Internal Quality Assurance Cell (IQAC) and Submission of Annual Quality Assurance Report (AQAR) 2017-18 of Ramrao Adik Institute of Technology (RAIT), Nerul Navi Mumbai

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

NAAC

VISION

To make quality the defining element of higher education in India through a combination of self and external quality evaluation, promotion and sustenance initiatives.

MISSION

- *To arrange for periodic assessment and accreditation of institutions of higher education or units thereof, or specific academic programmes or projects;*
- *To stimulate the academic environment for promotion of quality of teaching-learning and research in higher education institutions;*
- *To encourage self-evaluation, accountability, autonomy and innovations in higher education;*
- *To undertake quality-related research studies, consultancy and training programmes, and*
- *To collaborate with other stakeholders of higher education for quality evaluation, promotion and sustenance.*

Value Framework

To promote the following core values among the HEIs of the country:

- *Contributing to National Development*
- *Fostering Global Competencies among Students*
- *Inculcating a Value System among Students*
- *Promoting the Use of Technology*
- *Quest for Excellence*

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The Annual Quality Assurance Report (AQAR) of the IQAC

Part – A

AQAR for the year 2017-18

1. Details of the Institution

1.1 Name of the Institution	RAMRAO ADIK INSTITUTE OF TECHNOLOGY
1.2 Address Line 1	Dr.D Y Patil Vidyanagar
Address Line 2	Sector-7 NERUL
City/Town	NAVI MUMBAI
State	MAHARASHTRA
Pin Code	400706
Institution e-mail address	principal@rait.ac.in
Contact Nos.	022-27709505
Name of the Head of the Institution:	Dr. Ramesh Vasappanavara
Tel. No. with STD Code:	022-27709574
Mobile:	+91 9930776803

Name of the IQAC Co-ordinator: Dr. M. M. Singh Bhatia

Mobile: +91 9757218391

IQAC e-mail address: iqac.rait@rait.ac.in

1.3 **NAAC Track ID** *(For ex. MHCOGN 18879)* *MHCOGN 24630*

OR

1.4 **NAAC Executive Committee No. &Date:** EC(SC)/17/A&A/87.1 dated 16-09-16

1.5 Website address: http://www.rait.ac.in

Web-link of the AQAR: http://www.rait.ac.in/AQAR2017-18.doc

1.6Accreditation Details

Sl.No.	Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1	1st Cycle	A	3.09	2016	Sept 2016 – Sept 2021
2	2nd Cycle	-	-	-	-
3	3rd Cycle	-	-	-	-
4	4th Cycle	-	-	-	-

1.7Date of Establishment of IQAC: DD/MM/YYYY 05/04/2016

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

i. **AQAR 2016-17 submitted to NAAC on 06/06/2017**

1.9 Institutional Status

University ☐ State ☐ Central ☐ Deemed ☐ Private ☐

N/A

Affiliated College Yes ☑ No

Constituent College Yes ☐ No ☑

Autonomous college of UGC Yes ☐ No ☑

Regulatory Agency approved Institution Yes ☑ No ☐

AICTE approved Institute

Type of Institution Co-education ☑ Men ☐ Women ☐

Urban ☑ Rural ☐ Tribal ☐

Financial Status Grant-in-aid ☐ UGC 2(f) ☐ UGC 12B ☐

Grant-in-aid +Self Financing ☐ Totally Self-financing ☑

1.10Type of Faculty/Programme

Arts ☐ Science ☐ Commerce ☐ Law ☐ PEI (Phys Edu) ☐

TEI (Edu) ☐ Engineering ☑ Health Science ☐ Management ☐

Others(Specify)

1.11Name of the Affiliating University *(for the Colleges)* UNIVERSITY OF MUMBAI

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

Autonomy by State/Central Govt. / University

University with Potential for Excellence		UGC-CPE	
DST Star Scheme		UGC-CE	
UGC-Special Assistance Programme		DST-FIST	
UGC-Innovative PG programmes		UGC-COP Programmes	
Any other (*Specify*)	**NIRF 2018 RANK : 151 TO 200 BAND.** **NBA Accredition for Electronics branch & Electronics & Telecommunication branch.**		

2.IQAC Composition and Activities

2.1No. of Teachers	10
2.2No. of Administrative/Technical staff	1
2.3No. of students	1
2.4No. of Management representatives	1
2.5No. of Alumni	1
2. 6No. of any other stakeholder and community representatives	1
2.7 No. of Employers/ Industrialists	0
2.8 No. of other External Experts	2
2.9 Total No. of members	17
2.10No. of IQAC meetings held	10

2.11 No. of meetings with various stakeholders: No. 20 Faculty 04

Non-Teaching Staff Students 01 Alumni 05

Others (Parents, admin staff, management, students) 10

2.12Has IQAC received any funding from UGC during the year? Yes [ ] No [✓]

If yes, mention the amount -

2.13 Seminars and Conferences (only quality related)

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

Total Nos. 89 International 0 National 4 State 2 Institution Level 83

(ii) Themes

1. Faculty Development Program on " Machine Learning for Data Science and Analytics".
2. Workshop on "Application of Mathematics in Engineering And Real Life"
3. Workshop on "Product Specific Learning in Communication Engineering (PLCE-18)"
4. Workshop on "Level 2 Robotics".
5. Training on "PLC & SCADA" by SIEMENS.

Complete list given in Annexure v.

2.14 Significant Activities and contributions made by IQAC

- The IQAC continues to infuse quality improvement in all aspects of the functioning of our institution RAIT, Nerul. Representatives from students, faculty, nonteaching and supporting staff including administration and management take part in deliberations organized by IQAC to take notice, analyze and suggest changes that can positively impact the functioning of RAIT. This highly inclusive and distributive functioning style adopted by IQAC-RAIT makes its impact on all fronts where quality improvement scope is perceived and has a quicker response time.
- IQAC conducted 10 meetings in 2017-18. Through these meetings and an active online/manual feedback mechanism by all stakeholders, it dug out and implemented the activities that need to be introduced or strengthened.
- Through disbursement of the funds (Rs. 51 Lakhs for 2017-18) under IQAC to various departments. Teaching-learning activities received a boost in key areas identified for each of the five departments. 89 conferences/workshops/hands-on training programs were held at RAIT during 2017-18 with an expenditure of 17.10 Lakhs. 304 faculty members and students were deputed to attend workshops/conferences/UoM course syllabus setting, refresher/ orientation courses at an expense of 13.88 Lakhs. More than 50 major /minor interdisciplinary, College/ Industry Sponsored Projects were implemented as a part of an R&D activity,with a sanctioned Research fund of 34.825 lakhs.

- Students organized 3-day technical event, called “Technovate 2018”, at an expense of 5 Lakhs during 4-6 April 2018 ,in which 92 project teams participated in project competition, 165 papers were presented in NSCFET conference and 2 “Tech-talk” sessions on several cutting edge technologies were held. A noteworthy feature was active participation from neighbouring institutes. 25 awards were given in various categories in this event.
- Following the perspective plan 2012-17, IQAC conducted academic audits in odd and even semester 2017-18 in a digital format through DCF. This year we extended the scope of CO-PO attainment over internal evaluation by including university results also. This has made our evaluation process more inclusive thereby giving us a window to examine further improvement in T&L areas.
- The online feedback process has been integrated with DCF. The feedback analysis process is detailed in annexure.
- IQAC continued pre-requisite test conduction in each course at the beginning of semester to sensitize the faculty on the existing state of strengths/ weaknesses of students vis a vis the relevant prerequisites.
- IQAC also provided guidance/mentorship to faculty directly and indirectly through HODs concerned and DQAs of all departments.
- IQAC conducted environmental audit on 23rd Sept, 2017 and has suggested green measures. The results have been very encouraging on this front: Continuous uninterrupted operations of biogas facility resulting in running of gas burners in hospital canteen. A saving on LPG to the tune of 3 to 4 gas cylinders per month is the outcome. The solar project comprising of 1MW has been grid connected to MSEB and generating solar power that has resulted in savings to the tune of 5 Lakhs /month to the institute.
- Our latest air quality reports show a good index vis a vis neighbouring areas owing to our green campus with adequate tree plantation.
- Action taken report for academic year 2016-17 was reviewed by IQAC. The analysis of feedback received in academic year 2017-18 was analyzed and filtered to arrive at issues which can form an action plan was an important activity of IQAC followed these year too.

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 *

Sr. No.	Plan of Action	Achievements
1.	Recruitment of qualified staff to fill vacancies in each department.	Following IQAC guidelines in 2017-18, we recruited 41 Assistant Professors, 05 Associate Professors and 8 Professors.
2.	Promoting Teachers to do refresher/orientation courses/workshops/training programs.	For faculty development, as directed and funded by IQAC, 268 faculty members attended refresher/orientation courses/workshops/training programs fully funded by college R&D fund.
3.	Identification of weaknesses in	One of the IQAC planned measures adopted in 2017-18

	students and providing remedial measures.	was conduction of prerequisite tests in all the courses of each department. Also, through DCFs weak students were identified and up to 7 to 8 remedial classes were conducted per course in each semester.
4.	Student level organization of symposia/project competition/quiz.	Through widely advertised "Technovate 2018", a student organized workshop, a total of 165 papers published, 92 projects presented and 25 awards given for excellence. The expenditure incurred was approximately Rs. 5 Lakhs.
5.	Assistance to students by way of (i) Financial aid (ii) Classes for GATE/IES/CAT etc.	In 2017-18 as planned by IQAC, (i) Financial aid of Rs. 25.28 Lakhs was provided to students by institution in the form of scholarships and awards. (ii) GATE forums were organized for aspiring students
6.	Strengthening the Quality of Academics.	In 2017-18, (i) NPTEL Local Chapter was established. (ii) 89 expert talks/workshops/conferences conducted with funding from IQAC. (iii) 21 Industrial visits were organized for students.
7.	Monitoring and evaluating the teaching-learning activities	In 2017-18, DCF audits of each subject was conducted in every semester with comments and suggestions to improve under IQAC guidance through DQA of each department. The university exam results were also included to evaluate CO-PO attainment.
8.	Inculcating Research culture and motivating Teachers to complete PhD	As a result of IQAC initiative, 2 research scholars submitted their PhD thesis and 5 faculty members completed PhD.
9.	Guiding the students and staff to develop Social awareness through 'Social Wing' activities.	Major social wing activities in 2017-18: (i)Various festivals were celebrated with more than 230 underprivileged children like Christmas Celebrations, Diwali Celebrations, Holi Celebrations with Lunch, deserts and fun games . The motivation was to understand importance of the festival and to make sure they have fun. (ii)"Joyfest 2017" event was organized, various fun events based on jungle theme were organized which acted as fundraisers for the underprivileged children. RAIT Campus, Nerul. The Collection for fund was approximately 40,000/- (iii)A total number of 197 students attended and more than 400 saplings were planted in tree-plantation drive.

		(iv)"UDAAN-Let Dreams Fly 2018 marathon" was organized where all the money raised is donated towards the education of underprivileged kids, sponsoring their annual education expenses. Total amount of approximately ₹3.2 lakhs was raised and donated to World Vision India.
10.	Improving Quality of Student Projects and participation in various state/university/national level competitions.	233 students received awards this year in technical and cultural events.

Academic Calendar of the year attached in Annexure ix.

2.15Whether the AQAR was placed in statutory body Yes ☑ No ☐

Management ☑ Syndicate ☐ Any other body ☐

Provide the details of the action taken

1. Fund approval and disbursement of funds to departments are merit case to case basis. For academic year 2017-18 the fund to IQAC was 51 lakhs.
2. Academic audits of all Programmes with comments/suggestions for betterment under IQAC supervision was done in academic year 2017-18. The follow up of these suggestions was overseen by concerned HODs.
3. Surprise visits by Management and UoM LIC committees as well as AICTE to monitor the progress and quality analysis of programs being conducted at RAIT.
4. Preparation of AQAR in the prescribed format to show the activities mentioned above and their positive impact on the institution was done for the academic year 2017-18.
5. Analysis of feedback received from students and faculty and suggesting remedial measures for the same after approval from management. The feedback process is integrated with DCF and forms means to calculate PO attainment is done for academic year 2017-18.

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	03	01	-	-
PG	05	-	-	-
UG	05	-	-	-
PG Diploma	-	-	-	-
Advanced Diploma	-	-	-	-
Diploma	-	-	-	-
Certificate	-	-	06	02
Others	-	-	-	-
Total	13	01	06	02

Interdisciplinary	-	-	-	-
Innovative	-		-	-

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

CBCS/ Elective option

(ii) Pattern of programmes:

Pattern	Number of programmes
Semester	B.E. , M.E.
Trimester	-
Annual	Ph.D.

1.3 Feedback from stakeholders* Alumni ✓ Parents ✓ Employers ✓ Students ✓

(On all aspects)

Mode of feedback: Online ✓ Manual ✓ Co-operating schools (for PEI) ☐

An analysis of the feedback attached in the Annexure ii.

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

Yes. Choice based Credit & Grading System (CBCS) syllabus for UG and PG introduced

1.5 Any new Department/Centre introduced during the year. If yes, give details.

Research Centre in Electronics & Telecommunication sanctioned intake of 10. Increase in intake sanctioned for Computer Engineering Research centre. (10 to 20)

Criterion – II

2. Teaching, Learning and Evaluation

2.1 Total No. of permanent faculty

Total	Asst. Professors	Associate Professors	Professors	Others
297	220	44	33	-

2.2 No. of permanent faculty with Ph.D. 47

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
41	Nil	5	Nil	8	Nil	-	-	54	Nil

2.4 No. of Guest and Visiting faculty and Temporary faculty 17 | 9 | 0

2.5 Faculty participation in conferences, symposia (data from all dept)

No. of Faculty	International level	National level	State level
Attended		19	151
Presented papers	70	173	-
Resource Persons		3	9

Details attached in Annexure iii.

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

- GradeMe Software was introduced for online assessment of practical courses.
- Interactive teaching and learning methodology was adopted for academic year 2017-18 in more intensity in every classroom having podium, audio recording facility, projector, screen and internet facility for NPTEL and video sessions.
- NPTEL local chapter was established were more than 300 students and faculties enrolled for the various courses in NPTEL.
- 21 industrials visits were arranged for the students.
- Project based learning was introduced among students which resulted in achieving awards in various project competitions like 1st prize in Hackathon.
- Faculties continued to employ innovative teaching methodologies like quiz, role play, group discussion, puzzles, presentations by students, case studies etc. in 2017-18.
- IQAC has ensured that pre-requisite tests are conducted in each course at the beginning of semester to sensitize the faculty on the existing state of strengths/ weaknesses of students vis a vis the relevant prerequisites. In 2017-18 this was done for every course.
- Summer and winter internships were conducted for students in the institution to gain more practical knowledge and to get hands on experience on live projects/applications.

- German language course was conducted for faculties and students.
- LMS android app continues to be used in 2017-18 to ease the access of the technology by faculty and students.

2.7 Total No. of actual teaching days during this academic year: 198

2.8Examination/ Evaluation Reforms initiated by the Institution

In 2017-18, the following measures were adopted:
Coded answer sheets, double marks verification, Photocopy, Revaluation (Univ. initiated), Online MCQ for prerequisite test, internal question papers, assignments, laboratory experiments are designed to cover all course objectives.

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

Curriculum dev: 24	BOS Member: 02	UG Syllabus Setting: 35

Details given in Annexure iv.

2.10Average percentage of attendance of students: 75%

2.11 Course/Programme wise distribution of pass percentage**: 2016-17 (May 2017 B.E.)**

Branchwise and Sem wise

Title of the Programme	Total No. Of students appeared	CGPA				
		>=7.75 (%)	**7.74- 6.75 (%)**	**6.74 -5.75 (%)**	**< 5.75 (%)**	**Pass %**
IT	164	47.56	41.46	5.49	0.60	95.12
CE	215	38.14	40.46	12.56	0	91
IN	144	20.83	38.19	19.44	0	78.47
EL	209	29.67	44.98	8.61	0	83.25
ET	280	19.6	45	20.35	0	85

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

The quality assurance is ensured by creating QA mechanisms at three levels:

At institution level quality assurance is looked after by college level academic council and Quality Management Services comprising of Principal, Chief Mentor of Quality Assurance CMQA and other co-opted senior faculty members (IQAC for short) by conducting academic audit twice a year.

At the HOD level, Quality Assurance Team at RAIT (DQA-RAIT) sets assurance policy and ensures adherence by departments by conducting internal audit once in a semester.

At the teaching faculty and student level, Departmental Quality Assurance cells (DQAs) each department ensure implementation of processes prescribed and perform department level audit.

The cycle of changes required for enhancing quality in teaching and learning consists of a bottom up process that begins with the students who provide valuable feedback and this travels upwards all the way up to IQAC. The corrective action is conceived at the top and travels downwards and ends with the students feeling the impact of desired changes.

The QA system is structured enough to be interactive and participative and hence effective at all levels and yet flexible to enable it to adapt itself to changes if necessary which inevitably happens from time to time owing to say change in syllabi or as a result of developments in the concerned area of study. It also results in introduction of new areas of study that spring forth owing to rapid technology development by way of new courses.

2.13Initiatives undertaken towards faculty development

Faculty / Staff Development Programmes	*Number of faculty benefitted*
Refresher courses	12
UGC – Faculty Improvement Programme	-
HRD programs	-
Orientation programs	64
Faculty exchange program	-
Staff training conducted by the university	5
Staff training conducted by other institutions	19
Summer / Winter schools, Workshops, etc.	128
Others	-

2.14Details 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	135	Nil	-	-
Technical Staff	41	Nil	-	-

Criterion – III

3. Research, Consultancy and Extension

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

- In 2017-18, IQAC through concerned department coordinators ensured the participation of students and faculty for promotion of research aptitude and inculcation of research methodologies in their minds by organizing workshops / seminars on recent topics and also by encouraging and guiding them in presenting papers at seminars and conferences.
- Through disbursement of the funds (Rs. 51 Lakhs for 2017-18) under IQAC to various departments. Teaching-learning activities received a boost in key areas identified for each of the five departments. 89 conferences/workshops/hands-on training programs were held at RAIT during 2017-18 with an expenditure of 17.10 Lakhs. 304 faculty members and students were deputed to attend workshops/conferences/UoM course syllabus setting, refresher/ orientation courses at an expense of 13.88 Lakhs. More than 50 major /minor interdisciplinary, College/ Industry sponsored projects were done as a part of an R&D activity ,with a sanctioned Research fund of 34.825 lakhs.
- Workshops were conducted on current research topics for the benefit students and teachers for the knowledge enrichment.
- UG/PG Students were encouraged with funds for student projects as well as presentation of papers in seminars. A student organized workshop Technovate2018 of 3 days was held in which 92 projects presented, 165 paper presentations and 2 expert lectures of several cutting edge technologies and related issues was conducted at a cost of Rs. 5 Lakhs.
- An in-house research biannual journal titled “Communications in Engineering & Technology" was introduced for encouraging researchers and publications. The second edition is published and third edition is under preparation.

Details of workshops/training programs/seminars for 2017-18in Annexure v.

3.2 Details regarding major projects

	Completed	Ongoing	Sanctioned	Submitted
Number	4	5	09	9
Outlay in Rs. Lakhs	3.04	4.34	7.38	-

Details in Annexure vi.

3.3 Details regarding minor projects

	Completed	Ongoing	Sanctioned	Submitted
Number	40	2	42	42
Outlay in Rs. Lakhs	15.26	0.52	15.78	-

Details in Annexure vi.

