



Goa University
Annual Quality Assurance Report (AQAR)
(June 2016 to May 2017)



राष्ट्रीय मूल्यांकन एवं प्रत्यायन परिषद्

विश्वविद्यालय अनुदान आयोग का स्वायत्त संस्थान

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL
An Autonomous Institution of the University Grants Commission
P. O. Box. No. 1075, Opp: NLSIU, Nagarbhavi, Bangalore - 560 072 India

The Annual Quality Assurance Report (AQAR) of the IQAC

Part – A

1. Details of the Institution

1.1 Name of the Institution:	Goa University
1.2 Address Line 1:	Goa University P.O.
City/Town:	Taleigao Plateau
State:	Goa
Pin Code:	403 206
Institution e-mail address:	registrar@unigoa.ac.in
Contact Nos.:	0832-6519048; 0832-6519302
Name of the Head of the Institution:	Prof. Varun Sahni (Dr. Satish R. Shetye until 18.08.2016)
Tel. No. with STD Code:	0832-6519001
Mobile:	8698099225
Name of the IQAC Co-ordinator:	Prof. Pranab Mukhopadhyay
Tel. No. with STD Code:	0832-6519266
IQAC e-mail address:	iqac@unigoa.ac.in
1.3 NAAC Track ID:	GAUNGN10025
1.4 NAAC Executive Committee No. & Date:	66 th Standing Committee meeting held on 24 th September 2014
1.5 Website address:	https://www.unigoa.ac.in/
Web-link of the AQAR:	https://www.unigoa.ac.in/IQAC.php

1.6 Accreditation Details

Sl. No.	Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1	1 st	Four Star	NA	2001	2001-06
2	2 nd	B	2.6	2009	8 Mar 2009 to 7 Mar 2014
3	3 rd	A	3.09	2014	24 Sep 2014 to 23 Sep 2019

1.7 Date of Establishment of IQAC (DD/MM/YYYY): 11/07/2009

1.8 AQAR for the year: **AY 2016-17 (1 Jun 2016 to 31 May 2017)**

1.9 Details of the previous year's AQAR submitted to NAAC after the latest Assessment and Accreditation by NAAC:

(i) 2012-13 (30/12/2013)	(ii) 2013-14 (19/04/2015)
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(iii) 2014-15 (23/10/2015)	(iv) 2015-16 (24/03/2017)
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1.10 Institutional Status

University:	<u>State</u> / Central /Deemed/ Private
Regulatory Agency approved Institution: (eg. AICTE, BCI, MCI, PCI, NCI)	Yes No
Type of Institution:	<u>Co-education</u> Men Women
Area	<u>Semi-Urban</u> Rural Tribal
Financial Status	<u>Grant-in-aid/ UGC 2(f) / UGC 12B</u> Grant-in-aid + Self Financing Totally Self-financing

1.11 Type of Faculty/Programme

Arts Y	Science Y	Commerce Y	Law	
PEI (Phys Edu)	TEI (Edu)	Engineering	Health Science	
Management Y	Any other			

1.12 Name of the Affiliating University (*for the Colleges*)

Not applicable

1.13 Special status conferred by Central/ State Government-- UGC/CSIR/DST/DBT/ICMR etc

Autonomy by State/Central Govt/University Y		
University with Potential for Excellence	UGC-CPE	
DST Star Scheme	UGC-CE	
UGC-Special Assistance Programme Y	DST-FIST	Y
UGC-Innovative PG programmes Y	Any other (<i>Specify</i>)	
UGC-COP Programmes		

2. IQAC Composition and Activities

2.1 No. of Teachers	8
2.2 No. of Administrative/Technical staff	3
2.3 No. of students	1
2.4 No. of Management representatives	1
2.5 No. of Alumni	1
2.6 No. of any other stakeholder and community representatives	1
2.7 No. of Employers/ Industrialists	1
2.8 No. of other External Experts	1
2.9 Total No. of members	17

2.10 No. of IQAC meetings held in 2016-17: Three (1 July 2016, 10 October 2016, 20 March 2017)

2.11 No. of meetings with various stakeholders (informal/formal):

Faculty	2
Non-Teaching Staff	2
Students	1
Alumni	1
Others	2
Total	8

2.12 Has IQAC received any funding from UGC during the year? Yes **No**

If yes, mention the amount **Not Applicable**

2.13 Seminars and Conferences (only quality related)

(i) No. of Seminars/Conferences/ Workshops/Symposia organized by the IQAC

International	
National	
State	
Institution Level	
Total	0

(ii) Themes:

2.14 Significant Activities and contributions made by IQAC

- Streamlining of GU website
- Updation of staff, student, publications, conference presentations, projects and events databases
- Participation in various National Ranking Surveys ((i) NIRF, (ii) India Today, (iii) The Week), and attending to other surveys/questionnaires sent by various agencies and individuals, viz., ((i) Academia-Industry survey, (ii) Association of Indian Universities, (iii) Performance Appraisal & Retention of Faculty Members in Academic Institution in India: An Analytical Study, (iv) National Centre for Promotion of Employment for Disabled People (NCPEDP), (v) Survey on Framework of University-Industry Linkages in Research (PHD survey), (vi) National Survey on Resources Devoted to Scientific and Technological (S&T) Activities 2015-16 (SnT Survey), (vii) University Grants Commission, (Pay Review Committee, 2016)
- Compilation of University annual report, AQAR Report from PBAS datasets submitted by the faculty members and departmental information
- Writing in popular and scientific communications on Ranking and Quality parameters
- Presentations/lectures on quality enhancement in HEIs at Orientation programmes, refresher courses, administrative staff training programme, Other organisations having interest, etc.
- Sharing a brief on "Tracking trends and practices in scholarly communications from Goa University" as quality sensitization activity with the faculty

- Responding to RTI Query from the data on patents so compiled by the IQAC
- Dr. M.P. Tapaswi, OSD, IQAC presented a paper on "Assessing Quality in Higher Education Institutions in India: An Alternate View" at the Conference on Benchmarking Procedures and Practices for Quality Enhancement in Higher Education at Christ University, Bengaluru during 22-24 November 2016

2.15 Plan of Action by IQAC/Outcome

The plan of action chalked out by the IQAC in the beginning of the year towards quality enhancement and the outcome achieved by the end of the year*

Plan of Action	Achievements
Institutional repository updation	Newly published information has been added to the repository
Updation of databases	Staff, student (PG and PhD), conference presentations, projects and events databases are made available on the University website
Conduct awareness programmes related to quality enhancement in HEIs	Presentations/lectures on quality enhancement in HEIs at Orientation programmes, refresher courses, administrative staff training programme, Other organisations having interest, etc.
Have a coordinated time table across the campus to facilitate the functioning of CBCS system	The time-table for various programmes has now been added to every departmental page on website. There is also an agreement across departments that elective courses would be scheduled in the afternoon so that students can take courses across departments

* Attach the Academic Calendar of the year as Annexure 2.15 (Attached)

Whether the AQAR was placed in statutory body: **Yes** No

Management Syndicate **Any other body**

Provide the details of the action taken:

- Goa University has accorded Statutory status to IQAC and is chaired by the Vice Chancellor. The IQAC Committee approves the AQAR before it is uploaded to the GU website and submitted to NAAC and other bodies.

Part – B

Criterion – I

1. Curricular Aspects

1.1 Details about Academic Programmes

Level of the Programme	Number of existing Programmes	Number of programmes added during the year	Number of self-financing programmes	Number of value added / Career Oriented programmes
PhD	25	0	0	0
PG	36	0	2	36
UG	1	0	0	
PG Diploma	2			
Advanced Diploma				
Diploma				
Certificate	2			
Others (MPhil)	21			
Total	87		02	36
Interdisciplinary				
Innovative				

1.2 (i) Flexibility of the Curriculum: CBCS/Core/Elective option / Open options

(ii) Pattern of programmes:

Pattern	Number of programmes
Semester	35
Trimester	1
Annual	0

1.3 Feedback from stakeholders

Alumni	Y	Parents	Y
Employers	Y	Students	Y

Mode of feedback: **Online and Manual*** Co-operating schools (for PEI)

**IQAC has set up a mechanism to collect online student feedback on each course conducted in the university. Students, Parents, employers, community stake-holders and alumni are encouraged to give feedback directly to the concerned official including the Vice Chancellor either by e-mail or in person.*

1.4 Whether there is any revision/update of regulation or syllabi, if yes, mention their salient aspects

The syllabi across all departments get routinely updated either in terms of content or in structure. These are far too many to list here but can be gleaned from AC minutes if necessary.

