3	Riya Sinari	IT	Tata Consultancy Services
4	K. A. Shiddi Shivraman	IT	Tata Consultancy Services
5	Diksha	IT	Tata Consultancy Services

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D 4.3.2 BE Mechanical Engineering.

Annexure I

Date of visit	07.06.2019
Name of the College/Institution	Shree Rayeshwar Institute of Engineering and Information Technology
NAAC Accreditation	--
If Yes, Grade and year	Not yet Applied
Research funding received by college last year	Applied to AICTE
Programme being reviewed by AIC	N/A
Programme fee per year per student	Refer Annexure-1
Is financial position of the programme as per SC-1?	Yes – fulfilled as per AICTE Norms

Faculty Branch: Mechanical Engineering

Identify Faculty

Faculty Member 1	Mr. Kedar G. Acharya - Assistant Professor		
Highest qualification	Degree M.Tech. Thermal Engg.	University VJTI, Mumbai	% marks/grade 8.57
Qualified as per UGC?	Yes		
Nature of Appointment	Temporary		
Salary	----		
Faculty Member 2	Mr. Anish T. Bandekar - Assistant Professor		
Highest qualification	Degree M.Tech. Industrial Automation & Robotics	University VTU, Belgaum	% marks/grade 74.48%
Qualified as per UGC?	Yes		
Nature of Appointment	Temporary		
Salary	----		

First Year Common Faculties (Department of General Engineering)

Number of faculty members sanctioned for programme	09 (As per AICTE Approval Regulations 2018-19 Norms)		
Number of faculty positions filled	09		
Faculty Member 1	Mrs. Veda Kamat – Assistant Professor		
Highest qualification	Degree	University	% marks/grade

	M. Sc Chemistry	Goa	63
Qualified as per UGC?	Yes		
Nature of Appointment	Permanent		
Salary	51,662/-		
Faculty Member 2	Mr. Sandesh Mardolkar – Assistant Professor		
Highest qualification	Degree	University	% marks/grade
	B.E. Civil Engg.	Bombay	61.26%
Qualified as per UGC?	Yes		
Nature of Appointment	Permanent		
Salary	45,532/-		
Faculty Member 3	Mrs. Akila E – Assistant Professor		
Highest qualification	Degree	University	% marks/grade
	M.E. Power Systems	Annamalai University	9.51
Qualified as per UGC?	Yes		
Nature of Appointment	Probation		
Salary	53,624/-		
Faculty Member 4	Mr. Viren Pereira – Assistant Professor		
Highest qualification	Degree	University	% marks/grade
	Power & Energy System	Goa	6.9
Qualified as per UGC?	Yes		
Nature of Appointment	Permanent		
Salary	55,142/-		
Faculty Member 5	Mr. Jateen Shet Shirodkar – Assistant Professor		
Highest qualification	Degree	University	% marks/grade
	M.E. Industrial Engg.	Goa	7.24
Qualified as per UGC?	Yes		
Nature of Appointment	Probation		
Salary	45,042/-		
Faculty Member 6	Mrs. Aradhana Bandekar – Assistant Professor		
Highest qualification	Degree	University	% marks/grade
	M.Sc Mathematics	Goa	83%
	Pursuing Ph.D		
Qualified as per UGC?	--		
Nature of Appointment	Temporary		
Salary	50,000/-		

Faculty Member 7	Mrs. Avani Talkatkar – Assistant Professor		
Highest qualification	Degree M.SC Physics	University Goa	% marks/grade 65.44%
Qualified as per UGC?	--		
Nature of Appointment	Temporary		
Salary	31,000/-		
Faculty Member 8	Mrs. Loveena Coelho e Dias – Assistant Professor		
Highest qualification	Degree M.A English Literature	University Goa	% marks/grade 56%
Qualified as per UGC?	--		
Nature of Appointment	Temporary		
Salary	20,000/-		
Faculty Member 9	Mrs. Pallavi Bhatkande – Assistant Professor		
Highest qualification	Degree M.SC Mathematics	University Karnataka	% marks/grade 50%
Qualified as per UGC?	--		
Nature of Appointment	Visiting		
Salary	20,000/-		

College Director of Physical Education

Faculty Member 01	Mr. Nandesh Gaonkar – College Director of Physical Education		
Highest qualification	Degree M. P. Ed	University Solapur	% marks/grade 74.58
Qualified as per UGC?	--		
Nature of Appointment	Temporary		
Salary	25,000/-		

Industry Adjunct Faculty Members as per AICTE Approval Guidelines 2016-17

Sr. No	Name of the Staff	Designation	Qualification	Status of Appointment
1	Mr. Prajot Mainkar	Industry Adjunct Visiting Faculty	B.E. (Comp) M.E. (Software System)	Visiting Faculty
2	Mr. Ashwin Kunkolienkar	Industry Adjunct Visiting Faculty	B.E. (I.T.)	Visiting Faculty

3	Mr. Dattprasad Shet Kurtarkar	Industry Adjunct Visiting Faculty	B.E. Comp	Visiting Faculty
4	Mr. Sachin Kale	Industry Adjunct Visiting Faculty	B.E. (Comp) M.E. (I.T.)	Visiting Faculty

No. of applications received for admission to the programme during last 3 academic years