3.4 Details on research publications

	International	National	Others
Peer Review Journals	34	1	-
Non-Peer Review Journals	-	-	-
e-Journals	8	-	-
Conference proceedings	90	180	-

Details of research publications in journals placed in Annexure vii and conference proceedings placed in Annexure iii.

3.5 Details on Impact factor of publications: (Maximum)

Range 0-6 Average 2 h-index 0-12 Nos. in SCOPUS 8

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

Nature of the Project	Duration Year	Name of the funding Agency	Total grant Sanctioned (Rs. in Lakhs)	Received (Rs. in Lakhs)
Major projects	1-2 years	RAES	7.38	7.38
Minor Projects	Upto 1 year	RAES	15.78	15.26
Interdisciplinary Projects	1 year	D.Y.Patil School of Physiotherapy	0.5	0.5
Industry sponsored	1-2 years	TeamOne EduVance, BARC, TIFR, MUMLAB, DVPM	3.04	3.04
Projects sponsored by the University/ College	1 - 2 years 1 - 4 years	UOM RAES	1.5 8.024	9.524
Students research projects *(other than compulsory by the University)*	1-2 years	RAES	3.277	3.277
Any other(Specify)	-	-	-	-
Total	-	-	38.981	38.481

3.7 No. of books published i) With ISBN No. 7 Chapters in Edited Books 7

ii) Without ISBN No. 4

3.8 No. of University Departments receiving funds from **N/A**

UGC-SAP ☐ CAS ☐ DST-FIST ☐

DPE ☐ DBT Scheme/funds ☐

3.9 For colleges Autonomy ☐ CPE ☐ DBT Star Scheme ☐

N/A INSPIRE ☐ CE ☐ Any Other (specify) ☐

3.10 Revenue generated through consultancy Rs.10.75 Lacs

Details in Annexure viii.

3.11No. of conferences /workshop/training programmes organized by the Institution

Level	International	National	State	University	College
Number		04		02	83
Sponsoring agencies					

Details of conferences organized in Annexure ix and workshops/training programs etc. in Annexure v.

3.12 No. of faculty served as experts, chairpersons or resource persons 78

Faculty served as experts for workshops	36
Faculty as resource person	28
Faculty served as chairperson (university paper setting)	14

3.13No. of collaborations International 17 National 15 Any other 4

3.14No. of linkages created during this year 23

Details of collaborations and linkages placed in Annexure x.

3.15Total budget for research for current year in lakhs :

From Funding agency 0.11 From Management of University/College 9.99

Total 10.105

3.16 No. of patents received this year

Type of Patent		Number
National	Applied	28
	Granted	
International	Applied	
	Granted	
Commercialised	Applied	
	Granted	

Details in Annexure xi.

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

Total	International	National	State	University	Dist	College
8		1	1	4		2

Details of research awards by faculty listed in Annexure xii.

3.18No. of faculty from the Institution who are Ph.D.Guides and students registered under them: 06 / 10

3.19 No. of Ph.D. awarded by faculty from the Institution: 4

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

JRF - SRF - Project Fellows - Any other -

3.21No. of students Participated in NSS events:

University level 500 State level 1100

National level - International level -

3.22No. of students participated in NCC events:

University level 08 State level 13

National level - International level -

3.23 No. of Awards won in NSS/social work:

University level - State level 2

National level - International level -

3.24 No. of Awards won in NCC:

University level	-	State level	2
National level		International level	

Details of NCC/NSS activities given in Annexure xiii.

3.25No. of Extension activities organized

University forum	4	College forum	8		
NCC	10	NSS	8	Any other	1

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

Social wing and NSS activities 2017-18

- Self-defense workshop and seminar: A workshop was organized to teach self-defense techniques to females on account of International Women's Week.
- Christmas, Diwali and Holi Celebrations 2017: Goal was to celebrate the festivals with the underprivileged children and to make sure they have a great time enjoying it.
- Kite Festival Celebrations 2017: To connect with the Indian tradition of Kite flying festival and fly kites with fellow students and socializing with them.
- Joyfest 2017: Various fun events were organized which acted as fundraisers for the underprivileged children. Approximately Rs. 40,000/- fund was raised.
- Tree Plantation Drive: The goal of this event was to motivate the students to plant saplings and do their bit towards nature.
- Udaan – Let Dreams Fly 2018: The goal was to organize a marathon where all the money raised is donated towards the education of underprivileged kids, sponsoring their annual education expenses. This event was a huge success and raised a fund of approximately ₹3.2 lakhs and was donated to World Vision India.

➢ Value education has been provided to RAIT students through enrichment courses on wellness, societal awareness. A regular yoga instructor has been appointed to conduct yoga classes for students, faculty and staff.

➢ Our "kalaraag" students took part in street plays to spread social awareness. Alternate energy projects information like Bio Gas from kitchen waste, solar panels was widely shared to enhance understanding ill effects of Green House emissions.

Criterion – IV
4.Infrastructure and Learning Resources

4.1 Details of increase in infrastructure facilities:

Facilities	Existing	Newly created	Source of Fund	Total
Campus area (sq.m)	40000		RAES	
Class rooms	52	1	RAES	53
Laboratories	63	2	RAES	65
Seminar Halls	4	0	RAES	4
No. of important equipments purchased (≥ 1-0 lakh) during the current year.	1358	49	RAES	1407
Value of the equipment purchased during the year (Rs. in Lakhs)	590.666	160.71394	RAES	751.37994
Others	-	-	-	-

Development in Infrastructure

- **Mobile Lockers**
- **Renovations of washrooms.**
- **Renovations & modernization of Workshop.**
- **Enlargement of departmental Library.**

4.2 Computerization of administration and library

In 2017-18, the following measures were continued.

- E-Kiosk on every floor with software to automate the RAIT office activities.
- Digital library and E-books, anti- plagiarism software Turnitin
- Library Management system software is developed for departmental library.
- SLIM21 software is being used in Central Library
- Accounting and finance software using Tally and college wide ERP
- Massive Open Online Courses (MOOCs) and National Digital Library were incorporated.
- Central library facilitated with internet, multimedia, printer and reprographic facilities.

4.3 Library services:

	Existing		Newly added		Total	
	No.	Value (Rs.)	No.	Value (Rs.)	No.	Value (Rs.)
Text Books: Central Library	40206	14814093	2803	1604623	43009	16418716

Reference Books: Central Library	2389	1270363	188	605761	2577	1876124
e-Books	29994	3099657	0	0	29994	3099657
Journals	91	200980	84	239685	84	239685
e-Journals	1029	2513602	1029	2513602	1166	3205096
Digital Database	NPTEL Videos	-	NPTEL Videos	-	NPTEL Videos	-
CD & Video	2196	-	198	-	2394	-
Others (newspapers)	11	22896	15 news papers	25205	14 news papers	25205
Desktops	28	1242284	-	-	28	1242284
Laptops	13	298830	-	-	13	298830
Printers	3	48125	-	-	3	48125
Kiosk	1	61105	-	-	1	61105
Reprography facility	1	165900	-	-	1	165900
Barcode Scanner	2	22050	2	9676	4	31726
Internet	-	135Mbps+ Wifi	-	1.13Gbps + Wifi	-	1.13Gbps + Wifi
Plagiarism Web Tool	Turnitin (Availabl e)	433917	Turnitin (Availa ble)	434818	Turnitin (Available)	434818
Institutional Membership	IIT Bombay	30000	IIT Bombay	30000	IIT Bombay	30000

4.4 Technology up gradation

	Total Computers (Laptops+ desktops)	Computer Labs	Internet	Browsing Centres	Computer Centres	(No. Of computers)		
						Office	Depart-ments (desktops +laptops)	Others (Alumni, exam, lib, e-kiosks)

Existing	1361	34	135Mbps+ Wifi	6	6	20	1023+258	60
Added	159	-		-	-	2	91+58	13
Total	1520	34	1.13Gbps + Wifi	6	6	22	1114+316	73

Details of no.of computers given in Annexure xv.

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

In 2017-18, following initiatives undertaken for technology upgradation:

- Laptops for all faculty members, Wi-Fi routers of 1.13 GBPS in all laboratories and on each floor.
- FDP on " Machine Learning for Data Science and Analytics".
- Advance excel & Microsoft office training for administrative staff.
- Summer and Winter Internships were conducted.
- Oracle training up gradation.
- Procurement of Nanosniff Sensimer.
- Procurement of GPU workstation.

-

4.6 Amount spent on maintenance in lakhs :

i) ICT	3,41,504
ii)Campus Infrastructure and facilities	20,59,717
iii) Equipments	22,29995
iv) Others	231533
Total :	48,62749

Criterion – V
5. Student Support and Progression

5.1 Contribution of IQAC in enhancing awareness about Student Support Services

In 2017-18, IQAC enhanced awareness about Student Support Services among all stakeholders through:

- Digital notice boards displaying
  1) Discipline Anti ragging Committee members with contact details
  2) Women Grievance Redressal Cell Committee members with contact details
  3) Freeships/Scholarships: Alumni scholarship and Siksha sahakar scheme notices/reminders
  4) Medical Assistance to Students: health centre, health insurance
  5) Project Competitions and various extracurricular activities: Technovate 2018, Horizon 2018, Stamina 2018 etc.
  6) Chairman's address for industry level projects, internships in March, 2017.
  7) Technical and non technical committees like ISA, SUC, RAIT Sports, Social Wing, CSI, IEEE, ITSA, ISTE, IETE, MOTIF, Photo circle, Quiz Master, Radio Club, Yoga club
  8) Support for students with physical disabilities: Sitting arrangement for examinees, facility like ramp, lifts, wheelchair etc.
- e-Kiosks displaying facilities for
  1) Bonafide certificate
  2) Railway concession forms
  3) Online Fee payment
  4) University results
  5) Transfer and Migration Certificate
  6) Transcript Certificate
- Manual display boards (department wise) displaying
  1) Time tables
  2) Coaching for GATE: GATE forums
  3) Industrial visits to various well known industries, research centres etc.:
  4) Support for slow learners: Remedial lectures, additional practical hours, frequent tests.
  5) Summer and winter internships are conducted for students in the institution to gain more practical knowledge and to get hands on experience on live projects/applications.
  6) German language course was conducted for faculties and students.
  7) LMS android app continues to be used in 2017-18 to ease the access of the technology by faculty and students.
- Funding of Rs. 251800/- was provided to students and Faculty members for filing patents and copyrights.

5.2 Efforts made by the institution for tracking the progression

- For tracking students' progression within the UG program, following initiatives were undertaken in 2017-18:
  - **Digital Course File (DCF):** All academic records were digitally maintained in this file which kept record of all the students as attendance, test marks, assignment marks, journal grades and this all data was mapped with subjects CO-PO'S which automatically generated students IA and term work marks and also indicated final attainment of CO-POs. Feedback process has now been integrated with DCF and has formed means to calculate PO attainment.
    DCF details given in Annexure xvi.
  - IQAC also induced the introduction of **pre-requisite tests** in each course at the beginning of semester to sensitize the faculty on the existing state of strengths/ weaknesses of students.
  - **Special support for students who are at risk of failure:** The departments appointed class counselor for every batch who identified weak students based on regular tests. Wherever necessary, parents were invited to take part in the counseling. Remedial classes, extra-hour classes, frequent tests were arranged on regular basis for such week student.
- For tracking students' progression beyond UG program, following initiatives were undertaken in 2017-18:

  Support for progression to higher education and employment: At RAIT we have active Career Counselling and Placement Cell which organized Placement drives, Lectures on Career opportunities, Special aptitude, soft skill and technical skill workshops. RAIT also organized the lectures of eminent scientists/ personalities/ counsellors on careers after graduation/post-graduation in various fields. Special training sessions were also organized for GATE preparation.
  Details of training programs organized by placement cell provided in annexure xvii.
- Alumni database creation and contact via email has helped in tracking student progression.
- **Unnati-** Model to improve first year progress to ensure progress of weak students based on performance in internal tests was introduced. The positive impact of this innovation was clearly visible and was appreciated by many visiting academic evaluators.

5.3 (a) Total Number of students:

UG	PG	Ph. D.	Others
4178	51	21	-

(b) No. of students outside the state: 56

(c) No. of international students: Nil

Men

No	%
2719	65.13

Women

No	%
1459	34.9

Last Year						This Year					
General	SC	ST	OBC	Physically Challenged	Total	General	SC	ST	OBC	Physically Challenged	Total
2272	484	49	761	1	3567	2137	531	50	913	0	3631

Demand ratio (0.9) Dropout (Result awaited)

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

- 2017-18 saw this institution having key focus in motivating students for higher studies or research career. Placement cell regularly organized career counseling sessions. Information about career scope in various industries like IT, Embedded, VLSI was given.
- Orientation on various options for higher education and studying abroad was provided. Many students from this institution had gone for higher studies abroad or working as research scientists in premier research institutes like BARC, ISRO etc.
- GATE forums were arranged for students opting for higher studies. Mock tests were also arranged for competitive examinations like CAT, GRE etc. This has resulted into many success stories.
- Soft skill development classes were arranged for the students to enhance their communication skill, logical, numerical ability and problem solving skills. Support of Language Lab was taken to improve spoken English skills.

Details of training programs organized by placement cell provided in annexure xvii.

5.5 No. of students qualified in these examinations

NET	-	SET/SLET	-	GATE	12	CAT	03
IAS/IPS etc	-	State PSC	-	UPSC	-	Others	29

5.6 Details of student counselling and career guidance

- **Academic Counselling:**
  - In 2017-18, the institute provided regular counselling to the students to address issues relating to their academic shortfall and obstacles. Institute had constituted a dedicated team of Faculty to counsel the students academically. One class counselor was assigned to every class. One mentor is assigned to each batch.
  - Class counsellors looked after their academic requirements, Attendance and made arrangements for remedial and tutorial classes.
  - Class counsellors also arranged regular meeting with students to get various suggestions from students. Students could freely express their view, Suggest improvement, demand for any additional facility required.
  - After discussing with HODs, class counsellors tried to implement suggestions.
  - Parents were provided opportunity to meet the department teachers, HODs, and Principal to ascertain the progress of their wards. They were regularly informed about the progress twice a semester.

- **Personal Counselling:**
  - In 2017-18, our dedicated team of class counsellors took personal care for low performing or irregular students. Interaction with such students was done at one-to-one level. The students were encouraged to share their personal problem and a friendly environment was provided to make them comfortable to share their personal problems. The mentors maintained secrecy of any personal information and took necessary corrective steps in consultation with senior faculty members, and if required, parents were informed.
  - Well being courses conducted in 2017-18: Yoga classes conducted on daily basis, also self defence workshop was arranged on 23rd March, 2018 to teach self-defence techniques to females on account of International Women's Week.
- **Career Counselling:**
  - In 2017-18, Training and Placement Cell at RAIT was primarily involved in Career Guidance. All the students were provided with intense and multidimensional career guidance throughout the course duration. Online assessment tests were conducted for the students so that they can analyse their strengths and weaknesses.
- **In 2017-18, the placement cell was involved in:**
  - Organizing in-plant training programs for hands-on experience
  - Organizing programs to enhance soft-skills
  - Career counselling for pursuing higher studies in India and abroad
  - Conducting entrepreneurship development programs to motivate aspiring students

Details of training programs organized by Placement cell provided in annexure xvii and counseling photos provided in Annexure xviii.

No. of students benefitted | 1128 |

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
23 *	614	568*	In process

5.8 Details of gender sensitization programmes

In 2017-18, we adopted following initiatives:

- **Anti-ragging sqad:** As per UGC norms and regulation 2009, the Institute followed a strict anti-ragging policy and has a fully functional committee in place. The committee comprises of the Principal, the Registrar, the various Heads of Departments, the Parents Representative, a Representative from the Police force, a Sr. Student Representative and a Fresher Representative. This committee played a vigilant and a proactive role to prevent any ragging incident in the institution.
- **Women Grievance Redressal Cell:** Women's Grievance Redressal Committee comprising of senior faculty members who addressed problems faced by girl students and counseled them in the institution. Objective of cell was to combat violence against women employees and students, sexual harassment and gender discrimination. Cell took necessary steps to ensure the incidents pertaining to sexual harassment if require the intervention of the law or not.
- **Women Development Cell:** Self defence workshop and seminar arranged for all women of RAIT on 23rd March, 2018.
- Institute level "**Vishakha**" committee has been formed and a seminar was delivered by Dr. Leena Ragha on the topic 'Awareness about Sexual Harassment' on 23rd Feb, 2018.

Photos of self defence workshop provided in Annexure xix.

5.9 Students Activities

5.9.1 No. of students participated in Sports, Games and other events

State/ University level	25	National level	60	International level	01

No. of students participated in cultural events

State/ University level	54	National level	-	International level	-

5.9.2 No. of medals /awards won by students in Sports, Games and other events

Sports: State/ University level	25	National level	15	International level	01
Cultural: State/ University level	44	National level		International level	-

Details of sports and cultural activities of students listed in Annexure xx.

5.10 Scholarships and Financial Support

	Number of students	Amount in Lacs (Rs.)
Financial support from institution	90	15.27
Financial support from government	2001	1739.54
Financial support from other sources	03	2.01
Number of students who received International/ National recognitions	-	-

5.11 Student organised / initiatives

Fairs : State/ University level	12	National level	2	International level	-
Exhibition: State/ University level	2	National level	2	International level	-

5.12No. of social initiatives undertaken by the students 9

Details of social activities by students depicted in Annexure xiii.

5.13 Major grievances of students (if any) redressed:
_____Nil_____

Criterion – VI

6. Governance, Leadership and Management

6.1 State the Vision and Mission of the institution

Vision

To foster and permeate higher and quality education with value added engineering, technology programs, providing all facilities in terms of technology and platforms for all round development with societal awareness and nurture the youth with international competencies and exemplary level of employability even under highly competitive environment so that they are innovative adaptable and capable of handling problems faced by our country and world at large.

Mission

The institution is committed to mobilize the resources and equip the institution with men and materials of excellence. To ensure that the institute becomes pivotal center of service to industry and academia and society, with the latest technology and student forums of technology enhancing technical societies, cultural platforms, sports excellence centers and Entrepreneurial Development Center. To develop the institute to become an autonomous institution and deemed university at the earliest with facilities for advanced research and development programs on par with international standard. To invite international and reputed national institutions and universities to collaborate with our institute on the issues of common interest of teaching and learning sophistication.

6.2 Does the Institution has a management Information System

Yes. We have online information system starting from student feedback, Faculty feedback , HOD's comments which is then summarised in end semester reports (again on-line). These reports reach the co-ordinator IQAC where they are analysed for strengths and weaknesses and appropriate remarks/suggestions are given and with these it is passed on to Principal, RAIT. Principal then adds his observations/remarks/suggestions and other inputs as he deems fit and passes it back to IQAC for transfer to HODs who then act on the suggestions and provide the Action Taken Report. This entire report is shared by Principal with the Governing Council/Management.