1.5 Any new Department/Centre introduced during the year. **No**

If yes, give details: *Not applicable*

Criterion – II

2. Teaching, Learning and Evaluation

2.1 Total No. of permanent faculty:

	Total	Asst. Professors	Associate Professors	Professors	Others
Sanctioned	191	96	64	31	0
Direct Appointment	108	76	25	7	0
CAS	108	31	27	50	0

2.2 No. of permanent faculty with Ph.D.: 92

2.3 No. of Faculty Positions Recruited (R) and Vacant (V) during the year:

Asst. Professors		Associate Professors		Professors		Others		Total	
R	V	R	V	R	V	R	V	R	V
	20		39		24		0		83

2.4 No. of Guest and Visiting faculty and Temporary faculty

Guest	Visiting (VRPP)	Temporary
	24	42

2.5 Faculty participation in conferences and symposia:

No. of Faculty	International level	National level	State level
Attended Seminars/ Workshops*	3	21	3
Presented papers	46	109	18
Resource Persons	8	27	7

* Does not include those who presented papers/ acted as resource persons

2.6 Innovative processes adopted by the institution in Teaching and Learning:

Innovative tools:

- Use of LMS Moodle
- Slides presentation
- Screenings of films, documentaries and music
- Online tests and polls
- Use of games, online learning platforms

Innovative techniques:

- Flipped classroom pedagogy

- Active Teaching pedagogy using Group based learning/activities
- Participative teaching-learning to develop students' ability to analyse and present specific themes
- Seminars by students
- Mini-projects, Field work, activity based learning
- Whatsapp quizzes, blogposts, photo stories for creative writing, paintings and sculpture, comic strips, board games, theatrical activities, sessions on cross-cultural awareness
- Participation in national and international programmes
- Field placements in NGOs and Governmental organizations
- Linkage with industry for student internship
- Discussion of newspaper reports to bring social realities into classroom teaching
- Structuring of courses to engage students with the larger issues
- Case studies and problem based learning
- Guest Lectures by Indian and foreign scholars
- Tutorials, Correction & assignments, Remedial teaching

2.7 Total No. of actual teaching days during this academic year : **180**

2.8 Examination/ Evaluation Reforms initiated by the Institution (for example: Open Book Examination, Bar Coding, Double Valuation, Photocopy, Online Multiple Choice Questions)

- Multiple choice questions (including Online)
- Open book examination
- Tests, seminars and assignments
- Group discussions
- Film review

2.9 No. of faculty members involved in curriculum restructuring/revision/syllabus development as member of Board of Study/Faculty/Curriculum Development workshop

Activity	No. of faculty members
Curriculum restructuring	23
Revision	35
Syllabus development	37

2.10 Average percentage of attendance of students: **83%**

2.11 Course/Programme wise distribution of pass percentage:

Course	Grade O		Grade A		Grade B+		Grade B		Grade C		Grade D		F (Fail)		Total Students
	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No
Applied Geology	2	7	5	18	0	0	8	29	12	43	1	4	0	0	28

Biochemistry	2	10	10	50	0	0	7	35	1	5	0	0	0	0	20
Biotechnology	1	4	6	25	0	0	7	29	6	25	0	0	4	17	24
Botany	0	0	10	43	0	0	4	17	2	9	0	0	7	30	23
Business Administration	0	0	1	2	0	0	57	95	0	0	0	0	2	3	60
Business Administration (FS)	0	0	4	7	19	33	26	46	7	12	0	0	1	2	57
Integrated MBA	0	0	0	0	0	0	3	100	0	0	0	0	0	0	3
Integrated MBA (exit option – BBA)	0	0	0	0	0	0	6	100	0	0	0	0	0	0	6
Chemistry	3	4	24	30	0	0	29	36	12	15	0	0	12	15	80
Economics	0	0	6	17	0	0	14	40	5	14	4	11	6	17	35
Electronics	2	14	3	21	0	0	7	50	1	7	0	0	1	7	14
English	2	5	13	31	0	0	18	43	6	14	0	0	3	7	42
French	2	29	2	29	0	0	1	14	1	14	0	0	1	14	7
Hindi	0	0	6	19	0	0	18	56	7	22	0	0	1	3	32
History	0	0	2	5	0	0	20	49	10	24	3	7	6	15	41
International Studies	0	0	2	67	0	0	0	0	0	0	0	0	1	33	3
Konkani	0	0	2	5	0	0	25	57	15	34	1	2	1	2	44
M.Com	1	2	23	40	0	0	23	40	10	17	0	0	1	2	58
Marathi	0	0	7	32	0	0	12	55	1	5	2	9	0	0	22
Marine Biotechnology	0	0	3	30	0	0	5	50	2	20	0	0	0	0	10
Marine Microbiology	0	0	3	19	0	0	2	13	10	63	1	6	0	0	16
Marine Science	3	17	9	50	0	0	4	22	0	0	0	0	2	11	18
Mathematics	0	0	4	17	0	0	5	21	3	13	0	0	12	50	24
Microbiology	2	11	10	53	0	0	6	32	1	5	0	0	0	0	19
Philosophy	0	0	1	25	0	0	3	75	0	0	0	0	0	0	4
Physics	1	3	11	28	0	0	6	15	9	23	0	0	12	31	39
Political Science	0	0	9	35	0	0	10	38	7	27	0	0	0	0	26
Portuguese	2	33	1	17	0	0	1	17	0	0	0	0	2	33	6
Sociology	0	0	3	18	0	0	8	47	4	24	0	0	2	12	17
Women's Studies	0	0	4	50	0	0	4	50	0	0	0	0	0	0	8
Zoology	3	10	16	55	0	0	8	28	1	3	0	0	1	3	29

	Distinction		First Class		Second Class		Pass Class		Fails		Total						
	No	%	No	%	No	%	No	%	No	%	No						
BLISc	8	35	12	52	3	13	0	0	0	0	23						
MLISc	15	83	3	17	0	0	0	0	0	0	18						
MCA	3	5	28	49	14	25	5	9	7	12	57						

2.12 How does IQAC Contribute/Monitor/Evaluate the Teaching & Learning processes:

- Nodal Centre for information gathering and dissemination to provide support to the university in regularly updating information, compiling reports, participating in surveys and responding to questionnaires and routine RTI queries on academic matters
- Alert management on the state-of-the-art from the information so gathered
- Pioneered an online student feedback system
- Monitor website updates, time-tables, etc

2.13 Initiatives undertaken towards faculty development

HRDC PROGRAMMES	No. of programmes	No. benefited	No. of faculty (participants) from Goa Univ. Depts.
Refresher courses	4	136	21
UGC – Faculty Improvement Programme			
Orientation programmes	3	111	49
Faculty exchange programme			
Staff training conducted by the university			
Staff training conducted by other institutions			
Summer / Winter schools, Workshops, etc.			
Others Short Term Courses	1	29	29
Any other courses			

2.14 Details of Administrative and Technical staff

Category	Number of Permanent Employees	Number of Vacant Positions	Number of permanent positions filled during the Year	Number of positions filled temporarily
Administrative Staff	271	46	0	0
Technical Staff	87	46	0	0

Criterion – III

3. Research, Consultancy and Extension

3.1 Initiatives of the IQAC in Sensitizing/Promoting Research Climate in the institution

- Maintains and updates the publications repository of faculty publications and other databases (PhD students, Conference presentations, Research projects, etc) routinely
- Repository and other databases made available on Internet for increased visibility of work done
- Sensitize researchers on the quality journals in which they should publish by making presentations at various forums
- Circulated a brief on “Tracking trends and practices in scholarly communications from Goa University” as quality sensitization activity with the faculty

3.2 Details regarding major projects

	Completed	Ongoing	Sanctioned	Submitted
Number	12	20	8	23
Outlay in Rs. Lakhs	Please see the lists below			