Not Applicable – Proposed to Start from Academic year 2019-20

Infrastructure

Classrooms available to the programme and area of each classroom	Class Room	Area in Sqm
	CR-12	95.45
	TR-03	63.75
Teaching aids available for the programme	LCD Projectors, Over Head Projectors, Electronics Slats, Online Course Material, Digital Library	
Laboratories used by the programme and area of each laboratory	Laboratory Details	Area in Sqm
	Fluid Mechanics Lab	66
	IC Engine Lab	73
	First Year and Common Laboratories	
	Engineering Workshop	211.78
	Chemistry Lab	64.00
	Physics Lab	63.75
	Drawing Hall	134.30
	Computer Center	150
Special equipment used in the programme	<u>Please Refer Annexure-II</u>	
Availability of staffroom to teachers	Faculty Cabins along with one HoD Cabin and Department Office are available.	
Availability of common room to students	Common Facility	Area in Sqm
	Girls Common Room	128.10
	Boys Common Room	75.70

Library facilities available to the programme	Resource	Total Number available
	Books	2034
	Titles	560
	Journals (National)	06
	No. of Copies of Print National Journals (All Branches)	1195
	No. of International Journals (Online Subscription) – All Branches	1250
	Computers for Library Automation	03
	Multimedia Computers	09
Sports facilities available to the programme	Yes: Available.	
Canteen facilities	Yes : Available	
Health facilities, Counseling, etc. available to the programme	Yes: Available	

Data on placements of last 3 batches:**Not Applicable** – Proposed to Start from Academic year 2019-20

List of Specialized Equipments
(Mechanical Engineering)
Fluid Mechanics Lab

Sr. No	Name of Equipment	Quantity
1	Reynolds apparatus (Re-circulating type)	01
2	Verification of bernoullis Theorem	01
3	Flow over notches apparatus	01
4	Calibration of orificemeter	01

5	venturimeter and rotameter	01
6	Flow through orifice & mouth piece apparatus	01
7	Losses in pipe friction apparatus (Major loss)	01
8	Losses in pipe fitting apparatus (Minor loss)	01

IC Engine Lab

Sr. No	Name of Equipment	Quantity
1	Single cylinder 4 stroke diesel engine test rig with rope brake dynamometer	01

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D 4.4 Shri Kamaxidevi Homeopathic Medical College & Hospital, Shiroda, Goa.
BHMS

Annexure I

Date of visit	10/06/2019
Name of the College/Institution	Shri Kamaxidevi Homoeopathic Medical College & Hospital Shiv-Shail, Shiroda Goa
NAAC Accreditation	_____
If Yes, Grade and Year	_____
Research funding received by college last year	Nil
Programme being reviewed by AIC	BHMS (Bachelor in Homoeopathic Medicine & Surgery)
Programme fee per year per student	94,000 Two semester (2019-20)
Is financial position of the programme as per SC-1?	Yes

Faculty (add more rows in the table below if needed)

Number of faculty members sanctioned for programme	Copy enclosed
Number of faculty positions filled	
Faculty Member 1	Name
Highest qualification	Degree, University, % marks, grade, etc.
Qualified as per UGC	Yes/No
Nature of Appointment	Perm/Contract/Lecture-basis
Salary	Sixth pay
Faculty Member 2	Name
Highest qualification	Degree, University, % marks, grade, etc
Qualified as per UGC	Yes/No
Nature of Appointment	Perm/Contract/Lecture-basis
Salary	Sixth pay

No. of applications received for admission to the programme during last 3 academic years

Academic year	No. of applications	No. of seats sanctioned	No. of seats filled
2016-17	75	50	50
2017-18	80	50	50
2018-19	70	50	50

Infrastructure

Classrooms available to the programme and area of each classroom	<p>Yes (5) Lecture halls</p> <p>i) 50 seats @ 72.38 per hall</p> <p>ii) 100 seats @ 144.76 per hall</p>
Teaching aids available for the programme	Yes

Laboratories used by the programme and area of each Laboratory	Anatomy including Histology – (1+1+1+1) -74.4x4 = 297.6 Sqmt. + 25 Sqmt Physiology including Biochemistry – (1+1) - 74.4x2 = 148.8 Sqmt. Pharmacy (1) = 74.4 + 20 Sqmt. Pathology including Microbiology - (1) = 74.4
Special equipment used in the programme	Clinical training in hospital
Availability of staffroom to teachers	Yes
Availability of common room to students	Yes
Library facilities availability to the programme	Yes
Sport facilities available to the programme	Yes
Canteen facilities	Yes
Health facilities, Counselling, etc. available to the programme	Yes
Description of facilities that have been added since the last AIC visit	1. Addition of teaching staff 2. Addition of teaching aids 3. Addition of instruments 4. Addition of library books 5. L.C.D. in lecture halls.

Data on placements of last 3 batches

Batch: 2018-19

Sr. No	Placement
01	Students pursue higher education
02	Employment in private sector
03	Employment in hospitals
04	Private clinical practice
05	Higher education in allied sciences
06	Clinical research

Batch: 2017-18

Sr. No	Placement
01	Students pursue higher education
02	Employment in private sector
03	Employment in hospitals
04	Private clinical practice
05	Higher education in allied sciences

Batch: 2016-17

Sr. No	Placement
01	Students pursue higher education
02	Employment in private sector
03	Employment in hospitals
04	Private clinical practice

05	Higher education in allied sciences
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