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

6.3.1 Curriculum Development

- **Curriculum development is under purview of UoM**. In 2017-18, the choice based grading system has been introduced for UG and PG degrees by UoM. A concerted effort has been made to enhance interaction between BOS and the institute resulting in increased participation in syllabus setting and curriculum development and orientation program. *Details of Contribution of RAIT faculty in curriculum development is listed in Annexure iv.*
- In 2017-18, we adopted the strategy of adding or modifying some COs for better COs and POs mapping and attainment. Objectives and Program outcome mapping by indirect measurement was also introduced.
- RAIT faculty, in consultation with experts from IITs and industry as set up by Dean FOT, Chairman, BOS, has been actively contributing in the introduction of new courses, revision of syllabi, and design of scheme of evaluation for UoM. The faculty played an important role in conducting orientation programmes along with the Chairman, BOS. RAIT faculty assists Chairman, BOS in preparing the Question Paper bank.
- Enhanced support provided by industry for departmental advisory committees, project competitions, faculty exchange programs by TCS and Reliance Jio were arranged.

6.3.2 Teaching and Learning

In 2017-18, following initiatives were undertaken to enhance T&L:

- Training programs, workshops and expert talks have been conducted for upgrading technical skills. Implementation of outcome based teaching and learning methodology has been incorporated.
- Continuous assessment of student performance has been achieved through tests prerequisite test, assignments, seminars and projects.
- Learning with Multi-media has been made possible through the following:
  - Availability of course material on LMS.
  - Digital library facility.
  - Availability of video, NPTEL lectures.
  - NPTEL Local Chapter was introduced.
  - LCD projectors for presentation.
  - Cybernetics with audio recording facility
  - 100% faculty issued with laptops for carrying out research & teaching methods
  - Auto grader (Embedded system) GradeMe
  - Originality check of research work using Turnitin
  - Procurement New library books
  - High end (GPU) laptops, remote access to GPU workstation at GCOE, IITB.
- Unnati- Model to improve first year improvement program to ensure the progress of weak students based on performance in internal test.
- 25 patents and 03 copyrights are filed.

6.3.3 Examination and Evaluation

Evaluation Scheme

In 2017-18 we followed the syllabus published by UoM. It allocated 3 to 4 lectures per week of 60 minutes each and provided evaluation scheme for all subjects. A sample data sheet issued by UoM is as follows:

As per guidelines issued by University of Mumbai for Evaluation System of each individual subject varied somewhat in the pattern but the categorization was same the guidelines are given below:

- ***Prerequisite Test:*** Prerequisite test was conducted for every course at the beginning of semester in the form of MCQs indicating the existing state of strengths/ weaknesses of students.
- ***Internal Assessment (IA):*** Two tests were conducted which should cover at least 80% of syllabus. The average marks of both the tests will be considered for final Internal Assessment.
- ***End Semester Examination:*** Question paper comprises of 6 questions, each carrying 20 marks. The students need to solve total 4 questions. Question No.1 will be compulsory and based on entire syllabus. Remaining question (Q.2 to Q.6) will be selected from all the modules.
- ***Term Work/ Tutorial:*** At least 03 assignments covering entire syllabus were given during the class wise tutorial. The assignments were students centric and an attempt should be made to make assignments more meaningful, interesting and innovative. Term work assessment was based on the overall performance of the student with every assignment graded from time to time. The grades were converted to marks as per credit and grading system manual and added and averaged.
- ***Practicals:*** At least 10 experiments covering entire syllabus were set to have well predefined inference and conclusion. Computation/simulation based experiments were

6.3.4 Research and Development

In 2017-18, following strategies adopted to enhance R&D culture in the institute:

- **Training programs** have been arranged for the purpose of motivation for R&D activities.
- **In-house projects** have been carried out for administrative activities for enhancing consultancy projects.
- The R&D committee is involved in administrating research projects sponsored by various government and non-government funding agencies such as UGC, BARC, AICTE, UoM, DST, etc., and promotion of **collaborative research** partnerships for undertaking creative and advanced research.
- Minor projects approval from UoM

The details of training program and projects listed in Annexure v and vi respectively.

6.3.5 Library, ICT and physical infrastructure / instrumentation

In 2017-18,

- All classrooms have been upgraded with good acoustics and ICT facilities at a cost of 2.20 Lakhs per classroom.
- All departmental libraries were enlarged.
- Additional seating arrangement for staff in all departments.
- Mobile lockers are made for the students to keep their mobile phones during examinations on each floor.
- Renovations of washrooms.
- Workshop renovation and modernization is done.
- Upgraded solar panel capacity to 1 MW.
- Internet speed was upgraded to 1.13Gbps.

6.3.6 Human Resource Management

The institute followed the following strategy for HR management in 2017-18:

- Employees were given utmost importance and their needs are well recognized.
- **Service rules are transparent** and the staff got benefits such as provident fund, gratuity, etc.
- The faculty members and staff were entitled to other **benefits like casual leave**, maternity leave, medical leave, earned leave and vacation according to rules laid down in the statutes of UoM.
- The institute **arranged training programmes** and also deputed the staff to other organizations for attending such programmes for acquiring technical skills, teaching skills, and soft skills.
- The institute had also arranged **financial planning lectures** for staff, to assist them for effective planning of their finances.
- The institute had a well-defined and effective selection procedure, systematic **performance appraisal system** and promotion policies. Details of internal promotions in the academic year 2017-18:

Sr. No.	Post	No. of Promotions
1	Associate Professor	8
2	Professor	7

- **LIC group insurance policy:** The group insurance policy scheme for the Faculty and staff member has been initiated in the institute. The policy is term policy meaning the insurer will be covered for the sum assured agreed only on natural or accidental death. Total 216 faculties and staff have adopted for the scheme and total premium per year is Rs.326538/-
- Advance excel & Microsoft office program arranged for administrative staff.

- List of skill upgradation courses conducted in 2017-18:

Sr. No.	Course	Duration	No. of participants
1.	TIME- Aptitude, Quantitative, Data Interpretation, Verbal	12 days (8 Batches)	720
2.	Roy Eddington & Charles – Soft Skills, Personality Development, Communication, Interpretation Skills, Reading & Writing Skills, Mock Interviews.	12 days (8 Batches)	720
3.	Microsoft Long Term Training Program.(IOT & JAVA)	11 days	120
4.	Summer & Winter Internship	21 day	120

6.3.7 Faculty and Staff recruitment:

In 2017-18, RAIT continued to follow the recruitment policy laid down by IQAC. The details along with recruitment carried out in 2017-18 are:
RAIT believes in selecting inspiring teachers who motivate students by innovative thinking and practical examples in their approaches. RAIT follows UoM and AICTE rules for selecting its faculty. The underlying principle is to maintain or better the student teacher ratio set as prescribed by the AICTE and NBA authorities.

- The requirement of faculty is prepared by HODs based on analysis of the need carried out by survey and a consolidated list of requirement is forwarded to Principal. Accordingly strategies are adopted by RAIT for the recruitment of new faculty.
- Prior to the beginning of the academic year the roster is prepared and sent to UoM for approval and an advertisement is released.
- If the requirement arises in between and there is not sufficient time available for following university process, ad-hoc appointments are carried out by RAIT through local boards to meet the urgent academic loads.
- Faculty members recruited through local boards were ratified by university authorities as and when the regular board is formulated by UoM.
- The local selection board consists of Professors and HODs and one external professor from outside the institute. For university ratification, board comprises of a member nominated by UoM.

Recruited faculty details for 2017-18 given in Annexure xxi.

6.3.8 Industry Interaction/ Collabration

- In 2017-18, the institute had intense institute-industry interactions. **Industrial training** for the students as well as faculty was promoted. In this academic year also**, industrial visits** were arranged for faculty and students. Both UG and PG students are motivated to undertake their final year project in the relevant industries of their domain, thus exposing and preparing them to meet the real time requirement of the industry.
- **MOUs**: RAIT has entered in to R&D collaborations with Indian Institute of Technology Mumbai and leading research based industry called Gauranga SoftTech, Navi Mumbai for mutually beneficial research and development efforts.
- **MOUs of Cypress, TCS, Microsoft was renewed in 2017-18.**
- **Industry collaborations in 2017-18:** TCS, Barclays, Microsoft, Oracle Workforce Development Program, Internshala, NMMC for solid waste management, COE in IoT establishment with Cypress Semiconductor USA.

6.3.9 Admission of Students

In 2017-18 we continued to follow the admission process governed by MS-DTE. The details are as follows:

- **Director of Technical Education, Maharashtra State (MS-DTE)** governs the admission to all the branches. The institute has its own admission cell to provide information regarding the admission procedure to parents and candidates. The Institute follows the reservation quota rules as per the norms for the students in the reserved category and there is 100% transparency in the procedure. For admission in 20% management seats, there is a central admission cell and admission is based on eligibility Criterion set by DTE. All applications received at the institute level are processed and filled on merit basis. DTE also publishes database of available seats in the institute.
- The institute prospectus provides all the academic, administrative and fee structure information related to admission process. The notification contains detailed information about number of seats, different courses, eligibility for admission, process of admission and academic information on the institutional website. The referral of alumnus also helps in admission procedure. A digital display at the entrance of the college, and on all the floors is used for displaying the total number of seats in each department. All notice boards are also used to display the notification and details of admission procedures. The institute also provides extensive counseling by Principal, Registrar and HODs for prospective students.

6.4 Welfare schemes for

Teaching	√
Non teaching	√
Students	√

Welfare schemes for students:

➢ Following schemes were operative in 2017-18:

- Economical weaker students are provided concession in academic fees and opportunity to work in campus under Shiksha Sahakar Scheme.
- Institute ensures the financial assistance to the meritorious students in the form of Scholarships and other tuition fees waivers. The Institute educational fund is used exclusively for supporting the students. Ramrao Adik Institute of Technology has given exemptions in tuition fee, and Scholarship for merit students.
- The needy students are provided facility to pay tuition fees in instalments.
- There is provision of free Text Book supply facility offered in the library for SC and ST category students. On need, this facility is extended to students of economically weaker sections too.
- The students are funded for taking part in professional and project work competitions and professional societies.
- Accidental and life cover is provided to all students free of charge by RAIT.
- Various types of Counselling and guidance are provided to students.
- Insurance is provided to every student.
- Performance based awards for students from Management and industries every year.

Welfare schemes for Teaching and Non Teaching:

Some of the welfare schemes made available for teaching and non-teaching staff in 2017-18 are listed below:

- **Healthcare facility for teaching and non-teaching staff at concessional rates at D Y Patil Hospital, Nerul:** All the faculty and non-teaching staff are entitled to use medical facility at the concessional rates; the concession of 15% is given to all employee of RAIT. In addition, depending on complexity of case and repayment capacity of staff member, additional concessions are provided by the hospital management. Percentage of faculty utilizing this is 100%.
- **Maternity Leave:** The institute has a liberal leave policy for post maternal leave. Maternity leave is granted to all women faculty which can be up to maximum of three months. All eligible faculty members have been granted these privileges, incidentally 3% of Women faculty have availed this facility for last 4 years, post maternity leave depending on the need and emergency additional leave also granted to women faculty; nearly 2% of faculty has availed this facility.
- **Medical Leave/Casual Leave/Compensatory-Off facility:** 100% of faculty avails this facility.
- **Yearly 70 days vacation for teaching staff and 30 days of EL for non-vacation staff:** 100% of faculty avails above facility.
- **On-duty leave facility whenever faculty and staff travel on duty:** Nearly 80% of faculty enjoys on-duty leave facility.
- **Provident Fund as per rules:** Available for all faculty.
- Gratuity on attainment of superannuation for teaching and non-teaching staff is available for all eligible staff.
- **Incentives for publishing in high grade journals and books:** On an average 5% of the faculty receives grants, incentives under this scheme.
- **Travelling allowance and registration charges for attending conferences:** Around 90% of faculty avails this facility each year.
- **Additional increments/allowances after obtaining higher qualifications such as ME/MTech/MPhil/PhD:** On obtaining ME/MTech/MPhil qualifications, faculty is promoted as Assistant Professor in Sixth Pay. Under this scheme 75% of faculty has been given Sixth Pay scale. For faculty obtaining PhD, additional increments/promotion to next grade are awarded. Under this scheme 5% of the faculty has benefitted by this facility.
- Cooperative Society Membership for faculty and staff.
- Welfare LIC scheme was continued for the staff members.

6.5 Total corpus fund generated | 3Cr |

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	Yes	IQAC	Yes	IQAC-RAIT
Administrative	Yes	IQAC	Yes	IQAC-RAIT

6.8 Does the University/ Autonomous College declare 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?

University Evaluation Reforms:

- The institute conducts all examination as per university schedule at its campus. To conduct examination, the institute has well equipped infrastructure. The examination conduction is effectively monitored to follow guidelines of the university.
- In 2017-18, the institute continued to take following measures for the effective implementation of the evaluation reforms introduced by the university:
  - **The institute had examination coordinators** from each department for smooth conduction of the examination.
  - The **examination committee** met periodically to discuss all the examination related matters.
  - At institute level, **mid-term tests were conducted** as per university norms and results of the same are declared within eight days. The students can see their evaluated answer sheets and discuss the same with concerned faculty for clarification regarding the parameters taken into consideration for assessments.
  - Oral and practical marks were jointly evaluated by internal and external examiners.
  - For smooth conduction of university theory examination, an **internal squad** comprising of senior faculty members was appointed. Appropriate measures provided by UoM were taken into action time to time.

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

- There is a provision by the affiliating university to grant the autonomy according to the status of the institution. RAIT is planning to apply for the autonomy status as per clause 12(b) of the UGC Act (3).
- 2nd and 3rd year evaluation has been carried out in 2017-18 by the college as per decentralized evaluation scheme promulgated by university.

6.11 Activities and support from the Alumni Association.

- The institute has a registered **RAA** intended to strengthen the stakeholder relationship, participate in decision making process and to foster the institute level developmental activities. RAA also assists in placement activities as well as quality improvement of both the students and the faculty members by concreting the industry-academia partnership.

RAIT Alumni Association activities and progress for the year 2017-2018:

- Increase in RAA registered Membership to 8,500+ from the previous 1650+ members.
- A Panel discussion named "Idea- the start-up code Season 2 " was held on 4th October 2017 by RAIT Alumni Association in collaboration with Motif.
  The panelists invited for the event were:
  - Ajay Parthasarathy: RAIT Alumnus, founder of Tortilla Studios,
  - Nazim Sawant: Co - founder of IEC, India Entrepreneurship Club,
  - Deepika Singh: Cloud Partner of Google and founder of AppAve,
  - Sachin Sethia: Managing Director of Glazel Tech, Simon Philips: CEO Glazel Tech

The discussion gave students an insight into the world of entrepreneurship. It comprised of FAQs and doubts that were articulately answered by the panellists

- The RAA news letter is published every month on the Alumni Website.
- Organized RAIT Alumni Meet 2018 on 24th March 2018 at RAIT.
- Re-launched RAMP (RAIT Alumni Mentorship program) with the release of a brochure. This initiative introduced avenues for alumni to help students through internships, workshops, training programs and scholarships.

6.12 Activities and support from the Parent – Teacher Association

In 2017-18, following activities undertaken by Parent-Teacher Association:

- Class counsellor of each class conducted monthly meetings where various issues related to the students were discussed and action was taken by the class counsellor. All records are kept in class counsellor file which in available with each class counsellor. Class Counsellor sent attendance report to parents.
- **Parents-Teachers Meeting** was arranged for all years for all departments every semester. Vision-mission of the institute and the department were discussed with parents and all the facilities provided to students in the institute are explained to them. All academic records were displayed and inputs were received from them for betterment of the institute.

Sr. No.	Department	Date	No. of parents attended
1	Engineering Sciences	24/02/2018	191
2	Electronics	24/02/2018	125
3	Electronics & Telecom	24/02/2018	133
4	Information Technology	24/02/2018	42
5	Computer	24/02/2018	75
6	Instrumentation	24/02/2018	41

6.13 Development programmes for support staff

In 2017-18, the development programs arranged for support staff are listed below:

- Advance Excel and Microsoft office training program arranged for administrative and non-teaching staff.
- Yoga classes arranged for staff.

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

In 2017-18, the initiatives taken to make campus eco-friendly are:

- Increase in capacity of solar panel to 1 MW at cost of 60 lakhs.
- Additional capacity of biogas was increased in form of balloons.
- Gas metering facility is introduced. Two columns for carrying out biogas purification
- Bio manure has been produced and utilized in vegetable farming in the campus is continued.
- Biogas generated from in-house biogas plant has been utilized in gas stove in the canteen and it is the same canteen that provides kitchen waste as raw material.
- All classrooms have made sound proof and the whole campus lighted with LED lamps.

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.

Following innovations have been introduced during 2017-18 creating positive impact on the functioning of the institution:

- Evaluating outcomes of the training programs/workshops: To cite an example, evaluation method here consisted of conducting quiz for the participants and then analyzing their performance and finally coming out with the desired outcome in line with the stipulated objectives.
- Unnati- Model to improve first year progress to ensure progress of weak students based on performance in internal tests was introduced. The positive impact of this innovation was clearly visible and was appreciated by many visiting academic evaluators.
- Book fair was conducted in the institution by bringing leading publishers to the college premises which enabled teaching community to scan through the literature available at one place. Several books were ordered for main library as well as departmental libraries.
- Like last few years, several technical talks were conducted during Technovate 2018 by experts from IITs and industry. These talks were well attended by staff and students.
- Promotion of research policy in the institution is showing positive results as this academic year saw 25 patents and 3 copyrights are filed by faculty and students.
- This year saw an implementation of a software project providing Vision-Mission mapping and attainment of the institute and filing patent for the same was done.
- Implementation of indirect attainment measurements in DCF through feedbacks was continued this year with an enhanced scope.
- Giving a boost to practical learning for students through formation of project groups for taking up innovative projects through internships and seed funding by college was intensified this year. The positive outcome of this effort showed up via many students receiving awards across the colleges in project competitions.
- We initiated Faculty exchange programs with industries to give the students a flavour of industry practices and viewpoints that are relevant to industry.
- In tune with the policy of equipping students with current trends in industries, the college arranged 21 industrial visits to industries. The participation in this was handsome totalling to hundreds.

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

- Based on plan of action chalked down at the beginning of the year, IQAC has adopted following measures in the academic year 2017-18 to enhance quality of teaching and learning:
  - Following IQAC guidelines in 2017-18, we recruited 41 Assistant Professor, 5 Associate professor and 8 Professors with diverse yet complimentary teaching skills and non-overlapping research interests.
  - For faculty development, as directed and funded by IQAC,304 faculty members attended refresher/orientation courses/workshops/training programs that were fully funded by college R&D fund.
  - One of the IQAC planned measures of conducting prerequisite tests and analysing the results of the same to cover gaps in learning was continued in academic year 2017-18. Also through DCFs weak students were identified and up to 7 to 8 remedial classes conducted per course.
  - Through widely advertised Technovate 2018, a student organized workshop, a total of 165 papers published, 92 projects submitted and 25 awards given for excellence. The expenditure incurred was approximately Rs. 5Lakhs.
  - In 2017-18 as planned by IQAC,
    (i) Financial aid of Rs. 27.38 Lakhs was provided to students by institution in the form of scholarships and awards.
    (ii) GATE forums were organized for aspiring students this year too and was well received.
  - In 2017-18, NPTEL local chapter was introduced, 89 expert talks/workshops/conferences conducted with funding from IQAC.
  - In 2017-18, DCF audit of each subject was conducted in every semester with comments and suggestions to improve under IQAC guidance through DQA of each department. The university exam results were also included to evaluate CO-PO attainment.
  - As a result of IQAC initiative relating to faculty up-gradation initiatives, 2 research scholars submitted their PhD thesis and 4 faculty members completed PhDs.
  - Major social wing activities undertaken in 2017-18 were:
    i. Self-defense workshop and seminar: A workshop was organized to teach self-defense techniques to females on account of International Women's Week
    ii. Christmas, Diwali and Holi Celebrations with the underprivileged children and to make sure they have a great time enjoying it.
    iii. Kite Festival Celebrations 2017: To connect with the Indian tradition of Kite flying festival and fly kites with fellow students and socializing with them.
    iv. Joyfest 2017: Various fun events were organized which acted as fundraisers for the underprivileged children. Approximately Rs. 40,000/- fund was raised.

v. Tree Plantation Drive was done this year too to motivate the students to plant saplings and do their bit towards nature.

vi. Udaan – Let Dreams Fly 2018: Organized a marathon where all the money raised was donated towards the education of underprivileged kids, sponsoring their annual education expenses. This event was a huge success and raised a fund of approximately ₹3.2 lakhs and was donated to World Vision India.