Completed projects

Dept	PI	Title	Funding Agency	Sanctioned amount (Rs. In lakhs)	Duration
Biotechnology	Kerkar, S.	Consultancy of Water Analysis	Eureka Forbes	0.14	Sep 2016 – Mar 2017
Biotechnology	Muraleedharan, U.D. (PI); Matta, V.M. (Co-PI)	Biogeochemical Studies of the Arabian Sea and the Effect of Riverine Inputs from the Mandovi-Zuari System along the West Coast of India	MoES	64	Sep 2011 – Sep 2016
Botany	Rodrigues, B.F.	Monitoring and Evaluation of Plantations under CAMPA in the State of Goa	Forest Department, Govt. of Goa	2.63	Jul 2016 – May 2017
Botany	Rodrigues, B.F.	Bio-Physical Characterization and Site Suitability Analysis for Indian Mangroves (PRACRITI Phase-II Programme)	ISRO, Ahmedabad	20	Apr 2014 – Mar 2017
Botany	Janarthanam, M.K.	All India Coordinated Project on Sacred Grove Ecosystem Service Assessment: Ecosystem Service Assessment in Sacred Groves of Goa	MoEF	36.41	Mar 2012 – Mar 2017
Chemistry	Singh, P.R.	Electrochemical Studies of Polycrystalline Gold and Platinum Electrodes in Surfactant and Ionic Liquid Media and its use for Study of some well known Redox Systems	UGC	6	Apr 2016 – Mar 2017
Chemistry	Singh, P.R.	Electrochemical Preparation of Polyaniline-carbon Nanoparticles (PANI-CNPs) and Polyaniline-carbon Nanoparticles with Pt Nanoparticles (PAN-CNPs-Pt)....Fuel Cell Applications	SERB	27	Apr 2016 – Mar 2017
Computer Science and Technology	Kamat, V.V.	CAD-ELearn	Govt. of Goa	10	Apr 2011 – Mar 2017
Computer Science and Technology	Karmali, R. (PI); Sardesai, M.; Pawar, J.D.; Wagh, R.S. (co-PI)	Shallow Parser Tools for Indian Languages (SPT-IL) (Additional Co-PI:)	DeitY	36	Mar 2012-- Dec 2016
Electronics	Gad, R.S. (PI); Naik, G.M. (Co-PI)	Development of Coconut Plucking Robot	ICAR	25.22	Feb 2015 – Jan 2017

Management Studies	Borde, N.A.	Mood of the State: Survey	Prudent Media	0.5	Jul 2016 – Aug 2016
Marine Sciences	Rivonker, C.U.	Ballast Water Management Programme- India (BAMPI)	NIO	106.41	Sep 2011 – Sep 2016
Marine Sciences	Matta, V.M.	Atmospheric Deposition and its Influence on Nutrients in Coastal Waters of Goa: West Coast of India	MoES	47.37	Sep 2011 – Sep 2016
Physics	Pai, R.V.	Random-Phase- Approximation Excitation Spectra for Bose-Hubbard Models	CSIR	12.42	Apr 2014 – Mar 2017
Physics	Pai, R.V.	Cluster Mean-Field Theory for Bose-	DSTE-Goa	6.78	Jan 2014 – Jan 2017
Political Science	Shringare, A.	Post-Poll Survey 2017 Goa	CSDS, New Delhi	2.14	Feb 2017
Political Science	Tripathi, R.	Knowledge, Attitude, Belief, Practices, KABP Survey of Electors in Goa 2017	Election Commission of India	4.5	Dec 2016 – Jan 2017
Political Science	Tripathi, R. (PI); Desai, P.S. (Co-PI)	Survey of the Knowledge, Attitudes, Beliefs, Behaviour and Perceptions (KABBP) of Electors in Goa for the Assembly Election 2017	Goa State Election Commission	4.5	Dec 2016 – Jan 2017
Women's studies	DeSouza, S.	Sanghamitra: Goa State Coalition for Reproductive and Social Health of Adolescents	NMEW	25	May 2014 – Mar 2017
Women's studies	DeSouza, S.	Legal Awareness workshop for Anganwadi Teachers	National Commission of Women	1	Mar 2017
Total				402.02	

Ongoing projects

Dept	PI	Title	Funding Agency	Sanctioned amount (Rs. In lakhs)	Duration
Biotechnology	Kerkar, S.	Impact of Tourism on Estuarine Water Quality and Effect on Mangrove and Saltpan Ecosystem of Goa	DSTE, Goa	19.55	Nov 2013 - Jan 2018
Botany	Janarthanam, M.K.; Krishnan, S.	Preventing Extinction and Improving Conservation Status of Threatened Plants Through Application of Biotechnological Tools	DBT	35.71	Mar 2012 – Jun 2017
Botany		Biodiversity, Eco-physiology and Biotechnology UGC-SAP (DRS III)	UGC-SAP	118	Apr 2015 – Mar 2020
Chemistry	Santosh, G.	Self Assembly of Amphiphilic Donor Acceptor Dyads in to Nanostructures for Applications in Optoelectronics	DST	35	Aug 2013 – Sep 2018
Chemistry	Nadkarni, V.S.	Development of Novel Polymeric Detectors for Selective Dosimetric Analysis	AERB	25.19	Oct 2013 – Sep 2017
Chemistry	Morajkar, P.	Synthesis Characterization and Photocatalytic Application of Nanocomposites	UGC	6	Mar 2015 – Mar 2018
Chemistry	Majik, M.S.	Development of Analytical Methods and their Application in Biomolecular and Environmental Research	UGC	6	Apr 2015 – Mar 2018
Chemistry	Srinivasan, B.R.	Hydrothermal Synthesis, Characterization and Properties of New S-block Metal-Organic Frameworks	UGC	9.92	Jul 2015 – Jun 2018
Chemistry	Majik, M.S.	Development of Nucleosides and Marine Natural Products-Based Therapeutics and Their Synthetic Studies	DST	24	Feb 2016 – Feb 2019
Chemistry	Morajkar, P.	Effect of Reservoir Rock Composition on Oxidation of Hydrocarbons	DST	48.4	Mar 2016 – Mar 2019
Computer Science & Technology	Pawar, J.D.; Karmali, R.; Sardesai, M. (late); Wagh, R.S	Indian Languages Corpora Initiative(ILCI)- Phase II (Konkani)	DeitY	45.43	May 2012 - Jan 2017
Earth Science	Mahender, K.	Mineral Resources Conservation – GIS Data Base	UGC-SAP DRS-III level pro	74	Apr 2013 – Mar 2018
Earth Science	Viegas, A.	Mining and Minerals of Goa			