- For the academic year 2017-18, we have completed the full feedback cycle for all the departments starting from students going up to the Principal and followed by Action Taken Report by respective HOD.
  A sample of this digital feedback is placed in Annexure ii.

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

Digital Initiative Program or DIP-RAIT and Internal Quality Assurance Cell or IQAC-RAIT, are the two initiatives that RAIT has continued to adopt to improve its functioning at all levels in a participative, inclusive and verifiable manner.

Details provided in Annexure xxii.

7.4 Contribution to environmental awareness / protection

In 2017-18, following initiatives were taken to contribute to environmental awareness:

- Upgraded solar panel capacity to 1 MW at cost of 60 lakhs.
- AICTE conducted state level " Green Campus" initiative program organized by RAIT.
- The green campus initiatives taken by RAIT in last few years were sustained and they are listed below for completeness.
- Utilization of renewable energy within the campus like solar energy for lighting street lights, high masts and biogas energy for cooking.
- Bio manure for growing vegetables and trees.
- Composting.
- Segregation of kitchen waste suitable for loading in biogas plant.
- Biogas generated from in-house biogas plant has been utilized in gas stove in the canteen and it is the same canteen that provides kitchen waste as raw material.
- Road safety awareness campaign organized by NCC.
- Swatch Bharat Abhiyaan by NCC.

Photos of renewable energy sources given in Annexure xxiii.

7.5 Whether environmental audit was conducted? Yes [√] No [ ]

IQAC conducted environmental audit on 23rd Sep, 2017 and has suggested green measures. The results have been very encouraging on this front: Continuous uninterrupted operations of biogas facility resulting in running of gas burners in hospital canteen. A saving on LPG to the tune of 3 to 4 gas cylinders per month is the outcome. The solar panel has generated an aggregate of 85 to 100 KWH per day during sunny days of 2017-18 which resulted in reduction of carbon footprint and a saving on power bill for 24300 units of electricity amounting to saving of 2.18 Lakhs.

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

- We continue to maintain high standards in our strengths mentioned in SSR. In 2017-18, we took the following measures to add to our strengths:
  - Enhanced quality of staff
  - Enhanced equipments and infrastructure
  - Android based app for LMS
  - Promoting National Digital Library with students and faculties
  - IEEE digital library
  - Publications of in house biannual research journal
  - Lab Equipments/ Antivirus/ IoT,
- We have upgraded ourselves in all respects and removed some weaknesses mentioned in SSR:
  - Summer and winter internships.
  - Project based learning
  - 25 patents and 03 copyrights were filed
  - 21 industrial visits were conducted.
  - NPTEL courses and awards policy formulated (incentives for staff and students)
  - German language course conducted
  - Book exhibition on college premises

- **Recognition bestowed on RAIT during the year 2017-18**
  - NIRF -2018 Rank Band :151-200
  - ISTE "Best Students chapter" award for 2017-18
  - As per Times Engineering Institute Ranking survey 2018 has ranked RAIT 16th in Top 150 engineering institute in India & Rank 5th for region Wise Ranking- Western Region India.
  - Best Principal award by CSI
  - Best project award by CSI
  - 1st Prize in " Smart India Hackathon" organized by Government of India
  - Best Hardware award in E-yantra competition organized by IIT- Bombay.
  - 1st Prize in Hackathon by CSI.
  - 1st Prize in QUIZ by CSI
  - 1st prize in MATRIX -2017 at SPIT Mumbai

8. Plans of institution for next year

1. **Plan for teaching and learning activities:**

- To continue encouraging faculty to make use of webinar facility extensively.
- To provide more facilities to meet the research requirements of students and faculty.
- To promote self learning and adaptation to technology among students.
- To enhance project based learning.

2. **Plan for R&D / industrial consultancy as a tool for progress:**

- To recruit qualified staff with rich research background (PhDs) to bring about a paradigm change in learning environment against any vacancy which may arise in future.
- To encourage the faculty and students to send research proposals for funding from national agencies such as AICTE/DST/TEQIP/MHRD.
- To enhance industrial consultancy, research and development in some key areas.

3. **Plan for student related activities:**

- To continue to provide students with avenues for sports activities, cultural and social activities and also avenues for creative writing and oration through a spectrum of activities interlaced within curriculum calendar. The aim is to give them all-round development.
- To expand social wing activities.
- To continue efforts towards placement for students in Core companies for electronics, EXTC and instrumentation branches.
- To further strengthen the digital feedback mechanism with analysis and remedial measures.
- To further promote Incubation & entrepreneurship development amongst students.
- To strive for more employment of students in core companies.

4. **Plan for innovation:**

- RAIT has plans to upgrade in-house research project on indigenous solar powered generation with smart monitoring system and RAIT will share the experience with others on this matter.
- To enhance digital administrative activities through e-service book, leave management system and mobile notification system for students' result.

5. **Plan for good governance:**

- To share with the Management, the department wise events and analysis digital feedback report which includes comments by HODs, CMQA and Principal through Principal-RAIT. To streamline the flow of information on desired changes from bottom up and implementation of policies towards positive change top down with good book-keeping of the same.

Annexure I

Abbreviations:

CAS	-	Career Advanced Scheme
CAT	-	Common Admission Test
CBCS	-	Choice Based Credit System
CE	-	Centre for Excellence
COP	-	Career Oriented Programme
CPE	-	College with Potential for Excellence
DPE	-	Department with Potential for Excellence
GATE	-	Graduate Aptitude Test
NET	-	National Eligibility Test
PEI	-	Physical Education Institution
SAP	-	Special Assistance Programme
SF	-	Self Financing
SLET	-	State Level Eligibility Test
TEI	-	Teacher Education Institution
UPE	-	University with Potential Excellence
UPSC	-	Union Public Service Commission

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Annexure i

Academic Calendar 2017-18 ODD SEMESTER

Dr. D. Y. Patil Group's
RAMRAO ADIK INSTITUTE OF TECHNOLOGY, NERUL

ACADEMIC CALENDAR
July 2017-November 2017

JULY 2017

SUN	MON	TUE	WED	THU	FRI	SAT
30	31					1
2	3	4	5	6	7 DAC, DEPT, DQA meeting	8
9	10 SE, TE, BE TERM STARTS	11	12	13	14 DQA Audit-I	15
16	17	18	19	20	21 BE PROJECT GUIDE ALLOCTION	22
23	24	25	26	27	28	29

WORKING DAYS : 21 TEACHING DAYS : 16

AUGUST 2017

SUN	MON	TUE	WED	THU	FRI	SAT
		1 FE TERM STARTS; SE,TE,BE First Defaulter List Display	2 Defaulter Parent Meeting	3	4	5
6	7	8	9	10	11	12
13	14	15 INDEPENDENCE DAY & JANMASHTAMI	16	17 PARSI NEW YEAR	18	19
20	21 SE, TE, BE TERM TEST-I	22 SE, TE, BE TERM TEST-I	23 SE, TE, BE TERM TEST-I	24 Term Test-I Marks Display	25 # GANESH CHATURTHI	26 #
27 #	28 #	29 #	30	31		

WORKING DAYS : 18 TEACHING DAYS : 15

SE, BE, TE TERM START AND END
FE TERM START AND END
TERM TEST
FE, SE, TE, BE JOURNALS SUBMISSION
REMEDIAL CLASSES
ACADEMIC AUDIT
FEST
BE PROJECT
STUDENT FEEDBACK
HOLIDAYS

* - Social Wing Activity
\# - Mid Term Break

Dr. D. Y. Patil Group's
RAMRAO ADIK INSTITUTE OF TECHNOLOGY, NERUL

ACADEMIC CALENDAR
July 2017-November 2017

SEPTEMBER 2016

SUN	MON	TUE	WED	THU	FRI	SAT
					1 Defaulter List Display	2 RAKSHA BANDHAN
3	4 Defaulter Parent Meeting	5 ANANT CHATURTHI	6 ACADEMIC AUDIT-I	7	8	9 Dept PTM
10	11 FE TERM TEST-I	12 FE TERM TEST-I	13 FE TERM TEST-I	14	15	16
17	18 Cross Country*	19 DQA Audit-II	20	21 SPORTS, CULTURAL & TECH FEST Joy Fest*	22 SPORTS, CULTURAL & TECH FEST Joy Fest*	23 SPORTS, CULTURAL & TECH FEST Joy Fest*
24	25	26 Cross Country*	27 STUDENTS FEEDBACK	28 STUDENTS FEEDBACK	29 STUDENTS FEEDBACK	30 DUSSHERA

WORKING DAYS : 22 TEACHING DAYS : 19

ATTENDANCE IS GIVEN DUE WEIGHTAGE IN EVALUATION OF STUDENTS PERFORMANCE.
75% ATTENDANCE MANDATORY FOR APPEARING FINAL UNIVERSITY EXAMS.

OCTOBER 2016

SUN	MON	TUE	WED	THU	FRI	SAT
1 MOHARRAM	2 GANDHI JAYANTI	3 Defaulter List Display	4 Defaulter Parent Meeting	5	6 BE PROJECT SUBMISSION	7
8	9 DQA Audit-III	10 ACADEMIC AUDIT-II	11 SE, TE, BE TERM TEST-II	12 SE, TE, BE TERM TEST-II	13 SE, TE, BE TERM TEST-II	14
15	16 SE, TE, BE REMEDIAL CLASSES; JOURNAL SUBMISSION	17 SE, TE, BE REMEDIAL CLASSES; JOURNAL SUBMISSION	18 SE, TE, BE TERM ENDS; JOURNAL SUBMISSION	19 LAXMI PUJAN	20 BALIPRATIPADA	21 BHAUBIJ
22	23 DQA Closing	24	25	26	27	28
29	30	31				

WORKING DAYS : 19 TEACHING DAYS : 06

Tentative starting date of SE, TE, BE for Oral and Practical exams - 23th OCT
Tentative starting date of SE, TE, BE for Final University Examinations – 10 NOV

Dr. D. Y. Patil Group's

RAMRAO ADIK INSTITUTE OF TECHNOLOGY, NERUL

ACADEMIC CALENDAR

July 2017-November 2017

NOVEMBER 2017						
SUN	MON	TUE	WED	THU	FRI	SAT
			1 FE Defaulter List Display	2 FE Defaulter Parent Meeting	3 FE TERM TEST-II	4 GURUNANAK JAYANTI
5	6 FE TERM TEST-II	7 FE TERM TEST-II	8 FE REMEDIAL CLASSES JOURNAL SUBMISSION	9 FE REMEDIAL CLASSES JOURNAL SUBMISSION	10 FE REMEDIAL CLASSES JOURNAL SUBMISSION	11 FE TERM END
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		
WORKING DAYS : 22			TEACHING DAYS : 02			

Tentative starting date of FE for Oral and Practical exams - 13th NOV
Tentative starting date of FE for Final University Examinations – 5th DEC

Academic Calendar 2017-18 EVEN SEMESTER

D Y PATIL RAMRAO ADIK INSTITUTE OF TECHNOLOGY NAVI MUMBAI

Dr. D. Y. Patil Group's
RAMRAO ADIK INSTITUTE OF TECHNOLOGY, NERUL

ACADEMIC CALENDAR
January 2018-April 2018

JANUARY 2018

SUN	MON	TUE	WED	THU	FRI	SAT
	1	2	3	4 DAC meeting	5 DEPT and DQA meeting	6
7	8 Term Start Mandatory Registration	9	10	11	12 DQA Audit-I	13
14	15	16	17	18	19	20
21	22	23	24	25	26 Republic Day	27
28	29	30	31			

WORKING DAYS : 22 TEACHING DAYS : 17

FEBRUARY 2018

SUN	MON	TUE	WED	THU	FRI	SAT
				1 First Defaulter List Display Horizon	2 Defaulter Parent Meeting Horizon	3 Horizon
4	5	6	7	8	9	10
11* Udaan	12	13 Maha shivaratri	14	15	16	17
18	19 Shivjayanti	20 Attendance Report to Parents	21 Term Test-I	22 Term Test-I	23 Term Test-I	24 Dept PTM, Alumni Meet
25	26	27	28			

WORKING DAYS : 20 TEACHING DAYS : 13

TERM START AND END
DEPARTMENT MEETING
ACADEMIC AUDIT
CULTURAL & TECH FEST
HOLIDAYS
WEEK END

D Y PATIL RAMRAO ADIK INSTITUTE OF TECHNOLOGY NAVI MUMBAI

Dr. D. Y. Patil Group's
RAMRAO ADIK INSTITUTE OF TECHNOLOGY, NERUL

ACADEMIC CALENDAR
January 2018-April 2018

MARCH 2018

SUN	MON	TUE	WED	THU	FRI	SAT
				1 Second Defaulter List Display	2 Holi	3
4	5 Defaulter Parent Meeting	6 DEPT and DQA meeting	7	8	9	10
11	12 DQA Audit-II	13 Academic Audit-I	14	15 Stamina / CPL	16 Stamina / CPL	17 Stamina / CPL
18 Gudipadwa	19	20	21	22	23	24
25 Ramnavmi	26	27	28 EPL	29 Mahavir Jayanti EPL	30 Good Friday EPL	31 EPL

WORKING DAYS : 20 TEACHING DAYS : 19

APRIL 2018

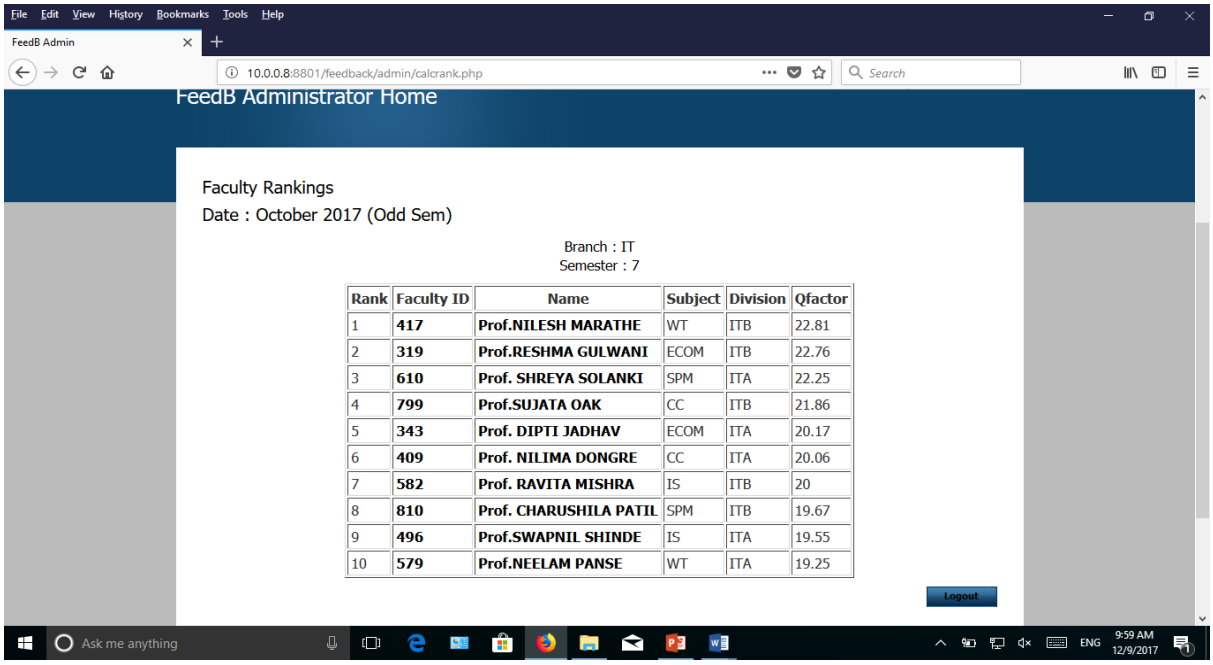
SUN	MON	TUE	WED	THU	FRI	SAT
1 EPL	2 final Defaulter List Display EPL	3 Defaulter Parent Meeting EPL	4	5 TECHNOVATE	6 TECHNOVATE	7 TECHNOVATE
8	9	10	11 Students Feedback	12 Students Feedback	13 Students Feedback (CO-PO)	14 Dr. Ambedkar Jayanti
15	16 Term Test-II	17 Term Test-II DEPT and DQA meeting	18 Term Test-II	19 DQA Audit-III Remedial Classes Journal Submission	20 Academic Audit-II Remedial Classes Journal Submission	21 Term End
22	23	24	25	26	27	28
29	30 Buddha Purnima					

WORKING DAYS : 21 TEACHING DAYS : 08

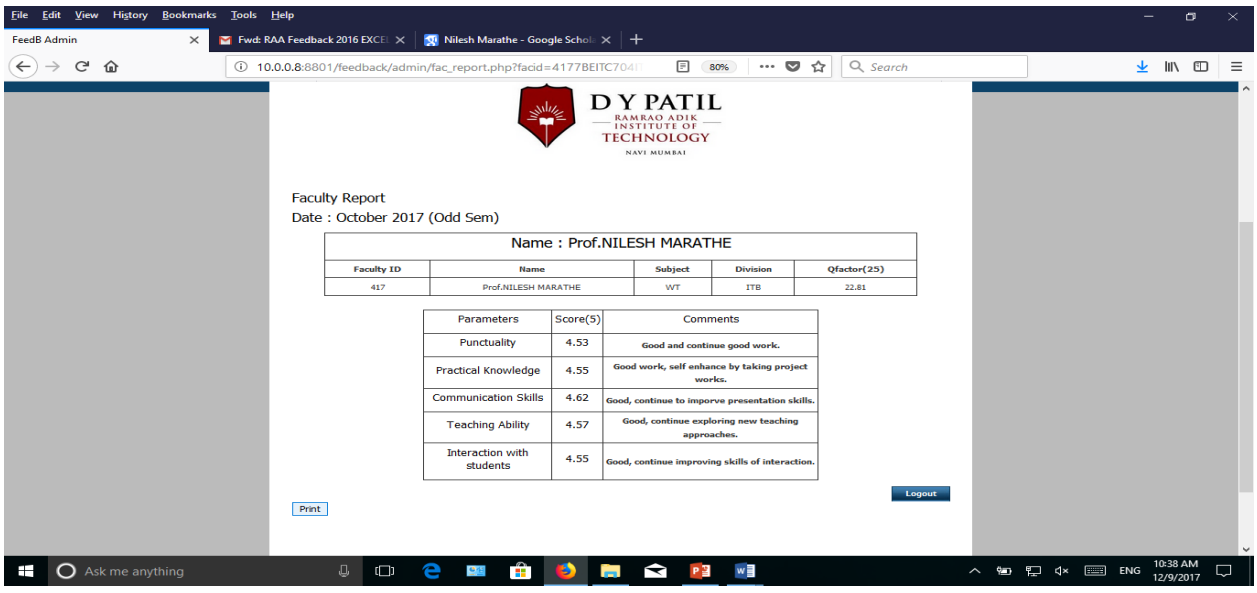
Annexure ii

Analysis of feedback

During the course work, students are encouraged to give feedback fearlessly without any conditions. This valuable input is collected by the concerned HODs of each Department. It is then compiled and stored digitally and kept with concerned HODs with his suggestions to each faculty. This process is also digitized to facilitate quick and easy feedback generation through digital forms.



Rank	Faculty ID	Name	Subject	Division	Qfactor
1	417	Prof.NILESH MARATHE	WT	ITB	22.81
2	319	Prof.RESHMA GULWANI	ECOM	ITB	22.76
3	610	Prof. SHREYA SOLANKI	SPM	ITA	22.25
4	799	Prof.SUJATA OAK	CC	ITB	21.86
5	343	Prof. DIPTI JADHAV	ECOM	ITA	20.17
6	409	Prof. NILIMA DONGRE	CC	ITA	20.06
7	582	Prof. RAVITA MISHRA	IS	ITB	20
8	810	Prof. CHARUSHILA PATIL	SPM	ITB	19.67
9	496	Prof.SWAPNIL SHINDE	IS	ITA	19.55
10	579	Prof.NEELAM PANSE	WT	ITA	19.25

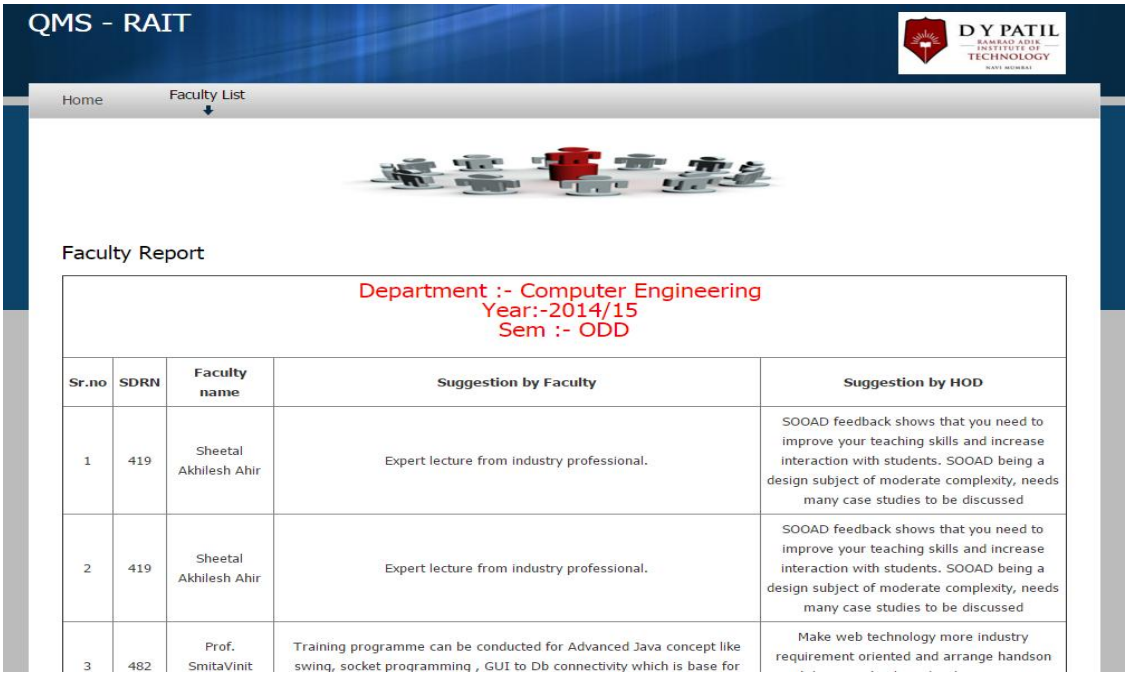


Faculty ID	Name	Subject	Division	Qfactor(25)
417	Prof.NILESH MARATHE	WT	ITB	22.81

Parameters	Score(5)	Comments
Punctuality	4.53	Good and continue good work.
Practical Knowledge	4.55	Good work, self enhance by taking project works.
Communication Skills	4.62	Good, continue to imporve presentation skills.
Teaching Ability	4.57	Good, continue exploring new teaching approaches.
Interaction with students	4.55	Good, continue improving skills of interaction.

Faculty detail report on Q factor.

HOD then summarizes feedback as, Q-factor: below 15, between 15 and 20, above 20. Internal EPI is obtained using DCF whereas university EPI is calculated after each subject result is analyzed. HOD prepares consolidated report based on above inputs as well as innovations and teaching & learning techniques adopted. HOD adds recommendations and submits report to CMQA. QMS team collects reports from all HODs. The team adds comments on each report and sends to the principal. Principal after adding comments holds meeting to prepare action plan.


QMS - RAIT

D Y PATIL RAMRAO ADIK INSTITUTE OF TECHNOLOGY NAVI MUMBAI

Home Faculty List

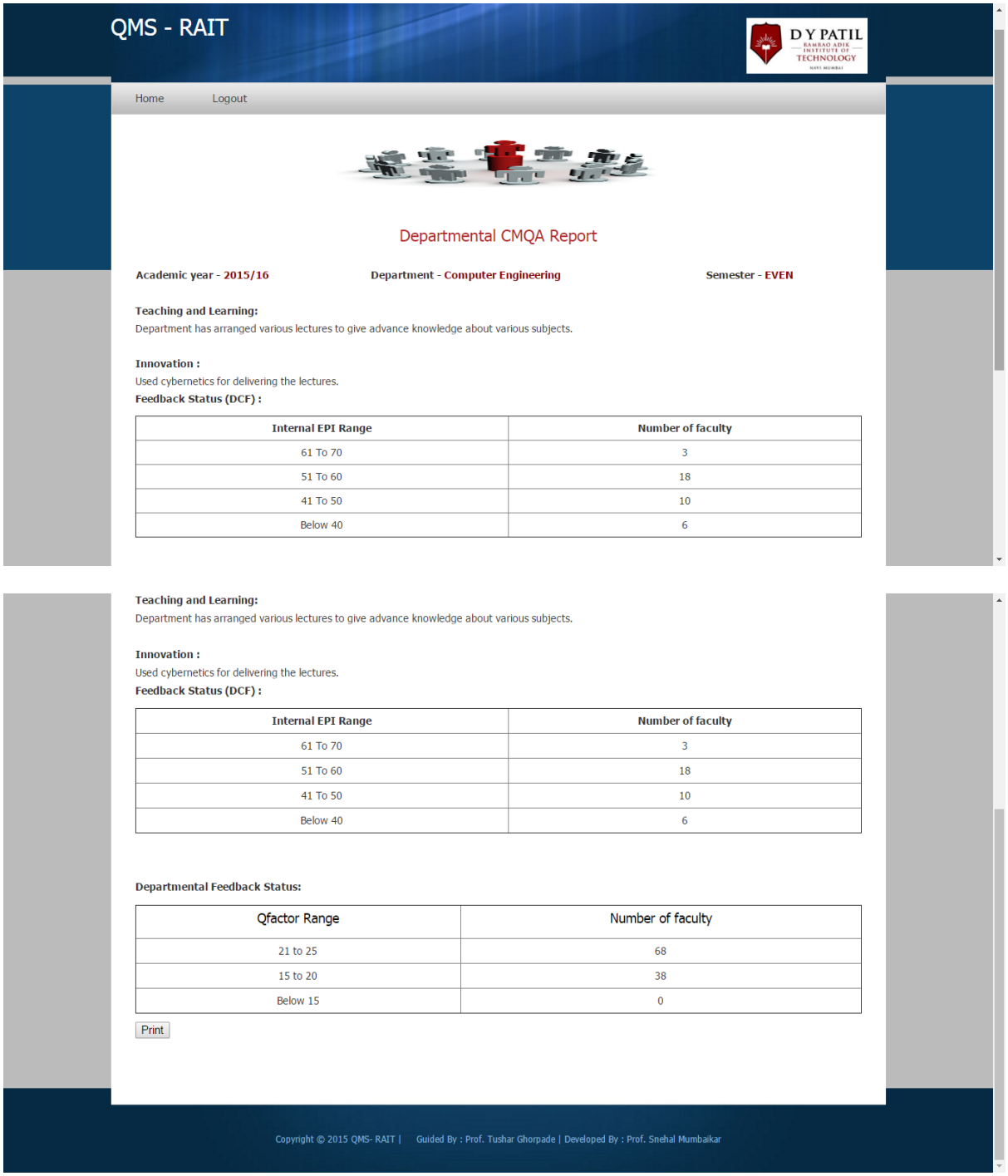
Faculty Report

Department :- Computer Engineering
Year:-2014/15
Sem :- ODD

Sr.no	SDRN	Faculty name	Suggestion by Faculty	Suggestion by HOD
1	419	Sheetal Akhilesh Ahir	Expert lecture from industry professional.	SOOAD feedback shows that you need to improve your teaching skills and increase interaction with students. SOOAD being a design subject of moderate complexity, needs many case studies to be discussed
2	419	Sheetal Akhilesh Ahir	Expert lecture from industry professional.	SOOAD feedback shows that you need to improve your teaching skills and increase interaction with students. SOOAD being a design subject of moderate complexity, needs many case studies to be discussed
3	482	Prof. SmitaVinit	Training programme can be conducted for Advanced Java concept like swing, socket programming , GUI to Db connectivity which is base for	Make web technology more industry requirement oriented and arrange handson

HOD feedback

Sample of departmental CMQA report



QMS - RAIT

D Y PATIL RAMRAO ADIK INSTITUTE OF TECHNOLOGY NAVI MUMBAI

Home Logout

Departmental CMQA Report

Academic year - 2015/16 **Department - Computer Engineering** **Semester - EVEN**

Teaching and Learning:
Department has arranged various lectures to give advance knowledge about various subjects.

Innovation :
Used cybernetics for delivering the lectures.

Feedback Status (DCF) :

Internal EPI Range	Number of faculty
61 To 70	3
51 To 60	18
41 To 50	10
Below 40	6

Teaching and Learning:
Department has arranged various lectures to give advance knowledge about various subjects.

Innovation :
Used cybernetics for delivering the lectures.

Feedback Status (DCF) :

Internal EPI Range	Number of faculty
61 To 70	3
51 To 60	18
41 To 50	10
Below 40	6

Departmental Feedback Status:

Qfactor Range	Number of faculty
21 to 25	68
15 to 20	38
Below 15	0

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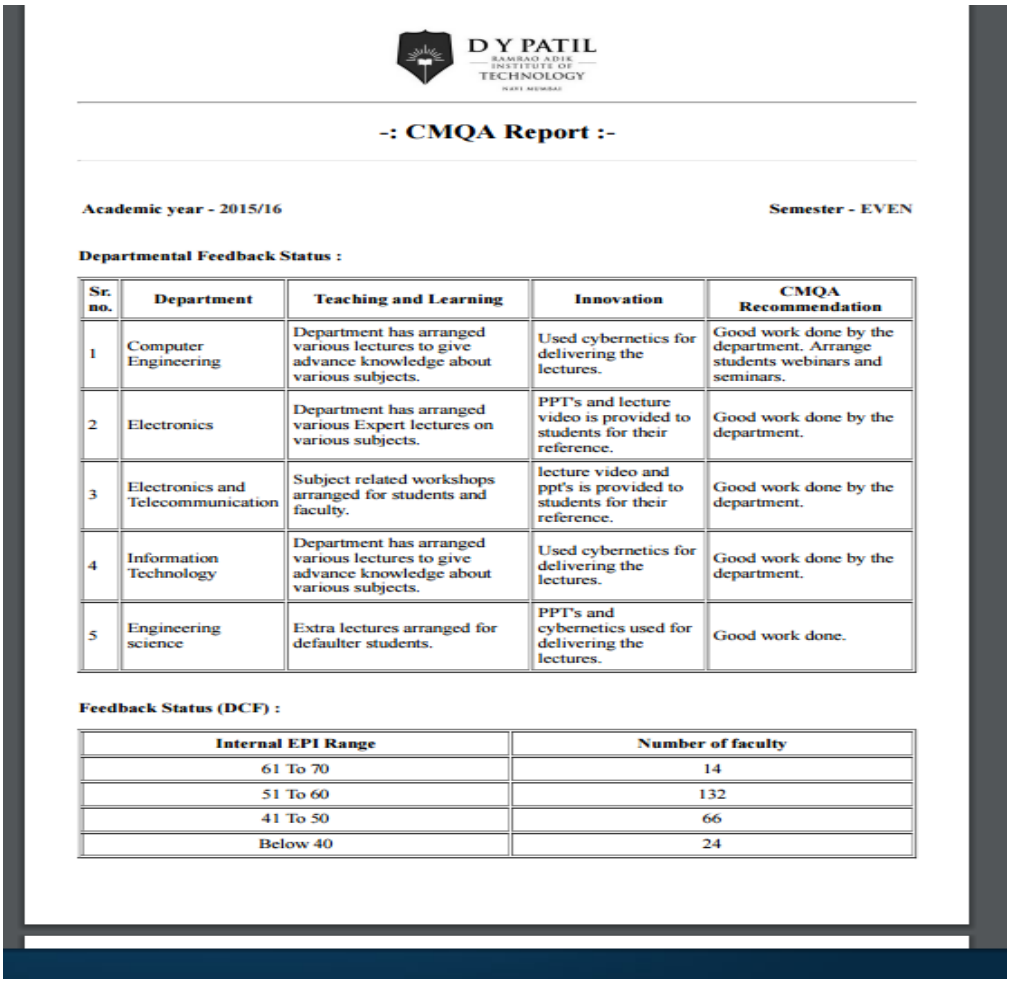
Departmental CMQA report.

Sample of Principal Feedback



D Y PATIL
RAMRAO ADIK INSTITUTE OF TECHNOLOGY

-: CMQA Report :-

Academic year - 2015/16 **Semester - EVEN**

Departmental Feedback Status :

Sr. no.	Department	Teaching and Learning	Innovation	CMQA Recommendation
1	Computer Engineering	Department has arranged various lectures to give advance knowledge about various subjects.	Used cybernetics for delivering the lectures.	Good work done by the department. Arrange students webinars and seminars.
2	Electronics	Department has arranged various Expert lectures on various subjects.	PPT's and lecture video is provided to students for their reference.	Good work done by the department.
3	Electronics and Telecommunication	Subject related workshops arranged for students and faculty.	lecture video and ppt's is provided to students for their reference.	Good work done by the department.
4	Information Technology	Department has arranged various lectures to give advance knowledge about various subjects.	Used cybernetics for delivering the lectures.	Good work done by the department.
5	Engineering science	Extra lectures arranged for defaulter students.	PPT's and cybernetics used for delivering the lectures.	Good work done.

Feedback Status (DCF) :

Internal EPI Range	Number of faculty
61 To 70	14
51 To 60	132
41 To 50	66
Below 40	24

Feedback Status (Avg_Int_EPI) :

Qfactor Range	Number of faculty
21 to 25	163
15 to 20	166
Below 15	1

Remark by Principal :

Excellent work done by all department.

Principal comments report.

All HODs prepare Action Taken Report and convey recommendations to respective faculty for improvement.

Sample of Action Taken Report

Academic year - 2015/16 Department - Electronics Semester - EVEN

Teaching and Learning:

10 senior faculty members of the department are involved in syllabus setting at University of Mumbai. 5 faculty members attended orientation programmes of newly added subjects. 7 Faculties are involved in paper setting of various subjects at University of Mumbai. For the new syllabus, a total of 10 Course outcomes are added in various subjects of 8th semester. To overcome the gap between industry needs and contents, regular workshops and expert lectures are arranged in the department. In 2015-16 total 14 no. of seminar, workshops and training courses were conducted by the department. Near about 4-5 remedial classes are conducted for every subject in every semester.

Innovation :

Department had conducted 1 webinar and lectures using NPTEL videos. Almost all faculties had taken lectures on Smart board. 4 Training Programs/workshops and 2 expert lectures were conducted during the semester. Faculty had total 45 publications in conferences and 11 publications in Journals in year 2015-16. Various innovative projects are done by students with faculties during the academic year. One of our student project named "Smart Suspension" got best hardware project award at IIT Bombay.

Feedback Status (DCF) :

Internal EPI Range	Number of faculty
61 To 70	4
51 To 60	23
41 To 50	16
Below 40	3

Departmental Feedback Status:

Qfactor Range	Number of faculty
21 to 25	23
15 to 20	20
Below 15	0

Remark by CMQA:

As reported by HOD-ELEX, participation of 10 faculty in UoM syllabus setting and 7 in paper setting is good initiative. Again 5 faculty attending orientation program is also good as also addition of 10 COs. Conduction of 14 workshops, seminars and training courses is impressive. Conduction of 4-5 remedial classes per course is also good. NPTEL video number should go up and so also use of smartboard teaching. On the R&D front the numbers

are very good- 45 in conferences and 11 in journals. Award winning project at IIT "smart suspension" is commendable. The status on Qfactor and also internal EPI is good overall except for 3 cases in EPI. HOD-ELEX requested to guide these staff members to change methodologies to move to upper brackets.

Remark by Principal;

Faculty below 40% EPI needs to concentrate on Delivery Techniques. CMQA and HODs to ensure use of Interactive Learning Process and ensure better learning experience. EPI between 41 to 50% need to better teaching techniques On the whole well done. But we can do better

Action taken by HOD;

The main cause of poor EPI of the concerned faculty members is due to the tough level of university question paper. The students, especially weak, could not perform well in the university examination. Such students have been identified and are being provided extra coaching by the faculty members. Also the students with marks between 40 to 60 in the examination have been identified and they will be provided extra attention to help them in scoring marks.