Earth Science	Vishwanath, T.A.	Igneous and Metamorphic Petrology			
Earth Science	Chachadi, A.G.	Groundwater Resources			
Electronics	Gad, R.S.	Vishveshvaraya PhD Scheme in area of ESDM for two full-time candidates	DeitY	47.18	Sep 2014 – Aug 2019
Electronics	Gad, R.S.	Vishveshvaraya PhD Scheme in area of ESDM & ITES for five full-time candidates	DeitY	199	Sep 2015 – Aug 2020
Electronics	Naik, G.M.	Visweswarayya Research grant for Electronics &IT	DeitY	33	Mar 2016 – Feb 2019
Electronics	Parab, J.S.	Visweswarayya Research grant for Electronics & IT	DeitY	33	Mar 2016 – Feb 2019
Electronics	Parab, J.S.	Visweswaraya Young Faculty Award Electronics &IT	DeitY	37	Apr 2016 – Mar 2021
Management Studies	Hegde-Desai, P.; Borde, N.A.	Financing of Micro, Small and Medium Enterprises (MSMEs) in Goa (With reference to specified sectors)	UGC	6.37	Jul 2015 – Jun 2018
Marine Sciences	Menon, H.B.	Optical Characterization of Case II: Waters and Retrieval of Colour Components from an Optical Sensor	INCOIS	61.23	Apr 2013 – Sept 2017
Marine Sciences	Menon, H.B.	Establishing A Network Station at Goa University for Atmospheric Boundary Layer Measurements Under The Noble Project of ISRO-GBP-SPL, VSSC, ISRO	ISRO	86.65	Apr 2013 – Mar 2020
Marine Sciences	Menon, H.B.	Aerosol Radiative Forcing over India	VSSC, ISRO, Trivandrum	50	Apr 2012 – Mar 2020
Marine Sciences	Nayak, G.N.	High Resolution Paleoclimatic Studies from the Bay of Bengal	MES	12.78	Mar 2012 – Mar 2018
Marine Sciences	Rivonker, C.U.; Kerkar, V.	Harmful Algal Blooms (HABs): Hab Monitoring (Mangalore toGoa)	MoES	57	Oct 2012 – Oct 2017
Marine Sciences	Rivonker, C.U.	Assessment of Marine Biodiversity Along the Goa and Northern Karnataka Coasts	MoES	62.9	Feb 2013 – Feb 2018
Marine Sciences	Nayak, G.N.	Estimation of Beryllium from the Polar Regions and Lake Sediments: Paleo-Oceanographic Implications	AUC-UGC	6.03	Jan 2014 – Nov 2017
Microbiology	D'Costa, P.M.	Fate of Diatoms During Microbially-mediated Decomposition Processes	SERB-DST	6.5	Aug 2014 – Aug 2017
Microbiology	Naik, M.M.	Studies on Involvement of Quorum Sensing Molecules in Development of Biofilm and Expression of Virulence Genes in Listeria monocytogenes and Staphylococcus aureus Isolated from Dairy Industry	SERB-DST	11.5	Dec 2015 – Nov 2017
Microbiology	Haldar, S.	Application of Metagenomic Technique for Isolation of Microbes from Mangroves for Potential use in Biofertilization and Bioremediation	SERB-DST N-PDF	2	Mar 2016 – Mar 2018
Physics	Desa, J.A.E.	Temperature Dependent Studies of Some Glass Structures and Structures of Some Superparamagnetic Glasses	UGC-DAE	1.25	Jan 2015 - Dec 2017
Physics	Priolkar, K.R.	Effect of Structural Disorder on Martensitic Transformation in Shape Memory Alloys	DST	59.02	Apr 2015 – Mar 2018
Physics	Pai, R.V.	Quantum Phases of Spin-1 Bosonic Atoms in Bichromatic Superlattices	UGC	14.39	Jul 2015 – Jun 2018
Physics	Pahari, B.	Advanced Solid state NMR on transparent conducting oxides	UGC-start Up Grants	6	Jul 2015 – Jul 2017
Physics	Raut-Desai, R.; Desa, J.A.E.	Mesoscopic Structural Investigation on Magnetic Porous Materials by SANS	UGC-DAE	1.35	Jan 2016 – Dec 2018
Zoology	Roy, R.; Kerkar, S.	Development of Alternative Sustainable Fish Feeds to Promote Human Health using Novel Non-conventional Indigenous Ingredients	DBT(India); BBSRC(UK)	106	Apr 2016 – Mar 2019
Total				1347.35	

Sanctioned projects (2016-17)

Dept	PI	Title	Funding Agency	Sanctioned amount (Rs. In lakhs)	Duration
Chemistry	Tilve, S.G.	Intramolecular Dehydrogenative Coupling (IMDC) Reactions for the Synthesis of Heterocyclic Scaffolds	DST-SERB	42.11	Jun 2016 – May 2019
Chemistry	Tilve, S.G.	Green Chemistry Approach for the Synthesis of Bioactive Heterocycles	UGC	9.33	Jun 2016 – May 2019
Chemistry	Tilve, S.G.	Diastereo and Enantioselective Synthesis of Alkaloids Containing Pyrrolidine and Piperidine Motif	CSIR	24.86	Jul 2016 – Jun 2019
Management Studies	Borde, N.A.	Socio Economic Mapping of Villages Affected by Mopa Airport	GMR Goa International Air	5.3	Jan 2017 – Aug 2017
Management Studies	Borde, N.A.	Drafting of Feni Policy (consultancy)	Govt. of Goa	25	Mar 2017 – May 2018
Physics	Priolkar, K.R.	Effect of Site Occupancy Disorder on Martensitic Transformation in Mn Rich Magnetic Shape Memory Alloys	CSIR, New Delhi	10.9	Jun 2016 – May 2019
Physics	Pahari, B.	Solid state NMR and computational study to probe the structural, defects and ion conduction mechanistic features in anti-perovskite based electrolyte materials	DST-SERB	29	Dec 2016 – Dec 2019
Physics	Sudhir, C.	Optical Manipulation and Trapping Single Gold Shell Encapsulated Semiconductor Quantum Dots and Applications Towards Bioimaging	SERB-DST	49.5	Jan 2017 – Jan 2020
Total				196	

Proposed projects (2016-17)

Dept	PI/ Co-PI	Title	Funding Agency	Proposed amount (Rs. In lakhs)
Botany	Rodrigues, B.F.	Monitoring of afforestation works under-taken in CAMPA during the year 2014-15 by the Forest Department	Forest Dept, Govt. of Goa.	2.63
Chemistry	Morajkar, P.	Synthesis of tio/Al ₂ O ₃ and TiO ₂ /Al ₂ O ₃ /HY- zeolite nano composites for photocatahtic oxidation of environmentally hazardous Voc	UGC - BSR	6.00
Chemistry	Morajkar, P.	Investigation of the effect reservoir rock composition on the reachly of CO ₂ /O ₂ mixture with hydrocarbons in the depleted oil reservoir: evaluation on risk if reservoir stability and efficacy of EoR process in context of capture and shone (Ces) dechnury	SERB	48.40
Chemistry	Tilve, S.G.	Green chemistry approach for the synthesis of bioactive heterocycles	UGC	9.33
Chemistry	Dhuri, N.S.	Small molecule activation and biomimetic oxidations synthesis, characterization and reactivity studies of non-heme high valent metal-oxygen reaction species	SERB	52.54
Chemistry	Dhuri, N.S.	Design of new transitional metal catalysts for biomimetic organic oxidations	CSIR	22.8
Chemistry	Dhuri N.S.	Lewis acid promoted oxidative transformations by high valent ruthanium (IV) oxo species	DSTE, GOA	15.08
Computer Science & Technology	Pawar, J.D.; Karmali, R; Parienkar, P.	Developing dependency tree banks for Indian language.	C-DAC	37.05
Electronics	Gad, R.S.	Development of coconut plucking robot (cocorobot) Phase-II	ICAR	53.43
Electronics	Gad, R.S.	Development of coconut plucking robot Agri Engg.27 (12)/2015 - AE	ICGR	27.24
Marine Sciences	Nayak, G.N.	Metal bioremediation potential of biota associated with estuarine mangrove and mudflat sediments, central west coast of India	DST	43.76
Microbiology	D'Souza, M.M.	Nanomaterials for environmental sensor technologies for vector and pollution control (NEST)	U.K. Govt.	0.45
Physics	Viegas, A.A.A.	Petrology and geochemistry of the continental margin Dyke Swarm, Western India, Implications on the Tectonomagnetic Evolution of the continental margin	MoES	74.33

Physics	Priolkar, K.R.	Microscopic understanding of effect of antisite disorder on magnetic and transport properties of Heusler alloys	BRNS-DAE	34.05
Physics	Pahari, B.	To rationalize the composition structure property relationship in some technologically promising ion conducting materials	DST	47.19
Physics	Sudhir, C.	Study of interaction of photon emitters with hybrid plasmonic photonic nanostructures for controlled emission applications	SERB - DST	54.53
Physics	Sudhir, C.	Optical manipulation and trapping gold shell encapsulated semiconductor quantum and application towards bio-imaging.	DST	52.97
Physics	Pahari, B.	Solid state NMR computational study of probe the structural, defects and ion conduction mechanistic features in anti-perovskite based electrolyte materials	DST	30.84
Sociology	Cohello, J.P.	Deterritorialization, Nationalism, and Cultural Homogenisation: A Study of Institutions and the Public Sphere among the Tibetans in Exile in India	ICSSR	11.25
Women's Studies	DeSouza, S.	Evaluation of the implementation of Griha Aadhar scheme and Laadli Laxmi scheme in the state of Goa	Goa Govt.	29.05
Women's Studies	Jagriti Shankar; DeSouza, S.	National Commission for Women	NCW	1.00
Women's Studies	DeSouza, S.	Menstrual health management practices and education outcomes among adolescent school going Girls in Goa	ICSSR, New Delhi	16.05
Zoology	Roy, R.	Development of alternative sustainable fish feeds to promote human using novel non-conventional indigenous ingredients	DBT, BBRC, ESRC-UK.	166.00
Total				835

3.3 Details regarding minor projects

	Completed	Ongoing	Sanctioned	Submitted
Number	0	0	0	0
Outlay in Rs. Lakhs				

3.4 Details on research publications

	International	National	Total
Peer Review Journals	No criteria to distinguish between International and national Journals		167
Non-Peer Review Journals	0	0	0
e-Journals	Part of Peer-review journals		
Conference proceedings	23	20	43