Departmental CMQA report with ATR

Annexure iii

Faculty participation in conferences and symposia

International level:

Name of Faculty	Title of paper	Name of conference/symposia
G. RaghuEmail authorNeeraj K. SharmaShridhar G. DomanalG. Ram Mohana Reddy	Memory-Based Load Balancing Algorithm in Structured Peer-to-Peer System	Springer Link, Progress in Intelligent Computing Techniques: Theory, Practice, and Applications pp 431-439, Part of the Advances in Intelligent Systems and Computing book series (AISC, volume 518)
Pornima Gidhe, Dr. Leena Ragha	Sarcasm detection of non # taf statements using MLP-BP	International Conference on Advances in Computing, Communication, Control, 2017
Sonal Vetale, Dr.Amarsinh Vidhate	Hybrid Centri c Routing Protocol of Wireless Body Area	International Conference on Advances in Computing, Communication, Control, 2017
Sanika Lokhande, Dr.Amarsinh Vidhate	Comparison of MAC Protocols in VANET	ICICI, 2017
Jyoti Deogirikar, Dr.Amarsinh Vidhate	An Improved Publish-Subscribe Method in Application layer Protocol for IoT	SmartTech, 2017
Rekha Gupta, Amarsinh Vidhate and Puja Padiya	A Survey on Vehicular Cyber Physical System	INTERNATIONAL CONFERENCE on ADVANCES IN SCIENCE AND TECHNOLOGY
Yashraj Rai, Dr. Ramesh Vasapannavara,Puja Padiya	Re-transmission strategy for Broadcasting of Safety message	IEEE, CCUBE
Pornima Gidhe, Dr. Leena Ragha	Comprehensive method of Knowledge Based Approach for Word Sense Disambiguation	ICRAC, Springer
Pooja Patil, Namita Pulgam, Vanita Mane	Image Forgery Detection & Localization using Modified JPEG Ghost	IEEE, EECCMC

Pooja Patil , Namita Pulgam & Vanita Mane	Comparative Analysis of Feature Extraction Techniques in Keypoint based Image Forgery Detection	Imperial Journal of Interdisciplinary Research (IJIR)
Nisha Fule Vanita Mane	Improved Matching Technique in Digital Image Region Duplication	2nd IEEE International conference on Electronics, Communication and Aerospace Technology (ICECA 2018)
Nisha Fule Vanita Mane	Comparative Analysis of Feature Matching Algorithms in Region Duplication Detection	International Conference on Electrical, Electronics, Computer Science, Mathematics, Physical Education and Management (ICEECMPE)
Snehal Bhoir, Vanita Mane, Tushar Ghorpade	A Comparative Analysis of Different Word Embedding Models	International Conference on Advanced Computing, Communication, Control, 2017
Snehal Bhoir, Vanita Mane, Tushar Ghorpade	Semantic Search on MOOC Aggregator using Query Expansion	International Conference on Energy, Communication Data Analytics & Soft Computing, 2017
Preet Kaur, Tushar Ghorpade, Vanita Mane	Extraction of Unigram & Biogram Topic List by using Latent Dirichilet Markov Allocation & Sentiment Classification	International Conference on Energy, Communication Data Analytics & Soft Computing, 2017
Shraddha Narhari, Rajashree Shedge	Topic Modelling: A Comparative Study	IJSRD - International Journal for Scientific Research & Development| Vol. 5, Issue 08, 2017 | ISSN (online): 2321-0613
Shraddha Narhari, Rajashree Shedge	Text Categorization of Marathi document using Modified LINGO	International Conference on Advanced Computing, Communication, Control, 2017
Swapnil Bhagat, Puja Padiya, Nilesh Marathe	A generic request/reply based algorith for detection of blackhole attack in manet: Simulation result	2017 8th International Conference on Computing, Communication and Networking Technologies (ICCCNT)
Swapnil Bhagat, Puja Padiya, Nilesh Marathe	A generic request/reply based algorith for detection of blackhole	2017 International Conference on Smart Technologies for Smart Nation

	attack in manet	
Sumithra T.V, Shilpa Kolte	Communication Accessories, The Gateway to Learning	International Conference on Data Management Analytics & Innovation 2018
Shilpa Kolte,Dr.J W Bakal	Big Data Summarization using Novel clustering Algorithm and semantic Feature Approach	International journal of rough sets and data analysis
Dr. Vishwesh Vyvawahare	Parallel Computing of Fractional Integer Operators	International Journal of Engineering Research in Electronics and Communication Engiuneering
Dr. Vishwesh Vyvawahare	Parallel Computing of Mathematical Functions in Fractional Calculas	International Journal of Engineering Research in Electronics and Communication Engiuneering
Dr. Vishwesh Vyvawahare	Fractional Order PI Controller design for PMSM: A model-based comparative study	International conference on Automatic Control and optimization Techniques
Dr. Vishwesh Vyvawahare	Parallel Computing of Ordenary Differential Equation	International Journal of Engineering Research in Electronics and Communication Engiuneering
Dr. Vishwesh Vyvawahare	Simulations of Special Mathematical Functions	International Journal of Engineering Research in Electronics and Communication Engineering
Dr. Sukanta Sabut	Detection of rpileptic seizure using wavelet transform and neural network classifier	ICCASP- 2018, Lonare
Dr. Sandip Dhoble	Design of 3D-sno2gas sensor	ICCASP 2018, Lonare
Shweta Ashtekar	Parallel Computing of Mathematical Functions in Fractional Calculas	International Journal of Engineering Research in Electronics and Communication Engiuneering
Gajendra Rajpoot	Design of microheater on 3D -Sno2 gas sensor	ICCASP-2018, Lonare

Manoj S. Gofane	Design of microheater on 3D -Sno2 gas sensor	ICCASP-2018, Lonare
Mr. Sameer Chikane	Parallel Computing of Fractional Integer Operators	International Journal of Engineering Research in Electronics and Communication Engiuneering
Ms. Priya Khot	Parallel Computing of Mathematical Functions in Fractional Calculas	International Journal of Engineering Research in Electronics and Communication Engiuneering
Ms.Sayali Wani	Detection of rpileptic seizure using wavelet transform and neural network classifier	ICCASP- 2018, Lonare
Ms Pooja Patil.	Parallel Computing of Ordenary Differential Equation	International Journal of Engineering Research in Electronics and Communication Engiuneering
Mr. Sangeeth Sadanand	Simulations of Special Mathematical Functions	International Journal of Engineering Research in Electronics and Communication Engineering
Mr. Shirish S. Kulkarni	Image Registration on Biomedical Images with Composite Algorithm	2017 International Conference on Nascent Technologies in the Engineering Field (ICNTE-2017)
Mr. Vivek P. Khalane	Image Encryption using Wavelet Transform Over Finite World	10th International Conference on Security of Information and Networks
Mrs. Ragini Gaikwad	PLC based Automatic Car washing System using Proximity Sensors	ICPCSI-2018
Mrs. Aparajita Singh	Design of Signed Distance Method based Fuzzy Logic Controller for TITO Process	RDCAPE 2017
Dr. Sandip Dhobale	Design of Microheater on 3D SnO2 gas sensor	International Conference on Special Functions & their applications(ICSFA 2015)(XIV Annual Conference of the Society for Special Functions & their applications) & Symposium on Fractional Calculus & their application in

		Special Functions
BHANGALE SHILPA		International Conference On Algebra ,Discrete Mathematics and Applications(ICADMA) 2017
BHANGALE SHILPA		International Conference On Discrete Mathematics (ICDM) 2018
Archana Mandhare, Sujata Kadam,	"Performance Analysis of Trust based Routing Protocol in MANET"	3rd International Conference on Computing, Communication & Signal Processing, (Iccasp-2018), January 26th-27th (2018), BATU Lonere
Kuldeep Sonawane, Ashwini Naik,	"Minimizing Energy consumption using modified –MECOR Protocol in MANET"	International Conference on Power, Control, signal and Instrumentation Engineering (IEEE), 2017.
Dayanand VishwanathDhongade,	" Classification of Sleep Disorders Based on EEG Signals by Using Feature Extraction Techniques with KNN Classifier",	International Conference on Power, Control, signal and Instrumentation Engineering (IEEE), 2017 DOI:10.1109/IGEHT.2017.8093976
Swarup Mhatre, Hemlata Patil, Sujata Kadam	" Performance Analysis of Prediction and Priority based Routing Protocol for MANET's "	International Conference on Power, Control, signals & Instrumentation Engineering(ICPCSI)
Madhura Mahajan, KTV Reddy, Manita Rajput,	" A switch Triggered Rescue Assistance System for safety of Women"	International Conference on Smart City and Emerging Technologies (ICSCET 2018)
Revati Jadhav, Manoj M. Dongre,Geeta Devurkar	,"Fuzzy logic based data dissemination in Vehicular Ad Hoc Networks"	International Conference on Electronics ,Communication and Aerospace Technology (ICECA)-2017,COIMBATORE
Ms. Pallavi D Pawar, Dr. Mukesh D. Patil, and Dr. Vishwesh A. Vyawahare.	"Speed Enhancement of QFT Bound Generation using GPU."	International Conference on Emerging Trends in Computing Technology ICETCT 2018
Prajakta Papalkar	, "Latency analysis of Diagonal Mesh topology for Network on Chip	international conference Equinox at Terna Engineering college

	Architecture"	
S. Deshmukh; K. Sarda; S. Sutavani; S. Wagh	"Investigating the structural properties of ER-ES PN model to define liveness of the system"	2017 European Conference on Circuit Theory and Design (ECCTD), 4-6 Sept. 2017
Roy Choudhury Somdotta, Aditi Sengupta, SantanuDas,	"Bandpass Filters using Multilayered Microstrip Structures"	International Conference onEmerging Trends in Electronic Devices and Computational Techniques (EDCT)
Aditi Sengupta, Roy Choudhury Somdotta, Santanu Das	"Temperature Dependence of MicrostripBandpass Filter For Extreme Climates",	International Conference onEmerging Trends in Electronic Devices and Computational Techniques (EDCT)
Roy Choudhury Somdotta, Aditi Sengupta, Santanu Das	"An Archimedean Spiral Shaped Frequency Selective Defected Structure for Narrow band High Q Applications",	International conference on Advanced Computing & Communication Techniques (ICACCT 2018)
Sonam Gadekar and Sujata Kadam	"Secure Optimized Link State Routing (OLSR) against Node Isolation Attack"	IEEE International Conference on Power, Control, Signals and Instrumentation Engineering, IEEE ICPCSI, 2017
Gandhali Jadhav and Sujata Kadam	"Multi –Focal Image Fusion with Convolutional Sparse Representation and Stationary Wavelet Transform"	3rd international conference on Computing, Communication and Signal Processing (ICCASP-2018)
Roshni Padyal and Sujata V.Kadam	" Continuous Neighbour Discovey Approach for Improvement of Routing performance in WSN"	2nd International Conference for Convergence in Technology(I2CT), 2017.
Swarupa Vedak, Mukesh Patil and Vishwesh Vyawahare	"Enhancing the High-Pass FIR filter design using Fractional Fourier Transform"	1st International Conference of Intelligent Computing, Instrumentation and Control Technologies (ICICICT-2017)

Swarupa Vedak, Mukesh Patil and Vishwesh Vyawahare	"Design of Band-Pass FIR filter using Fractional Fourier Transform"	1st International Conference of Digital Signal and Image Processing (ICoDSIP-2017)
Ashish Patil, Shweta Ashtekar, Amruta Chintawar	"Implementation Controller Area Network data Compression Algorithm for Automobile Applications"	International conference on Electrical, Electronics & Communication Engineering, 2017 Pune
SumedhaAwarsarmol, Shweta Ashtekar, Amruta Chintawar	"Securely Data Hiding and Transmission in an ECG Signal using DWT"	IEEE International Conference on Power, Control, Signals and Instrumentation Engineering, IEEE ICPCSI, 2017
Dr. Pallavi Chavan	Multilayer Visual Crytography with Soft Computing Approach for Authentication	Third International Conference on Information and Communication Technology for Competitive Strategies (ICTCS-2017)
Mr. Nilesh Marathe	A generic Request/Reply based proposed algorithm for detection	2017 International Conference on Smart Technologies for Smart Nation(SmartTechCon)
	A generic Request/Reply based algorithm for detection of black hole attack in MANET: Simulation Results	The eight international conference on Computing, Communication and Networking Technologies
Mrs. Nilima Dongre	Ranked Multi-Keyword Search Data Using Cloud	International Conference on Intentive Computing and Informatics
	Public auditing for shared data in cloud storage with an effective user dismissal	Internatinal Conference on Computing, Communication and Signal Processing
	Data Acquisition Techniques in Mobile Forensics	International Conference on Intentive Systems and Control
	Wireless Printing	Intenational Conference on Inventive Communication and computational

	System	Technologies- 2018
Ms Ravita Mishra	Entity Resolution online Multiple Social Networks	International Conference on Emerging Technologies in Data Mining and Information Security
Mr. Vivek Kumar Singh	Detection and localization of duplicated frames in Doctored Video	Intelligent Systems Design and Applications (ISDA 2017)
Mrs.Samundiswary	Public auditing for shared data in cloud storage with an effective user dismissal	Internatinal Conference on Computing, Communication and Signal Processing
Ms.Sneha Sathe	Data Acquisition Techniques in Mobile Forensics	International Conference on Intentive Systems and Control

National level:

Authors	Title	Name of conference/symposia
Karan Patil Vishwanath Khuprao Rucha Kulkarni Soumi Banerjee	Detection of Honeywords from Real Password With Decoy Mechanism	NSCFET-2018
Sanika Vaidya SayliRanshur KirtiPavaskar Prathmesh Gunjgur Jyoti Joshi	College Enquiry Chatbot using NAÏVE BAYES Algorithm	NSCFET-2018
Snehal Jadhav Sayali Mohite Pranjal Borhade Anitha Senathi	Phishing Identification Technique using Prediction Algorithm based on URL features	NSCFET-2018
Shrutika Gunjal Vinal Patil Nipurna Gharat, Samundeshwari s. Shraddha Mhatre Nilima Dongre	Fog computing: Mitigating Insider Data Theft attacks in the cloud	NSCFET-2018

SejalGhonate SnehalHande Kiran Mali Suchita Patel, KshipraTatkare Dipti Jadhav	Suspicious Activity Detection During Online Examination	NSCFET-2018
Sukeshani Patil Maheshwari Narute Lalit Manjrekar Pooja Sonawane	Layered Security for Image using Cryptography and Steganography using AES Algorithm	NSCFET-2018
Ketan More Raj Wagh Harshvardhan Waghmare Suchita Patel KshipraTatkare Priyanka Shingane	RFID Based Medical Card	NSCFET-2018
Abishek Venkatesh Pavankumar Mahadik Franklin George Dr. Ashish Jadhav	Virtual Reality Maps	NSCFET-2018
Ajinkya Naik Ashutosh Dwivedi Sahil Jadhav Zaid Shaikh Jyoti Kundale	Ad Campaign Analytics	NSCFET-2018
Pramod Khillari Sanish Jadhav Mohit Akkanawru Dadaso Arjun Anita Patil	Analyzing and Predicting Concurrency Bugs in Open Source Systems	NSCFET-2018
Sayali Tiple Mayuri Humane Prajakta Pawar Snehal Kale Swapnil Shinde	Sclera Pattern Recognition for Human Identification/Authentication	NSCFET-2018
Namita Bhandoli Srishti Gupta Nikita Gawde Suyog Bilaskar Nilesh Marathe	Smart RTO System	NSCFET-2018
Rituja Singh Bhushan Ambavane Vaibhav Pote Harshwardhan salunkhe Dr. Pallavi Chavan	Mobile application authentication using automatic lip reading	NSCFET-2018
Avajinath Lahamage Dinesh Kharat Shivendu Dabake Abhishek Gharat Nikita Kulkarni	Remote Health Care Monitoring System	NSCFET-2018

Sayali Wani Pratiksha Jadhav Aishwarya Raut Neelam Panse Puja Vakhare	Deaf and Dumb Language Recognition	NSCFET-2018
Mrunalini Sonawale Dheeraj Sandhanshi Leena Nandrekar Suraj Nair Jyoti Deone	Detecting Suspicious account in Money Laundering	NSCFET-2018
Sushmita Patil Shivani Mahadik Priti Jadhav Ms.Varsha Sanap Sneha Mhatre, Dr. Pallavi Chavan	Encryption of Color Images Using Visual Cryptography	NSCFET-2018
Tanvi Shah Samruddhi Patil Shubham Agawane Vaibhav Choudhari Vijaya Waghmare	Virtual Hacking Labs	NSCFET-2018
Tanishq Varhadi Deep Patel Ayush Varhadi Deepali Patil	Smart Shopping Cart Using RFID and GSM Module	NSCFET-2018
Surendra Prajapati Prachi Walmiki Sachin Bhopi Anitha Senathi	Real Time Appointment System	NSCFET-2018
Damini Chandre Hariprasad Nair Manali Chandorkar Neelam Panse Prajwal Ramteke Soumi Banerjee	Travel Guide using Quick Response (QR) Code	NSCFET-2018
Satyenkumar Mourya Anand Choudhari Himanshu Nawalkar Sumit Tukliya Jyoti Joshi	Sound Classification	NSCFET-2018
ShubhamPaskanti HardikPatil RushabhPapanwar KiranPawar VijayaWaghmare	Augmented Reality in Engineering Drawing	NSCFET-2018
Shivani Jadhav Sanjana Kale Bhuvana Iyer Krishnakant Thakur Prof. Dipti Jadhav	Optic Interactive System	NSCFET-2018

Vishal Sanap Harshal Sonje Vishakha Nanote Shubham Tambe Anitha Senathi	Improving Road Safety Using Data Mining Techniques	NSCFET-2018
Pranav Bhagat Aalok Atre Sankalp Bagde Prof. Sujata Mendgudle	Self Driving RC Car	NSCFET-2018
Ganesh N Sumedh P Vishal N	Secured IoT Based Home Automation System	NSCFET-2018
Priyanka P. Durge Prof. Manoj M. Dongre	Analysis of Energy Consumption in Wireless Sensor Network(WSN) using Ant Colony Optimization	NSCFET-2018
Dnyaneshwar ghagare Naresh Humane Mr. Prasad Pathak	Natural Disaster System Management through Social Media	NSCFET-2018
Mayur Manyar Nishant Bhangale Mr. Pratik Kadam	IoT Maneuvered Intelligent Cartesian Plotter System on Android Platform	NSCFET-2018
Rajesh Chaudhari Raviprakash Gupta Kartika Thevar Prof. Kapila Moon	Hand Gesture Recognition using OpenCVs	NSCFET-2018
Prasad G. Patil Ashish S. Patil Pramod A. Khandagale Prof. Pratibha Dhotre	Design and Implementation of Gesture Controlled Pick and Place Robot	NSCFET-2018
Akshay Mogaveera Mihir Mahadik Ritwik Giri Anup Ashok Patil	Self-Driving Robot using Neural Networks	NSCFET-2018
Amit Chowdhury Vaibhav Borkar Gajanan K. Birajdar	Indian Language Identification using Spectrogram based CLBP Texture Features and Neural Network Classifier	NSCFET-2018
Abhilash Pahari Chetankumar More Samidha Malwankar Prof. Nilam Patil	Multifunctional Robotic Arm Using Arduino and IoT	NSCFET-2018

Sneha R. Yaradettin Jagruti A. Kumbhar Mrs . Smitha Raveendran	Automatic Rechargeable Smart Shoes for Blind People	NSCFET-2018
Janmejay Pandey Vivek Nair Aniket Morankar Mrs. Divya K.Shah	Insect inspired Hexapod using Raspberry Pi and Internet of Things	NSCFET-2018
Rutuja Dhumal Rupali More Rupali Galande	Book Reader for Blind Using Optical Character Recognition	NSCFET-2018
Miss.Tehmina Rehman Miss.Sandhya Gaikwad Miss.Shrutika Sapkal Mrs.Smitha Raveendran	Industrial parameters Monitoring Using nrf Protocol	NSCFET-2018
Abhijeet Mahesh Tejas belawale Reshma Nath Payal Jha	Mobile Detector and Uploading DATA on IOT	NSCFET-2018
Pratik Kadam Meghana Shandilya Pradhnya Kadam	Analysis of Diabetic Retinopathy using Feature Extraction method	NSCFET-2018
Girish Pramod Giri Mukesh Dinesh Prajapati Ketan Bharat Salvi Dr Vishwesh Vyawahare	Digital Drafting Apparatus for Real Time Archetyping and Supplemented digital rendering	NSCFET-2018
Mr. Ankur Kulthe Ms. Sreelakshmi K.V. Mr. Tahir Mukadam Prof. Ragini Gaikwad	Automatic Open Drain Cleaning System	NSCFET-2018
Swapnil Mishra Prashant Memane Subhradeep Pathak Pratik Kadam	Self Stabilizing Platform	NSCFET-2018
Anup Shinde Gopal Ture Prathamesh Patil Mrs. Trupti Agarkar	SMART SEED SOWING MACHINE for AGRICULTURE	NSCFET-2018
Gouri D.Khochare Sonali S.Kamble Pooja R. Kshirsagar	IOT based Weather Reporting System	NSCFET-2018

Praful Dhanavade Rohit Kawde Mahesh shinde	Vehicle to Vehicle Communication Through Li-Fi	NSCFET-2018
Ankita Sathyanarayanan Yash Gori Bhakti Khadke Prof. Sthuthi Rachel Joshua	Brain-Waves and Eye Blink Controlled Wheelchair	NSCFET-2018
Kaustubh Padalkar Sangram Mohitepatil Virendra Oak Anup Patil	Density Based Dynamic Traffic Control System	NSCFET-2018
Mihir Gada Vikram Bhanwariya Satyajit Dash Mrs. Kapila Moon	Fire Extinguishing Robot with GSM Module	NSCFET-2018
Sandeep Banerjee Varun Alur Divya Shah Sanket Solanki	Patient Nonspecific Epilepsy Detection using EEG	NSCFET-2018
K Swathy Shrutika Jantre Yogita Jadhav Sushil M. Labde	Design of Closed Loop Buck Converter Using FuzzyLogic Controller	NSCFET-2018
Piyush Thoke Dinesh Mhatre Kaustubh Bhosale Prof. Sakshi Somani	Patient Health Monitoring System Using Zigbee And Gsm Module	NSCFET-2018
Pranav Nandankar Mayuri More Siddhi Nikam	Interactive speech recognition based Augmented Reality.	NSCFET-2018
Vrishabh Sanas Swamy Mudiga Prashant Rashankar Clara Arackel	Speed Control of Electric Vehicle	NSCFET-2018
Nikhil Sarode Surabhi Jadhav Jennefer Sen	Implementation of Time based 3-Axis Capacitive Accelerometer using COMSOL Multiphysics	NSCFET-2018
Aniket D. Patil Rasika S. Joshi Sanket S. Gadhave Prof.Prasad Pathak	OFFICE AUTOMATION USING IoT	NSCFET-2018

Juhi Nagaich Kalyani Chaudhari Sanket Jain	Dr NoPrick	NSCFET-2018
Aniket Wagh Kiran Bora Anchit Tiwari Sanket Solanki	Controlling Various Devices Connected to Wi-fi Based On Internet Of Things (IOT)	NSCFET-2018
Sachin Patwa Jayaraj Rane	Data transmission using Li-Fi	NSCFET-2018
Shantanu Kulkarni Aditya Madhavi Sayali Jathar Ashwini Raorane	CONTACTLESS IDENTIFICATION AND TRACKING OF BAGGAGE TRANSPORTATION AT AIRPORT USING RFID TECHNOLOGY	NSCFET-2018
Aditya Uday Pathak Mayank Rajiv Vaid Priyanka Vankatte Mrs. Shilpa Achaliya	Advance Petrol Pump Station	NSCFET-2018
Himanee Kamble Meghana Kadu Sayali Jagtap Prof. Prasad Pathak	Raspberry Pi based Reading Aid for Blind	NSCFET-2018
Prathamesh Deherkar Shubham Vishnu Patil Ms. Seila Mahapatra Mr. Sushil Labde	Voting Machine using Biometric Fingerprint Sensor	NSCFET-2018
Sanket N.Joshi Akshay V.Kathawate Abhijeet S.Joshi Prof. Sharmila Petkar	E- Fault Simulator of Locomotive Engine	NSCFET-2018
Swapnil Kadam Rashmi Parab Sayli Palkar Savita R. Bhosale	IoT based garbage pollution Monitoring System	NSCFET-2018
Yugal Attarde Gagandeep Saini Jeetu Chaudhari Archana Khodke	Frequency Changer Circuit Based on Cyclo-Converter using Thyristors	NSCFET-2018
Pranita Poojary Akshata Kadam Aniket Pawar Sanket Solanki	GESTURE BASED COMMUNICATION FOR THE DEAF AND DUMB	NSCFET-2018

Supriya Mayekar Mrunalini Nadekar Gaurav Jadhav Mrs. Sujata Mendgudle	Textile Antenna Design Simulation & Fabrication	NSCFET-2018
Thanekar Uday Sharveen Ambekar Srinivas Sumit More Umesh Pranav Mrs Rupali Gulande	Active Impetus Augmentation System	NSCFET-2018
Sayali Bhosale Kalyani Bhopi Roshni Sorte Sharmila Petkar	SMART TROLLEY BASED ON RFID TECHNOLOGY	NSCFET-2018
Sonal More Kundan Patil Kashmira Koli Shubham Mapara	BCI Based EEG Controlled Hand Assistant : Using Signal Processing	NSCFET-2018
Sheetal Bade Archana Dhebe Apurva Patil Dr. Hemlata Patil	Performance Analysis of MIMO OFDM	NSCFET-2018
Shailesh Deshmukh Amit Shelar Gajendrasingh Rajput	Anti-Collision System for SMART Trains	NSCFET-2018
Mandar Pandurang Gawas Sagar Santosh Vichav Akshay Anil Salunke Prof. Vaishali Jadhav	Accident Detection System With Theft Prevention	NSCFET-2018
Vikas Bankar Sonali Kamble Mayuri Ramteke Kapila moon	Smart Grocery Management System	NSCFET-2018
Navneet Sharma Aditya Shinde Prof Sthuthi Rachel Joshua	Library Automation System using RFID	NSCFET-2018
Razeen Kazi Akshay Mani Tripathi Prof. Vaishali.S.Jadhav	Traffic Density Control Using Microcontroller	NSCFET-2018
Monisha Rathore Apurva Pol Sneha Ramgir Dr.Vishwesh Vyawahare	Root Locus Analysis of Complex Order Systems	NSCFET-2018

Chinmay R Kulkarni Ritvik R. Palvankar Nikhil S. Thorat Mr. Gaurav Datkhile	Implementing Computerized and Digitally Mobile Home	NSCFET-2018
Viniti R. Chaudhary Tanvi N. Dongaonkar Rutuja V. Dive	REALIZATION OF DIFFERENT TRANSFER FUNCTION OF CONTROL SYSTEM USING ANALOG COMPONENTS	NSCFET-2018
Akhil Menon Sonali Khobragade Onkar Mhatre Prof. Sakshi Somani	IoT based Portable Health Scrutinization	NSCFET-2018
Aishwarya Sawant Saurabh Salgaonkar Bhagyesh Salgaonkar Dr. M.S. Bhatia	GPS tracking using ARDUINO UNO on GOOGLE EARTH	NSCFET-2018
Pratik Magadwar Shubham Mumbaikar Rohan Gavandi Poornima Talwai	Astute Commuting Elevator (A.C.E.)	NSCFET-2018
Asmita Mutha Pranali Palve Mayur Bhanushali Mrs. Hemlata Biradar	Smart Sign Language Glove	NSCFET-2018
Prasad Tulaskar Mitesh Jambhale Pralhad Kurhade Rutuja Dive	Multi Renewable Input Stand-alone System	NSCFET-2018
Shubham Sonkar Madhura Soman Siddhi Shinde Khushboo Pichhode	Smart-Tech Mirror using Raspberry Pi	NSCFET-2018
Manali Dandekar Sahil Gavankar Akash Ghodekar Savita R. Bhosale	Robot Hand Using Human Gesture	NSCFET-2018
Thorvi Ravindra Firake Priyanka Ashok Gharat Surekha Gaikwad Dr. Sheila Mahapatra	Smart Health Kit	NSCFET-2018
Vaibhav N. Kadam Anay D. Ghatpande Pramod S. Jadhav Pratik J. Kadam	Ball Balancing Robot	NSCFET-2018

Pradnyesh Walve Sania Sehgal Kiran Kamath Dr. Ayush Saxena	IOT BASED HOME MONITORING & CONTROLLING SOLUTIONS	NSCFET-2018
Subbhrajyoti K. Halder Pradeep S. Harname Gaurav S. Ghatwal Prof. Sharmila Petkar	Braille Printer using Android Smartphone	NSCFET-2018
Jagruti Mahajan Ekta Mandhare Prof. Gajanan Birajdar	Classification of Speech and Music using Soft Computing	NSCFET-2018
Ashwini Shaktivel Kumar	Various security issues and challenges in IoT	NSCFET-2018
Sanket Sawant Sachin Yadav Satyanarayan Nadar Mr. Gaurav Datkhile	ACCELEROMETER BASED HAND GESTURE CONTROLLED CAR	NSCFET-2018
Niharika Srivastav Atharva Tipre Vignesh Vanniar Poornima Talwai	Complex Hand Gesture Recognition	NSCFET-2018
Gurpreet Singh Khatri Mayur S. Meher Komal P. Loke Manoj Gofane	Performance Monitoring of PV Solar System Using Virtual Instrumentation	NSCFET-2018
Vaibhav Patil Pratik Mhatre Abhay Yenpure Manoj Gofane	EMBEDDED CAR SAFETY & SURVELLIANCE USING ARDIUNO	NSCFET-2018
Vipul Shinde Rohan Thorat Mrs. Trupti Agarkar	Automated Vehicle Control Using Fuzzy Logic	NSCFET-2018
Amey Wadhavkar Adwesh Tripathy Sanmesh Yadav Manoj Gofane	WIFI EMBEDDED WEBCAM	NSCFET-2018
Siddhesh Assawa Ujjwal Barhate Omkar Nawale Dr. Ayush Saxena	SMART CAR DIAGNOSTICS	NSCFET-2018

Rupak Rajaraman Sarvesh Yelugam Kapil Shejul Dr. Sharad P. Jadhav	Real Time Implementation of Fuzzy Logic Controller for a Hybrid Dynamic System	NSCFET-2018
Hemangi Tandel Roshany Yadav Neha Billava Dr. Ayush Saxena	SMART EYE	NSCFET-2018
Shubham S. Parab Aniket B. Parab Aditya K. Pande Vishwesh A. Vyawahare	Analysis of Switching Transients in circuits with Complex-Order Memory Element	NSCFET-2018
Mr. Aditya Kulkarni Mr. Aditya Neela Yogesh Ghadwal Mrs. Clara Arackel	Camera Stabilizer	NSCFET-2018
Siddhant Shetty Ajinkya Dongre Ashish Gurav Mrs. Archana Khodke	Sun Tracking Solar Panel	NSCFET-2018
Rashmi Falak Nikita Gaikwad Smrut Bandgar	Automated Aircraft Monitoring System	NSCFET-2018
Rohan Mahajan Heramb Khanvilkar Viraj Rane	Neural Network based Motorcycle Ecosystem	NSCFET-2018
Shamika Khedkar Abhishek Hedaoo Viraj Desai Arjun Dhurat	Gadget Charging Station	NSCFET-2018
Akash Ashok Thorat Manas Vishe Shivam Trisal Anup Ashok Patil	Quadquaptor using Ardunio	NSCFET-2018
Aashika Kandan Sonam Thali Vishal V Dubey Mrs. Shamal Salunke	Keeping track on patient's health residing at nursing home using IOT	NSCFET-2018
Yamini Patil Rupali Sarang Sneha Savane Prof. Gajanan Birajdar	Speech Recognition based Medication System for Smart Home	NSCFET-2018

Noopur Deshmukh Pragati Godge Vishakha Dhake Prof.Ramakant Patil	IOT BASED SMART ENERGY METER	NSCFET-2018
Ashish Kadu Shital kadam Ajitkumar Aundhe Mrs. Shamal Salunkhe	Strawberry Leaf Diseases Detection using Image Processing	NSCFET-2018
Rutuja Ghuse Aditya Patil Satlaj Gavali Prof. Vijay R. Dahake	Smart GSM and Bluetooth based electrical appliances Automation System	NSCFET-2018
Shamali Pawashe Shejal Payer Shruti Saple	Optical Sorting using Image Processing	NSCFET-2018
Saquib Rab Prasad Patel Harshit Pandey Bhavesh Digey	Analysis and Detection of Epileptic Seizure using Digital Signal Processor	NSCFET-2018
Amit Dubey Lavanya Naidu Viraj Ingawale Mrs. Sushma Kodagali	Comparison Of RCA And CLA Using Cadence Software	NSCFET-2018
Aakarsh Sinha Rini Cassandra Saurav Kumar Amruta Kulkarni	Alcohol Sensing & Vehicle Control	NSCFET-2018
Pradhan Sukhada Singh Pratima Shinde Khushboo Mrs. Sapkale Pallavi	Self Defence Module	NSCFET-2018
Pratibha Mhatre Ankita Meshram Priya Phadtare Chandrakant Gaikwad	EEG Signal Classification	NSCFET-2018
Samiksha D. Bijagare Shatakshi S. Arya Sneha D. Dhumal	Implementation of GL Derivative using DSP Processor	NSCFET-2018
Pranay Jadhav Rahul Lote Ankita Sardal Bhavesh Digey	HYBRID POWER GENERATIOPN USING ECO-FRIENDLY RAILWAY STATION	NSCFET-2018

Amruta Adsul Pooja Deshmukh Mihir Harshe Dr. Gargi S. Phadke	Automated Guided Vehicle in Store Management	NSCFET-2018
Siddhesh Patil Aditya Tendolkar Kaushik Choughule Prof.Malay Kenia	SMART HELMET USING ARDUINO	NSCFET-2018
Mr.Prathamesh Dakwe, Mr.Pranit Kumbhare., Mr. Nayan Amrutkar Supriya Bhuran	Integrated smart home using embedded systems	NSCFET-2018
Ankita P. Gaikwad, Neena V. Mhatre Tanvi S. Gawde Gaurav Datkhile	IoT BASED PATIENT HEALTH MONITORING SYSTEM	NSCFET-2018
Abhishek Baraskar Rahul Jha Rishikesh Waghmare Deepak Chauham	Old Man's Friendly Robot	NSCFET-2018
Dhanasekaran Pillai Siddharth Suryavanshi Mahesh Prajapati Amal Saxena	HUMMING BASED SONG RECOGNITION SYSTEM	NSCFET-2018
Gaurav Bhokare Anish Salvi Rushikesh Sapkal Yash Parihar	Regulation of Devices using IOT	NSCFET-2018
Vishal Mamidi Rohit Raut Sanket Varadkar Jai Mhatre	Patrolling Robot	NSCFET-2018
Apurva A Sakpal Mithali D. Lohar Nikita S. Bare Mrs. Nilam Patil	Railway Track Geometry System Fault Detection	NSCFET-2018
Nikeeta Shejwal, Rajendra Thakur, Omkar Raut Mrs. Shital Patil	Element Recognization and Sorting Using LabVIEW	NSCFET-2018
Mr. Shubham Jadhav. Mr. Sonaba Khondge. Mr. Amol Avhad	Smart Water Management Based On IOT	NSCFET-2018

Somnath Solaskar. Anmol Singh Divesh Singh. Utkarsh Rai.	Vehicle Security and Safety System	NSCFET-2018
Aniket Dhamankar Akash Bargode Sujay Ambelkar Amol Telore	Traffic Light Control Using Image Processing	NSCFET-2018
Snehal R. Kale Sejal V.Gaikwad Supriya M.Kadam Parag Patil	RFID Based Shopping Trolley System	NSCFET-2018
Shaunak Joshi, Mrunmay Jadhav, Swapneel Raul, S Jyoti Vengurlekar	Design and Development of Amphibious Robot	NSCFET-2018
Mrs. Ekta Sarda	Rising Star Predictor	NSCFET-2018
Mrs. Saguna Ingale	Smart Home	NSCFET-2018
Dr. A.V. Vidhate Mrs. Saguna Ingale	Home Automation and Personal Assistant	NSCFET-2018
Mr. Vishwanath Chikareddi Dr. Leena Ragha	Real time traffic management using Google Maps	NSCFET-2018
Snehal Mumbaikar Mrs. Rajashree Shedge	Octopus- Hybrid Bigdata Integration Engine	NSCFET-2018
Mrs. Swaroopa Bhodhe	Resume Evaluator using Fuzzification	NSCFET-2018
Mrs. Neeraj Sharma	Diabetic Retinopathy Detection	NSCFET-2018

Mrs. Sheetal Ahir	Smart Baggage Handling	NSCFET-2018
Mrs. Neeraj Sharma	A novel approach to IOT based garbage monitoring and management system	NSCFET-2018
Mrs. Puja Padiya Mr. Prathmesh G.	A Conversation Based Personal Shopping Assistant	NSCFET-2018
Mr. Tushar Ghorpade	Smart Retail Based Strategy	NSCFET-2018
Dr. Leena Ragha	Drowsiness Detection System	NSCFET-2018
Mrs. Rashmi Dhumal	Dynamic Load Balancing on Cloud	NSCFET-2018
Mrs. Rajasahree S.	Analysis of Plant Breeding using Hadoop	NSCFET-2018
Mrs. Tabassum M.	Blind Chatbot for Educational Information	NSCFET-2018
Tushar Ghorpade Swaroopa Bhodhe	Fraud Detection using Deep Learning	NSCFET-2018
Mr. Vishwanath Chikareddi Dr. Leena Ragha	Agricultural Drone	NSCFET-2018
Mrs. Puja PAdiya Mr. Prathmesh G.	Semantic Web Search and Page Rank using Hadoop Platform	NSCFET-2018

Mrs. Puja PAdiya Mr. Prathmesh G.	Semantic Web Search and Page Rank using Hadoop Platform	NSCFET-2018
Mrs. Rajasahree S. Snehal Mumbaikar	Octopus- Hybrid Bigdata Integration Engine	NSCFET-2018
Dr. A.V.Vidhate	RAIT-TPC PORTAL	NSCFET-2018
Mrs.Sumitra T.V.	RAIT Chat Bot	NSCFET-2018
Dr. A.V.Vidhate	Proactive Network Failure Detection using Machine Learning	NSCFET-2018
Mrs.Rubi Mandal	Artficial Intelligence Based Mobile Trip Planner	NSCFET-2018
Dr. A.V.Vidhate	RAIT Media Server : Exploring Social Networks for Educational purpose	NSCFET-2018

Annexure iv

Faculty involvement in Curriculum development/BOS

Name of faculty	Dept.	BOS member	Syllabus setting	Curriculum development	Orientation program
Dr.Arpita Palchoudhury	ES	No	Yes	Yes	
Dr.Sharmila Petkar	EL	Yes	Yes	Yes	Yes
Dr. Vishwesh Vyawahare	EL	No	Yes	Yes	Yes
Ms. Poornima Talwai	EL	No	Yes	Yes	Yes
Ms. Sushma Kodagali	EL	No	Yes	Yes	Yes
Dr. Ashish Jadhav	IT	No	Yes		
Nilima Dongre	IT	No	Yes	Yes	Yes
Reshma Gulwani	IT	No	Yes		Yes
Mukesh D Patil	EXTC	Yes	Yes	Yes	
Amruta Chintawar	EXTC	No	Yes	Yes	
Dongre Manoj M.	EXTC	No	Yes	Yes	
Dr. Ashwini Naik	EXTC	No	Yes	Yes	
Dr. Chandrakant Gaikwad	EXTC	No	Yes	Yes	
Vijay Dahake	EXTC	No	Yes	Yes	
Dr. Sharad P Jadhav	IN		Yes	Yes	
Mr. Shirish S. Kulkarni	IN		Yes		
Dr. Gargi S. Phadke	IN		Yes		
Mr. Vivek P. Khalane	IN		Yes		
Mr. Ramakant S. Patil	IN		Yes		
Mrs. Shamal Salunkhe	IN		Yes		
Ms. Diptee S. Patil	IN		Yes		
Mrs. Ragini M. Gaikwad	IN		Yes		
Mr. Malay H. Kenia	IN		Yes		
Dr. Leena Ragha	Comp		Yes	Yes	
Dr. A. V. Vidhate	Comp		Yes	Yes	
Vanita Mane	Comp		Yes		
Rajashree Shedge	Comp		Yes		
Puja Padiya	Comp		Yes		
Tushar Ghorpade	Comp		Yes		
Aditi C.	Comp		Yes		