3.5 Details on Impact factor of publications:

Range	0.172 to 13.465
Average	2.308
h-index	8*
Nos. in SCOPUS	78

*As in Web of Science for the years 2016-17 (searched on 30 Aug 2017)

3.6 Research funds sanctioned and received from various funding agencies, industry and other organisations

Principal Investigator	Funding agency	Title of the Project	Amount Received (Rs)	GU Budget head
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Sponsored Project funding				
D'Costa, P.M.	SERB-DST	Fate of Diatoms During Microbially-mediated Decomposition Processes	150000	A - 61
Desa, J.A.E.	UGC-DAE	Temperature Dependent Studies of Some Glass Structures and Structures of Some Superparamagnetic Glasses	45000	D - 79
DeSouza, S.	NMEW	Sanghamitra: Goa State Coalition for Reproductive and Social Health of Adolescents	419607	A - 57(I)
Dubey, S.K.	DBT	Biochemical Characterization of Tributyltin Chloride (TBTC) Resistant Bacteria from Marine Environment of Goa, India and Isolation of Genes Encoding Enzyme(s) for TBTC Resistance (Degradation)	15687	A - 17(9)
Gad, R.S.	DeitY	Vishveshvaraya PhD Scheme in area of ESDM for two full-time candidates	698870	A - 45(6)
Gad, R.S.	DeitY	Vishveshvaraya PhD Scheme in area of ESDM & ITES for five full-time candidates	2259113	A - 45(7)
Janarthanam, M.K.	MoEF	All India Coordinated Project on Sacred Grove Ecosystem Service Assessment: Ecosystem Service Assessment in Sacred Groves of Goa	544812	A - 7(12)
Kerkar, V.	MoES	An Assessment of Occurrence of Algal Blooms Along the Coast of Goa and Gujarat and its Ecological Implications	247657	A - 2(20)
Matta, V.M.	MoES	Atmospheric Deposition and its Influence on Nutrients in Coastal Waters of Goa: West Coast of India	48455	A - 2(25)
Menon, H.B.	ISRO	Quantitative Analysis....	18643	A - 38(2)
Menon, H.B.	ISRO	Establishing A Network Station at Goa University for Atmospheric Boundary Layer Measurements Under The Noble Project of ISRO-GBP-SPL, VSSC, ISRO	800000	A - 38(7)
Naik, G.M.	UGC	Design of Hyperspectral Smart Sensor Using Soft-Core Processors and IP Cores	131422	D - 58
Nayak, G.N.	UGC	Understanding Depositional Environments, Metal Concentrations and Processes Through the Study of Mudflats Within Mandovi-Zuari Estuarine System, Goa	74	D - 65
Nayak, G.N.	UGC	Estimation of Beryllium from the Polar Regions and Lake Sediments: Paleo-Oceanographic Implications	216057	D - 78
Pai, R.V.	CSIR	Random-Phase- Approximation Excitation Spectra for Bose-Hubbard Models	229225	A - 1(33)
Priolkar, K.R.	CSIR	Preparation and Characterization of Gallium Free Ferromagnetic Shape Memory Alloys	31468	A - 1(26)
Priolkar, K.R.	DAE-BRNS	Study of Magneto-Elastic Coupling in Antiperovskite Materials	4757	A - 13(10)
Priolkar, K.R.	DST	Effect of Structural Disorder on Martensitic Transformation in Shape Memory Alloys	700000	A - 62

Rivonker, C.U.	MoES	Harmful Algal Blooms (HABs): Hab Monitoring (Mangalore to Goa)	250000	A - 2(29)
Rodrigues, B.F.	ISRO	Bio-Physical Characterization and Site Suitability Analysis for Indian Mangroves (PRACRITI Phase-II Programme)	675000	A - 38(8)
Roy, R.	DBT(India); BBSRC(UK)	Development of Alternative Sustainable Fish Feeds to Promote Human Health using Novel Non-conventional Indigenous Ingredients	2120000	A - 17(17)
Salker, A.V.	UGC	Catalytic Radar Reaction (Nano Structured Based Catalysts for Detoxification of Exhaust?)	3559	D - 69
Shyama, S.K.	DAE	Evaluation of the Genotoxic Effect of Ionizing Radiation in Somatic Germinal Cells of Fishes	55200	A - 13(8)
Student Fellowships				
	CSIR	C.S.I.R. Junior/ Senior Fellowships	1045066	A - 1(1)
	DST	DST Inspire fellowship under AORC (Ph.D)	389600	A - 3(73)
	UGC	Joint UGC-CSIR Junior Research Fellowship	105385	D - 15
	UGC	UGC-JRF / SRF in Science, Humanities & Social Science	2249000	D - 16(10)
Infrastructure strengthening				
	UGC	Special Assistance Programme in the Dept of Chemistry at the level of DRS-II	63070	D - 38(7)
	UGC	Special Assistance Programme in the Dept of Zoology at the level of DRS-II	419258	D - 38(9)
	DST	Assistance for FIST Programme under Dept. of Chemistry	191046	A - 3(43)
	DST	Assistance for FIST programme, Dept. of Marine Science	252361	A-3(81)
Bhosle, S.	MoES	Ocean Science and Technology Cell (OSTC) on Marine Microbiology at Goa University	350212	A - 2(6)
Bhosle, S.	MoES	Upgradation of the OSTC, Goa University into a Centre of Excellence in Marine Microbiology	290661	A - 2(17)
Dubey, S.K.	UGC	Marine Microbiology under innovative programme	3444794	D - 39(4)
Sudarsan, P.K.	Census of India	Setting up of work station for research on sample micro data of census at Goa University	22492	A - 54(1)
	UGC	University Science Instrumentation Centre	724649	D - 14
Total research funding			19274200	

3.7 No. of books published

i) With ISBN No.	6
ii) Chapters in Edited Books	27
iii) Without ISBN No.	0

3.8 No. of University Departments receiving funds from

UGC-SAP	3
CAS	0
DST-FIST	8
NCW	1
DBT Scheme/funds	1

3.9 For colleges Autonomy CPE DBT Star Scheme
 INSPIRE CE Any Other (specify)

3.10 Revenue generated through consultancy: Rs. 7.35 lakhs

Faculty (Chief Consultant)	Client Organization	Title of Consultancy of project	Amount received (Rs. In Lakhs)
Prof. B. F. Rodrigues, Dept. of Botany	Forest Dept. Govt. of Goa	Monitoring of afforestation works undertaken in CAMPA during the year 2014-15 by the Forest Dept.	2.63
Dr. Rahul Tripathi, Dept. of Political Science	KABBP, MOU	Survey of the Knowledge, Attitudes, Beliefs, Behaviour and Perceptions (KABBP) of Electors in Goa for the Assembly Election 2017	0.67
Dr. Savita Kerkar, Dept. of Biotechnology	DSTE	Evaluation of water samples of water profiles from different localities plating & estimating total coliforms	0.14
Dr. R. Nirmala, Dept. of Management Studies	UGC	Social Economics concern of changing economy in Goa	1.25
Dr. M.S. Dayanand, Dept. of Management Studies	GMR	Social Economics survey among the households of village panchayats around Mopa, Goa	5.29
Total			7.35

3.11 No. of conferences organized by the Institution

Level	International	National	State	University
Number	0	7	32	12
Sponsoring agencies		<ol style="list-style-type: none"> 1. ACM, Goa Chapter 2. DST, Govt. of India 3. Indian Academy of Sciences, Bangalore 4. Indian Council of Philosophical Research, New Delhi 5. Indian National Science Academy, New Delhi 6. National Academy of Sciences of India, Allahabad 7. Research scholars of Life Sciences & Marine Sciences 8. UGC-SAP 	<ol style="list-style-type: none"> 1. ACM, Goa Chapter 2. ACM, India 3. All India Konkani Parishad 4. BITS, Goa 5. CSI, Goa Chapter 6. Difficult Dialogues Inc., New Delhi 7. Extra Mural GU 8. Goa University (Extension Programme) 9. Goa University (Directorate of Extra Mural Studies and Extension Services) 10. MHRD, Govt. of India 11. National Commission for Women, New Delhi 12. Directorate of Archives and Archaeology, Govt. of Goa 13. Sahitya Akademi, New Delhi 14. SCERT, Goa 15. Self- financed (Participants charges) 16. TristãoBragança Cunha Charity Trust, Panaji 17. University Grants Commission 18. WIPRO, Bangalore 	<ol style="list-style-type: none"> 1. Association of Chemistry Teachers (ACT) of Goa 2. Chemistry Department Faculty and Alumni Association (CDFAA) 3. Goa University 4. Institute Menezes Braganza, Panaji 5. International Centre Goa, Dona Paula 6. National Mission For the Empowerment of Women, New Delhi 7. National Institute of Oceanography, Goa 8. Tokyo Chemical Industry 9. University Grants Commission

3.12 No. of faculty served as experts, chairpersons or resource persons: 44

3.13 No. of collaborations International: 6 National: 10 Any other: 0

3.14 No. of linkages created during this year: Nil

3.15 Total budget for research for current year in lakhs:

From Funding agency	Rs.192,74,200
From Management of University	
Total	Rs.192,74,200

3.16 No. of patents received this year

Type of Patent	Status	Number
National	Applied	0
	Granted	0
International	Applied	0
	Granted	0
Commercialized	Applied	0
	Granted	0

3.17 No. of research awards/ recognitions received by faculty and research fellows of the institute in the year

Total	International	National	State	University	District	College
1	1*	0	0	0	0	0

*Dr. Anuradha Wagle, Dept. of French and Francophone Studies

3.18 No. of faculty from the Institution who are Ph.D. Guides and students registered under them
Guides: **79** Students registered with them: **282**

3.19 No. of Ph.D. awarded by faculty from the Institution: **56** (at the last convocation)

3.20 No. of Research scholars receiving the Fellowships (Newly enrolled + existing ones)

JRF	14
SRF	18
Project Fellows	0
Any other	7
• INSPIRE (5)	
• GU RES FELLOWSHIP (1)	
• ICCR (1)	

3.21 No. of students Participated in NSS events:

University level	<u>NIL</u>	State level	<u>NIL</u>
National level	<u>NIL</u>	International level	<u>NIL</u>

3.22 No. of students participated in NCC events:

University level	<u>NIL</u>	State level	<u>NIL</u>
National level	<u>NIL</u>	International level	<u>NIL</u>

3.23 No. of Awards won in NSS:

University level	<u>NIL</u>	State level	<u>NIL</u>
National level	<u>NIL</u>	International level	<u>NIL</u>

3.24 No. of Awards won in NCC:

University level	<u>NIL</u>	State level	<u>NIL</u>
National level	<u>NIL</u>	International level	<u>NIL</u>

3.25 No. of Extension activities organized

University forum	5
College forum	0

NCC	0
NSS	0
Any other (Blood Donation)	1

3.26 Major Activities during the year in the sphere of extension activities and Institutional Social Responsibility

- Workshop on Home gardening and compositing (31 Aug 2016)
- All Goa Inter–Higher Secondary School Essay and Poster making Competitions (23 Sep 2016)
- Workshop on A close encounter with snakes (20 Oct 2016)
- Workshop on Bonsai (9 Mar 2017)
- Workshop on water conservation (Feb and 15 Mar 2017)
- Goa Through the Ages: Heritage Walks in Chandor and Loutolim program for the students of Government High School, Shelop–Khurd, Sattari and Azmane High School, Neura, Tiswadi (17 Mar 2017)
- Workshop on Gram Panchayat Development Plan-Veling Priol (25 Mar 2017)
- Public lectures by experts under Visiting Research Professors Programme (VRPP) in various areas of knowledge

The extension activities by the Extra Mural Studies Board were carried out both through University Departments and affiliated colleges

1. Extension Services carried out through University Departments:
 - a) The Department of Political Science organized a day long programme at Veling Panchayat with regards to participatory democracy.
 - b) The Department of History took the students of Government High School, Sattari, and Azmane High School, Neura, on heritage walks to Chandor and Loutolim, to give ninety –five rural students a glimpse of Goa through the Ages.
 - c) The Department of Earth Science conducted two programmes on Water harvesting and Conservation. The first programme was organized at Mount Mary’s Higher Secondary School. Chinchinim, which more than 120 students from the Arts, Science and Commerce streams and a couple of teachers of the school attended the same. The second programme was organized at Viscount High School, Pernem, for students of Class VIII and IX. In both the programmes, there was an interactive session on rain water harvesting and conservation followed by a demonstration of a working model of water harvesting. On this occasion posters related to the same were displayed.
2. Extension Services carried out through Affiliated Colleges:
 - a) Dnyanprasarak Mandal College of Commerce, conducted a one day workshop on Popularization of Science Education in Goa which was attended by seventy students from various Higher Secondary Schools and High Schools of Goa. On this occasion a talk cum demonstration by Ms Anupa Khorjuvear, J. E., GEDA was organized.
 - In the second session, Prof. E. De’Sa, spoke on “What next after the 12.th”, He also spoke on his research work “What is glass and how to understand it in a better way”.
 - In the third session participants were taken around to various science labs, which gave them an exposure to the various research facilities and instrumentation available in the college.
 - During the post lunch session Mr. Sagar Sakordekar, of SRS Academy, Ponda, spoke on “Enjoy Maths with Vedic Mathematics”.
 - In the last session the National Teachers Award recipient, Shri. Vijay Kumar Verekar, retired Asst. Headmaster spoke on “Learning basics concepts in Physics with household material”.
 - b) Carmel College for Women Nuvem, organized a sensitization program on Environment on 9th March for sixty, 8 th Std students of Mae dos Pobres School, Nuvem with Dr. Manoj Borkar and Shri. Jose Andrade as the resource persons
 - Staff members Aldina Gomes and Gladys D’Souza met and interacted with unwed mothers at Sister

Adores House in Pathiapur, Nuvem.

- On 20th March there was a full day First Aid course held in collaboration with the Red Cross Society
- From 20th-22nd March a nutrition course was conducted for thirty participants from Nuvem and surrounding areas as well as for college students.
- On 26th March Medical camp for Women was organised wherein test for diabetes, ENT, bone density, PAP smear were conducted for nearly fifty Women, with eight Doctors and Nurses in attendance
- c) Shri Mallikarjun College of Arts and Commerce conducted a free medical camp at Cola Village Panchayat, Canacona. A total number of 225 villagers took advantage of the camp which offered bone density test, diabetes detection, uric acid test, orthopaedic examination. Eighty one new cases were detected; Nineteen related to diabetes, fourteen to uric acid, Twelve to high blood pressure twenty to osteopenia and sixteen to osteoporosis.

Criterion – IV

4. Infrastructure and Learning Resources

4.1 Details of increase in infrastructure facilities:

Facilities	Existing		Newly Created		Source of Funding	Total	
	No.	Total Area (Sq. M)	No.	Total Area (Sq. M)		No.	Total Area (Sq. M)
Campus area	01	1630217m2	-	-	Goa Govt.	01	1630217m2
Class rooms	55	3477 m2	12	827 m2	Goa University + UGC + Goa Govt.	67	4304 m2
Laboratories	102	6542 m2	03	253 m2	Goa University + UGC + Goa Govt.	105	6795 m2
Seminar Halls	08	1988 m2	01	205 m2	Goa University + UGC + Goa Govt.	09	2193 m2

Facilities	Existing	Newly Created	Source of Funding	Total
No. of important equipment purchased (\geq 10 lakh) during the current year	NA	11	Please see Table below	11 (New)
Value of the equipment and furniture purchased during the year (Rs. in Lakhs)	NA	175.71+126.94	University funds +Project funds	Rs 302.65 Lakhs (New)

Expenditure incurred Rs. 10.00 Lakhs and above towards purchase of Equipment for the year 2016-17 (under Part-III)			
Sr. No.	Budget Head	Source of funding	Amount
1	A-3(82)(1)	DST-FIST (DST- New Delhi) (Dept. of Physics)	6931338.00
2	A-3(81)(1)	DST-Fist (DST- New Delhi) (Marine Sci.)	1633522.00
3	A-3(81)(1)	DST-FIST (DST- New Delhi) (Marine Sci.)	1094760.00

4	A-3(81)(1)	DST-FIST (DST- New Delhi) (Marine Sci.)	2124854.00
5	A-3(89)(1)	DST- New Delhi (Dr. P. Morajkar)	1593130.00
6	A-3(90)(1)	DST-FIST (DST- New Delhi) (Dept of Chemistry)	1436866.00
7	A-17(17)(1)	DBT New Delhi (Dept. of Zoology)	4054972.00
8	B-23(3)(1)	Rashtriya Uchchatar Shiksha Abhiyan (RUSA)	1760321.00
9	B-23(3)(1)	Rashtriya Uchchatar Shiksha Abhiyan (RUSA)	1872250.00
10	D-2(9)(1)	UGC, New Delhi (XII Plan-General Development Assistance Scheme)	1031801.00
11	D-2(9)(1)	UGC, New Delhi (XII Plan-General Development Assistance Scheme)	1129432.00
TOTAL			24663246.00

4.2 Computerization of administration and library

Select centralised UMS modules are being tested, the data is being added. The catalogue and circulation system of the library is already fully computerised

4.3 Library services:

	Existing		Newly added		Total	
	No.	Value	No.	Value	No.	Value
Text Books	163402	129,960,528	6094	1260642	169496	131,221,170
Reference Books	35257	NA	30	275868	35287	275868
e-Books	214	1100000	Nil	NA	214	1100000
Journals	232	6788977	11	279000	243	7067977
e-Journals	6	520952	Nil		6	520952
Digital Database	2	427139	Nil	NA	2	427139
CD & Video	3396		5		3401	
Others (specify)						

4.4 Technology up gradation (overall)

	Total Computers	Computer Labs	Internet services	Student (laptops)	Office	Departments	Others (computer centre)
Existing	790	36	1GB and 20Mbps	1500	NA	273	419

4.5 Computer, Internet access, training to teachers and students and any other programme for technology upgradation (Networking, e-Governance etc.)

The Goa University Management system (GUMS) has started function with some modules going live. These include the transport module and the leave module in beta mode.

4.6 Amount spent on maintenance in lakhs:

Item	Rs. in Lakhs
i) ICT	0.0
ii) Campus Infrastructure and facilities	239.14
iii) Equipment	25.21
iv) Others	920.17
Total	1184.52

Criterion – V

5. Student Support and Progression

5.1 Contribution of IQAC in enhancing awareness about Student Support Services

Updating website with relevant information.

5.2 Efforts made by the institution for tracking the progression

Data is being collected at IQAC on all parameters that indicates progression on different aspects. The UQAC routinely updates different administrative and academic heads on the progress of the University in research publications and other quality parameters.

5.3 (a) Total Number of students

UG (Integrated)	PG	Ph.D.	Others (M.Phil, Cert/Dip)
125	1888	282	11

	PG+ Integrated	PhD	Total
(b) No. of students outside the state	93	21	114
(c) No. of international students	24	0	24

	Number	Percentage
Men	78 (Integrated) + 589 (PG) + 113 (PhD)	34%
Women	48 (Integrated) + 1310 (PG) + 169 (PhD)	66%

	General	SC	ST	OBC	Physically Challenged	Total
Last year	1814	42	175	462	2	2495
This year	1857	40	160	457	6	2520

Demand ratio: 1.77:1.00 (975 Admitted; 751 Wait list)

Dropout%: 1-2% (approximately)

5.4 Details of student support mechanism for coaching for competitive examinations (If any)

- A Moodle page has been designed -for free online NET/SET coaching
<http://goalnet.unigoa.ac.in:8090/course/view.php?id=855>
- Training to M.Sc. & Ph.D. students for facing SET/NET Examinations (Zoology Dept.)

No. of students beneficiaries: **36**

5.5 No. of students qualified in these examinations

NET: 13	SET/SLET: 18	GATE: 5	CAT: 0
IAS/IPS etc: 0	State PSC: 0	UPSC: 0	Other: 0

5.6 Details of student counselling and career guidance

Continuous counselling & Career guidance; Display of notices on notice board; Personal discussion on interview techniques; Sending details of job vacancies by email; A MOODLE page- MARGDARSHAN- has been designed for Students

No. of students benefited: **227 students recruited**

5.7 Details of campus placement

On campus			Off campus
Number of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Students Placed
20	870	67	160

5.8 Details of gender sensitization programmes

- Gender Sensitization Programme by Internal Complaints Committee for the Prevention, Prohibition and Redressal of Sexual Harassment of Women at workplace organized on 1 March 2016. Over 244 PG and Ph.D. students, faculty, and administrative staff attended.
- Making Equality a Reality (MEAR 2016): Inter-Collegiate and Inter-Departmental festival of Competitions (8 Mar 2016)

5.9 Students Activities:

5.9.1 No. of students participated in

Level:	State/Univ	National	International
Sports and Games	76	123	0
cultural events	NA	NA	NA

5.9.2 No. of medals /awards won by students in

Level:	State/Univ	National	International
Sports and Games	2	2	0
cultural events	NA	NA	NA

5.10 Scholarships and Financial Support

	Number of	Amount (Rs. In
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	students	Lakhs)
Financial support from institution	1039	46.00
Financial support from government	361	73.11
Financial support from other sources (Dhempo Charity)	1	0.01
Number of students who received International/ National recognitions		-

5.11 Student organised / initiatives

Level	Fairs	Exhibitions
State/ University	1	NIL
National	NIL	NIL
International	NIL	NIL

5.12 No. of social initiatives undertaken by the students : 3

5.13 Major grievances of students (if any) redressed:

One Sexual Harassment Case reported – The Internal Complaints Committee has proceeded as per rules and the enquiry is on-going.

There were two grievance cases reported with regard to grades – The Controller of Examination office redressed them as per rules

Criterion – VI

6. Governance, Leadership and Management

6.1 State the Vision and Mission of the institution:

Vision: To meet the relevant and required tertiary level knowledge aspirations and associated employment needs of the State and to strive to attain global levels of excellence in teaching and research.

Mission: To effectively and efficiently impart fundamental, appropriate and socio-economically relevant knowledge at the tertiary level of education to those seeking depth of understanding and employment-driven technical competence in their chosen areas of study.

6.2 Does the Institution has a Management Information System

- After the series of deliberations with the MIS vendor the system is likely to be in place in 2017-18.

6.3 Quality improvement strategies adopted by the institution for each of the following:

6.3.1 Curriculum Development

Goa University follows a systematic multi-level process in the design, development and implementation of the Post-Graduate curriculum offered on the campus.

Level-1: Based on the curriculum model of UGC/ necessary inputs from other universities, feedback from alumni, parents and industry the individual Departmental Councils propose/suggest structure(s) of the program(s), details of courses, infrastructural and allied requirements.

Level-2: The Board of Studies (BOS) comprising of external experts and members of the Faculty from the teaching department concerned and affiliated colleges, reviews the program and courses and makes suitable recommendations for the approval of the Academic Council of the University for implementation.

Level-3: Finally, the Programs recommended are discussed and deliberated upon by the Academic Council which approves the course content for implementation preferably from the subsequent academic year. The same is placed on the University website for reference.

Level-4: Further every existing program goes through a review/revision based on the feedback from academic audit committee, students and employers.

6.3.2 Teaching and Learning

Following practices were offered in one or more programmes

- Blogposts
- Board games
- Class Seminars
- Comic strips
- Extensive use of LCD projector
- Field Placements in NGOs and Government Organizations
- Field Work
- Films, documentaries screening and music
- Flipped classroom pedagogy
- Games as a teaching/learning tool
- Group discussion/ activities
- Intercollegiate Competitions
- Linkage with Industry for student internship
- Mini-projects
- Online tests and online polls
- Paintings and sculpture
- Paper presentations at National and International conferences
- Photo stories for creative writing
- Power point presentation
- Problem based learning
- Process
- Remedial teaching
- Seminar presentation by students
- Sessions on cross-cultural awareness

- Theatrical activities
- Trimester to semester system
- Use of Duolingo (online learning platform)
- Use of LMS Moodle
- Visits to field and Research Institutes
- Whatsapp quizzes

6.3.3 Examination and Evaluation

Management studies programme: Changed to university-wide grading pattern

6.3.4 Research and Development

- Research in the areas of current interest by the faculty and Ph.D. students contribute to the knowledge at large. The outcome of this activity in the form of research publications has been highlighted in the section 3.4 Details on research publications
- Sponsored and consultancy research work is also carried out at the University. The year 2016-17 in recent past showed highest receipts of funds as indicated in sections 3.2 and 3.6 of this report
- Research publications and information about the PhD students as well as Sponsored research projects are shared over web for benefit of all those interested

6.3.5 Library, ICT and physical infrastructure / instrumentation

- A modern library with computer terminals for the students, automated housekeeping including circulation, campus wide access to e-resources make the library as essential infrastructure for the students and research community
- The Computer Centre of the University maintains the website besides providing support services to the ICT infrastructure of the organization including high-speed, state-of-the-art Internet connections
- All the faculty blocks and other buildings are interconnected with roads

6.3.6 Human Resource Management

- The two sections of the Administration provide support in managing the human resources
- The faculty are encouraged to attend programmes that benefit their professional competence
- Orientation programmes for the staff at the rank of assistant registrar in the administration was organized

6.3.7 Faculty and Staff recruitment

- The University follows UGC norms for recruitment to maintain quality
- In the event of shortfall of qualified staff University recruits temporary/contractual staff

6.3.8 Industry Interaction / Collaboration

- Continued interactions with industry help in placements and internship for the University students. The departments such as Management studies, Computer Science and Technology benefit at large for the placements

6.3.9 Admission of Students

- Online process of admissions has become a practice since past few years, that has brought transparency in the system
- While some departments offer admissions based on entrance tests, some programmes (MBA, MCA, and M.Sc. in Marine Biotechnology) are based on National level entrance tests

6.4 Welfare schemes for

Teaching staff	Medical Health Centre on campus, LTC
Non-teaching staff	Festival advances, LTC, Computer advance, Medical Health Centre on Campus, Consumer Credit Society, Cooperative Society
Students	Earn while you learn, GU Merit Scholarships, Transport, Hostel, Medical Health Centre on Campus

6.5 Total corpus fund generated: Rs.1.6 Lakhs

6.6 Whether annual financial audit has been done: Yes / No

6.7 Whether Academic and Administrative Audit (AAA) has been done?

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	No	Academic Audit Committee	No	Boards of Study
Administrative	Yes (Financial)	Chartered Accountants, Auditors	Yes	Finance Committee and Executive Council

6.8 Does the University/ Autonomous College declares results within 30 days?

For UG Programmes	Yes	No
For PG Programmes	Yes	No

6.9 What efforts are made by the University/ Autonomous College for Examination Reforms?

Management studies programme: Changed to university-wide grading pattern

6.10 What efforts are made by the University to promote autonomy in the affiliated/constituent colleges?

- The Ordinances necessary for grant of autonomy have been framed for colleges.
- Chowgule College functions as an autonomous institution from 2015-16.

6.11 Activities and support from the Alumni Association

Goa University Alumni Association in association with PES's Ravi S. Naik College of Arts and Science, Farmagudi Ponda organised a talk on "Flame Retardants- increasing pressure on the global environment" by Prof. Jacob de Boer director of IVM Amsterdam Netherlands and Professor In Environmental Chemistry And Toxicology on 20th December 2016 in Goa University

The Alumni Association in collaboration with International Office, Career Counseling and Placement Cell conducted an interactive information session on Higher Studies in the U.S. By Tanushka Bali, Senior Education USA Adviser at USIEF on September 15, 2017 in Goa University

6.12 Activities and support from the Parent–Teacher Association

- Parent-Teacher Association at the University does not exist
- Other associations that exist are: Goa University Teachers Association, Goa University, Non-Teaching Staff Association and Goa University Officer's Association that take matters pertaining to University upliftment and welfare

6.13 Development programmes for support staff

- Orientation programme for the staff at the rank of Assistant registrar in the administration was organized

6.14 Initiatives taken by the institution to make the campus eco-friendly

- Different activities were performed by different departments:
- Participated in Swachh Bharat Abhiyan and cleaned the area
- One Day Workshop on 'Biodiversity and Habitat Conservation' with Chaukul Grampanchayat and villagers, Chaukul English School, Chaukul, Forest Department, Amboli and Malabar Nature Conservation Club (MNCC), Amboli at Chaukul Grampanchayat
- Sessions on the theme of Eco-friendly living and Waste Recycling in Language classes through texts. In a comparative approach, participants were exposed to individuals and institutions active in environment protection and alternative lifestyles in India and in Europe. Members of the Department participated in an awareness session on Identification of fire hazards, Prevention and containment of accidental fires
- Beach Cleaning drive in August 2016
- Assistance to Tata Energy & Resources Institute (TERI), Goa in preparing the Biodiversity Registry of

Panaji, Goa

- Conducted workshops in Rural Areas for Environmental Awareness and Conservation of natural Resources
- Follow prescribed norms for storage, use and disposal of different chemicals. Heavy metal waste is collected separately and not washed down the drains. Organic solvents are recovered and reused.
- Planted new trees
- Encouraged students to maintain cleanliness in their surroundings

Criterion – VII

7. Innovations and Best Practices

7.1 Innovations introduced during this academic year which have created a positive impact on the functioning of the institution. Give details.

Innovative practices opted by one or more departments

- A slot is reserved in the regular time-table for an invited talk by academic/ industry personnel and or student presentations and group discussions
- Time table for conduct of ISA is displayed at the beginning of the semester
- Transparency in the evaluation is brought in by showing of answer scripts to students
- Students project implemented in Internet of Things (IoT) technologies
- Biosafety measures in the Laboratory
- Courses supplemented with several non-formal techniques
- Field trip to industry
- Drama syllabus was taught practically by actual performing on stage
- Flipped-classroom concept

7.2 Provide the Action Taken Report (ATR) based on the plan of action decided upon at the beginning of the year

The revised IQAC Statute to be implemented to conform to the NAAC guidelines	Implemented
Up-gradation of website and formulation of IT Policy of Goa University	Order to the vendor for upgradation has been placed, IT Policy in place
Student election reform process to be initiated	This has been implemented
Mechanism for transition of PhD students to uploading of thesis on repository to be simplified	Electronic copy of the thesis is delivered by the student directly to the librarian for obtaining 'no-dues'
PhD rules to be amended in order to comply with UGC's new notified regulations	The rules have been implemented
Explore campus planning with environmental safe-guards through appropriate bodies	Interaction with the vendor on solar energy initiated
Create infrastructure for document digitisation on campus	State-of-the Art face-up scanner acquired and operational

7.3 Give two Best Practices of the institution (*please see the format in the NAAC Self-study Manuals*)

- The Visiting Research Professors programme helps bring doyens to the state for students and interested

- residents of Goa to interact and learn from them at no fee basis
- Online Institutional repository of publications of the university is unique among the State Universities

7.4 Contribution to environmental awareness / protection

- Water harvesting and social forestry project in association with the Forest department

7.5 Whether environmental audit was conducted? Yes No

7.6 Any other relevant information the institution wishes to add. (for example SWOT Analysis)

NIL

8. Plans of institution for next year

- Recruitment of teaching and non-teaching staff on vacant positions
- UG Students Council elections to be democratized and conducted by colleges
- Initiate functionality of GUMS
- Website revision



Prof. Pranab Mukhopadhyay
Director, IQAC

Date: 21.6.2018



Prof. Varun Sahni
Vice Chancellor and Chairperson, IQAC

Date: 29.6.2018

Annexure 2.15

ACADEMIC CALENDAR 2016-2017 The arrangement for Academic Terms for M.A./M.Sc./M.Com./M.B.A. (FS)/M.C.A/M.Tech/B.Lib/M.Lib for the for the academic year 2016-17 shall be as follows: (on the campus)

Item	Duration	No. of Days
Term - I	06/06/2016 to 21/11/2016	
Teaching begins	15/06/2016	
Teaching ends	02/11/2016	90 days
Ganesh Chaturthi Break	07/09/2016 to 09/09/2016	03 days
Preparatory Break	03/11/2016 to 06/11/2016	04 days
Diwali Break	31/10/2016 to 01/11/2016	03 days
SEA – Sem. I/III/V & Repeat Exam & assessment	07/11/2016 to 21/11/2016	11 days
Term – II	22/11/2016 to 03/05/2017	
Teaching begins	22/11/2016	
Teaching ends	07/04/2017	90 days
Christmas Break	26/12/2016 to 30/12/2016	05 days
Preparatory Break	08/04/2017 to 11/04/2017	04 days
SEA – Sem. II/IV/VI & Repeat Exam & assessment	12/04/2017 to 27/04/2017	11 days
Summer Vacation	04/05/2017 to 05/06/2017	32 days
Reopening	06/06/2017	

NOTE: All breaks except the preparatory breaks are treated as vacation for the teachers.