Namita Pulgam	Comp		Yes		
Shilpa Kolte	Comp		Yes		
Tabassum Maktum	Comp		Yes		
Rashmi Dhumal	Comp		Yes		Yes
Trupti Patil	Comp		Yes		Yes
Prathamesh Gunjgur	Comp		Yes		
Bhavana Turorikar	Comp		Yes		
Harsha Saxena	Comp				Yes
Shilpa Kolte	Comp				Yes

Annexure v

Details of workshops/training programs/seminars for 2017-18

Computer Department:

Sr. No.	Workshops/Training Programs	Dates	Budget Sanctioned (INR)
1	Workshop on "Linux Shell Programming and managing Linux in network environment".	18th & 19th sep 2017	47,000/-
2	Workshop on "Network Simulator NS2"	23rd sep 2017	
3	Expert Lecture on " Algorithm and Complexity"	23rd sep 2017	
4	Expert Lecture on "Latex- Report Writing"	23rd sep 2017	
5	Expert Lecture on "Advanced Microprocessors".	25th Sep 2017	
6	Expert Lecture on "Network Security".	27th sep 2017	
7	Expert lecture on "VHDL Programming".	28th Sep 2017	
8	Expert Lecture on "Application of Discrete Mathematics".	29th Sep2017	
9	Expert Lecture on "Tools in Artificial Intelligence"	29th Sept 2017	7,500/-
10	Workshop on "Current trends in Web Development".	10th & 11th sep 2017	21,600/-
11	Hands on Session On "GUI Programming".	26th October 2017	
12	Microsoft Long Term Training Program.(IOT & JAVA)	3rd July 2017 to 13 July 2017	
13	Expert Lecture on "Career tracks in Data Science"	12th Jan 2018	800/-
14	Expert Lecture on "Blooms Taxanomy"	29th Jan 2018	
15	Hands on Session on "3D Animation using Blender Tool"	17th & 18th Feb 2018	35,980/-
16	Workshop on "Machine Learning for Data Science and Analytics"	25th Jan to 30th Jan 2018	82,144/-
17	Expert Lecture on ‘Interface Design and Enterprise Design’	16th March, 2018	10,000/-
18	Microsoft Long Term Training Program Data base Revised session	10th Feb 2018	
19	Workshop on ‘Python Web Development with Django Framework’	23rd March, 2018	10,000/-
20	Expert Lecture on "Energy Efficient Green Cloud Computing"	26th March 2018	
21	Expert Lecture on "Key Components and Technologies in Deploying Mobile Computing Applications."	28th March 2018	3000/-
22	Expert Lecture on "Network Monitoring and Analysing Evidence Logs."	28th March 2018	3000/-
23	Expert Lecture on "XML"	3rd April 2018	0/-
24	UG Project work	28th Feb 2018	57,168/-

25	UG Paper Publications	28th Feb 2018	20,100/-
26	Expert Lecture on "Desigining Parallel Algorithm for High Performannce Computing"	21st March 2018	0/-
27	Expert Lecture on " Parallelism for performance enhancement of Computers.	10th April 2018	0/-
28	Expert Lecture on " Software Project Management"	11th April 2018	0/-
29	Code Off Hackathon	30 & 31 March 2018	83,218/-

Electronics Department:

Sr. No.	Workshops/Training Programs	Dates	Budget Sanctioned (INR)
1	Hands on training on Raspberry-Pi	5/03/2018 - 6/03/2018	16,900/-
2	L2 Robotics Workshop	24/02/2018- 25/02/2018	49,600 /-
3	Hands on Training on MEMS Sensimer	14/02/2018	2800 /-
4	Control system Design and Simulation using LabVIEW	08/02/2018- 09/02/2018	5500 /-
5	Ethical Hacking(IEEE)	27/01/2018- 28/01/2018	8,500 /-
6	Winter Internship	18/12/2017- 04/01/2018	0
7	Hands -on training on Simulation of Electrical Network using MATLAB/Simulink	23/09/2017- 24/09/2017	7500 /-
8	Hands-on training on VLSI programming and Implementation using CPLD	16/09/2017- 17/09/2017	6000 /-
9	Hands-on training on Virtual Imstumentation using LabVIEW	16/09/2017- 17/09/2017	5000 /-
10	Scientific report writing using LaTeX	15/09/2017, 23/09/2017, 27/09/2017	0
11	Hands-on training on Power Electronics Simulation using MATLAB and Simulink	09/09/2017- 10/09/2017	7500 /-
12	Witricity Workshop	08/09/2017	15,000 /-
13	Scientific report writing using LaTeX	19/08/2017	0
14	PCB workshop 2	9/9/2017- 10/9/2017	12,000 /-
15	Hands-on training on open source Embedded Platform Arudino	12/8/2017- 13/8/2017	15,325 /-
16	PCB workshop	12/08/2017- 13/08/2017	14,000 /-
17	Simulation and Layout drawing Cadence Software	5/8/2017-6/8/2017	7000 /-
18	Summer Internship	3/7/2017- 20/7/20/17	0

19	Energy scenario and Energy Security	22/02/2018	0
20	3D Printing for Electronics Engineers	08/12/2017	0
21	Motivational Talk for Self-development	04/10/2017	0
22	Engineering Life to a corporate professional: Important decision and choices	04/10/2017	0
23	Introduction to Filters	24/09/2017	0
24	Tech talk on FACTS Implementation in Power System	15-09-2017	0
25	Introduction to drivers	10/09/2017	0
26	Recent trends in Power Electronics	10/09/2017	0
27	Tech talk on, Is Technology Transforming Healthcare	08-09-2017	0
28	Discussion on Communication in Microgrid Cell	13/7/2017	0

Instrumentation Department:

Sr. No.	Workshops/Training Programs	Dates	Budget Sanctioned (INR)
1	Training on "PLC & SCADA" by SIEMENS	21/3/2018 to 25/03/2018	2,23,200
2	Embedded Systems using ARM Mbed for IOT	16-18 Feb 2018	1,11,900

Electronics & Telecommunication Department:

Sr. No.	Workshops/Training Programs	Dates	Budget Sanctioned (INR)
1	Get Started with Arduino (A hands on Introductory Workshop)	5th to 6thAugust 2017	29,950/-
2	Enhancing Analytical Skills in Electronic Devices and Circuits using Simulation	16 to 17 September 2017	8,770/-
3	Get started with Arduino: A hands on introductory worksopobservatory	23 to 24 September 2017	20,870/-
4	Antenna Designing Tool Using EM-Cube	23 to 24 September 2017	12,400/-
5	VHDL Workshop	23 to 24 September 2017	8,450/-
6	Scientific Report Writing Using Latex	22 September and 27 September 2017	Nil
7	Fundamentals of Speech Signal Processing using MATLAB	7 to 8 Octobar 2017	4,500/-
8	Antenna Design using EM-Cube Simulation Software	7 to 8 October 2017	14,000/-
9	Network simulator NS2 software	20, 21st January,2018	2,900/-
10	Product specific learning in communication engineering	4th to 19th January, 2018	4,400/-
11	Introduction to Arduino	30/01/2018-31/01/2018	7,450/-

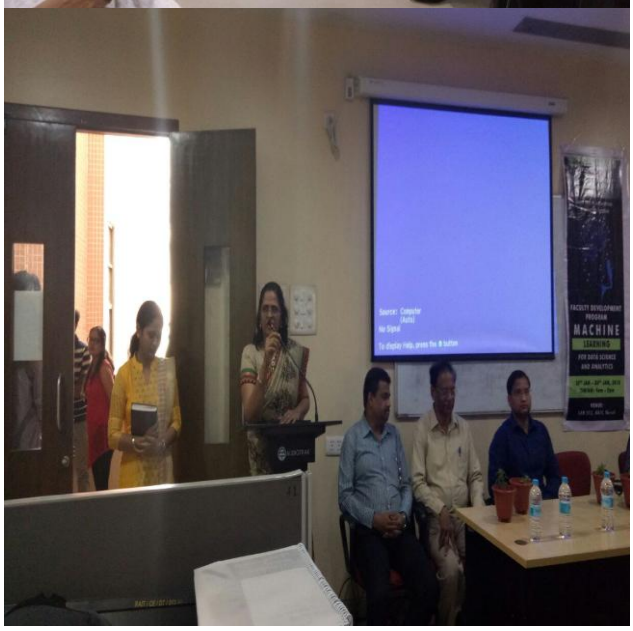
Engineering Sciences:

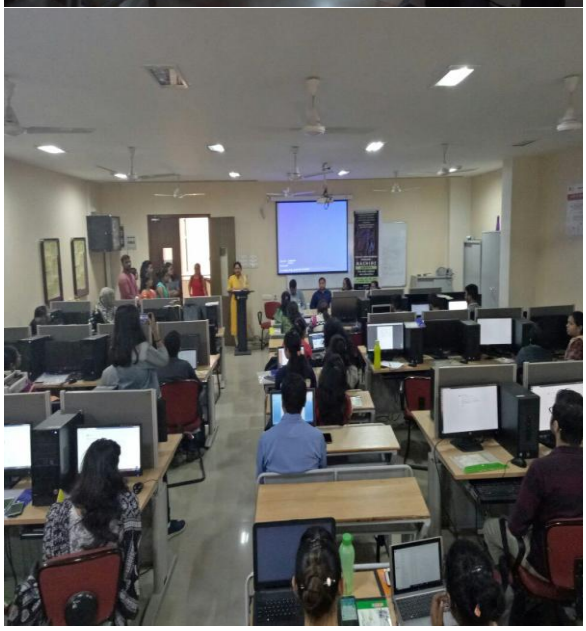
Sr. No.	Workshops/Training Programs	Dates	Budget Sanctioned (INR)
1	Spoken English Workshop	17/02/2018	10,000
2	Workshop on “Applications of Mathematics in Engineering and Real Life”	26/02/2018 to 28/02/2018	80,000
3	A Seminar on Applications of Devices in Engineering & Technology	01-03-2018	20,000
4	Workshop on German Language		31,000

Information Technology Department:

Sr. No.	Workshops/Training Programs	Dates	Budget Sanctioned (INR)
1	Workshop on Core Java	16th September 2017	4500
2	Workshop on VHDL	14thSeptember 2017	4500
3	Latex Training	12th Jan and 19th Jan 2018	3200
4	Orientation Program for Automata Theory	1stJan 2018	2730
5	One Week FDP on Machine Learning For Data Science and Analytics	25thJan to 30thJan 2018	54763
6	Expert Talk on " Career oppunrtunity in IT"	18th Sept., 2017	
7	Expert Talk on "Data Science Buzz Word"	22nd Sept., 2017	
8	Expert Talk on :Wireless Sensor Network"	10th October 2017	
9	Expert Talk on " Cloud Computing"	17th October 2017	

CATEGORIES OF WEB APPLICATIONS


FACULTY DEVELOPMENT PROGRAM
MACHINE
LEARNING



Annexure vi

Details of major and minor projects

Details Regarding Major projects

Srno	Completed	Outlay
1.	Marathi Document Clustering	75,000
2.	Development of Glucose sensor using Nanostructured metal oxide and polymer-metal oxide composite thin films	81,000
3.	Estimating the effect of different types of dust on crystalline photovoltaic(PV) modules performance	80,000
4.	Development of BCI based Functional Electrical Stimulation(FES) System for Neuro -rehabilitation	68,000
	Total	304,000

Srno	Ongoing	Outlay
1.	Text Analytics using NLP Approach	75,000
2.	Image Tamper Detection	75000
3.	Novel Approaches for Data Summarization using Bigdata	75,000
4.	3D Printer (2nd Version)	1,34,109
5.	Optimization of thickness of Spiro-OMeTAD layer used as hole transport material for efficient perovskite solar cells	60,000
6.	Modelling and control of ball on beam control setup	149000
	Total	434,000

Details Regarding Minor projects

Srno	Completed	Outlay
1.	RAIT_DB_MINER_TOOL (Level 1)	50,000
2.	Retransmission strategy for broadcast in VANET	50,000
3.	RAIT_PR_TOOL (Level 1)	50,000
4.	RAIT_PR_TOOL (Level 2)	50,000
5.	Diagnosis of cardiac activities tractable on raspberry Pi	23,985
6.	Small plant for herbal juice production and automation through MITSUBISHI PLC	25,000
7.	Mobile air pollution monitoring system	20,000
8.	Heat exchanger automation using YOKOGAWA Centum VP DCS	15,000
9.	Development of a dynamic online model for measurement of attainment of PO's & PEO's as per specifications	65,000
10.	Drafting using Glassified Technology	16,000
11.	Neural Network Based Motorcycle IoT Ecosystem	65,000
12.	BRAILLE Printer using Optical Character Recognition	12,500
13.	Library Assistant Bot	20,000
14.	HEXAPOD	15,000
15.	Ball Balancing Robot	53,000
16.	Smart Elevator System	28,000

17.	IoT Based Intelligent 2D plotter	15,000
18.	IoT based security system	11,200
19.	CanSat	10,000
20.	RAIT_DB_MINER_TOOL (Level 2)	50000
21	Development of Prototype Testing Facility for the Degaussing of Naval Ships and Submarines	50,000/-
22	Design, Modelling and Fabrication of Bandpass filters in Ultrawide Band (UWB) Applications	51,000/-
23.	Speech Based Laryngeal Cancer Detection System	58,501/-
24.	Mine Mapping and 3D reconstruction of the Mine	49,729
25.	Distributed Control system based extraction and filteration of atmospheric water for domestic and agricultural applications	56022/-
26.	IOT based health monitorng system using ARDUINO for bed ridden patients	35500
27.	Design and development of IOT lab automation	48522
28.	Analysis and detection of pre-epeliptic seizures using DSP for EMG signals	41300
29.	RAIT_DB_MINER_TOOL (Level 2)	50000
30	Development of Prototype Testing Facility for the Degaussing of Naval Ships and Submarines	50,000/-
31.	Design, Modelling and Fabrication of Bandpass filters in Ultrawide Band (UWB) Applications	51,000/-
32	Speech Based Laryngeal Cancer Detection System	58,501/-
33.	Mine Mapping and 3D reconstruction of the Mine	49,729
34.	Distributed Control system based extraction and filteration of atmospheric water for domestic and agricultural applications	56022/-
35.	IOT based health monitorng system using ARDUINO for bed ridden patients	35500
36.	Design and development of IOT lab automation	48522
37.	Analysis and detection of pre-epeliptic seizures using DSP for EMG signals	41300
38.	Electronic Sensory System for visually impaired using ultrasonic phased array	27,000/-
39.	IoT based Home Monitoring and Control solution	16,000
40.	Highly efficient solar cell using tracking system and cover	8,000
	Total	1526000/-

Srno	Sanctioned	Outlay
1.	Neural Network Based Motorcycle Ecosystem	30,000 /-
2.	Design and comparision of 2*2 patch array antennas using RT duroid at milimeter wave frequency and fabrication	22,000 /-
	Total	**52,000/-**

Annexure vii

Details of research publications (journals)

Author Name	Title/Topic	Name of the Journal	Citation Index	Impact Factor	H-Factor	Year of Publication
Chandrakant J. Gaikwad, Pradip Sircar	Bispectrum_based technique to remove cross terms in quadratic systems	Signal, Image and Video Processing	0	1.102	0	2017-18
Vibha Saxena Sridevi Chandran, Sipra Choudhury, Ajay Singh, Kailasa Ganapathi, Manmeet Kaur, Tanvi, Kunal P. Muthe, Dr. Sanjay C. Gadkari	Morphology driven sensitivity enhancement of MEH-PPV Langmuir-Blodget Films on Plastic substrates for NO2 gas	Chemistry Select	0	Yet to come	0	2017-18
Jagannath Nirmal,Mukesh Zaveri,Suprava Patnaik,Pramod Kachare	Novel approach of MFCC based alignment and WD-Residual modification for voice conversion using RBF	Neuro computing	0	3.3	0	2017-18
Divya Shah; Rohit Chaurasiya; Khushboo Pichhode, Vishwesh Vyawahare; Mukesh Patil,	“FPGA Implementation of Fractional-order Chaotic Systems”, International Journal of Electronics and Communications, Elsevier, Volume 78, Pages 245-257, 2017.	International Journal of Electronics and Communications	4			2017-18
Dr. Vishwesh Vyawahare Mr. Gaurav Datkhile Mr. Pratik Kadam	Artificial neural network approximations of linear fractional neutron models	Annals of Nuclear Energy		1.312	5	2018

Dr. Vishwesh A Vyawahare	On the stability of linear fractional-space neutron point kinetics (F-SNPK) models for nuclear reactor dynamics	Annals of Nuclear Energy	2	1.312	5	2018
Dr. Vishwesh A Vyawahare	BWR stability analysis with sub-diffusive and feedback effects	Annals of Nuclear Energy	3	1.312	5	2017
Dr. Vishwesh A Vyawahare	Nuclear reactor with subdiffusive neutron transport: development of linear fractional-order models	International Journal of Dynamics and Control	4	0.368	5	2017
Dr. Sukanta Sabut	Delineation of the ischemic stroke lesion based on watershed and relative fuzzy connectedness in brain MRI	Medical & Biological Engineering & Computing, springer	1	1.916/SCI	8	2017
Dr. Sukanta Sabut	Delineation and classification of liver cancer using level set method in CT images	Biomedical Engineering: Applications, Basis and Communications		0.233	8	2017
Dr. Sukanta Sabut	Multiresolution wavelet transform based feature extraction and ECG classification to detect cardiac abnormalities	Measurement ,Elsevier	4	SCI: 2.359	8	2017
Dr. Sukanta Sabut	Segmentation of Diabetic Wound by Multidimensional Clustering for Quantitative Assessment of Healing Process	Bentham Science Publihser	1	0.308	8	2018
Mr.Gajanan K. Birajdar	Blind image forensics using reciprocal singular value curve based	Multimedia Tools and Applications		1.53	4	2017

	local statistical features					
Mr.Gajanan K. Birajdar	A Methodology to Segment Retinal Vessels Using Region-Based Features	Information and Communication Technology for Sustainable Development			4	2018
Mr.Gajanan K. Birajdar	Subsampling-Based Blind Image Forgery Detection Using Support Vector Machine and Artificial Neural Network Classifiers	Arabian Journal for Science and Engineering		0.865	4	2018
Mr.Gajanan K. Birajdar	Blind method for low-order interpolation detection in digital images	Australian Journal of Forensic Sciences		0.778	4	2017
Dr. Sheila Mahapatra	Voltage stability enhancement by IGSA-FA hybrid Technique implementation for optimal location of TCSC	Journal of Engineering Science and Technology		o.57	5	2017
Mrs. Shivangi Agarwal	EEG Signal enhancement using cascaded S-Golay filter	Elsevier: Biodmedical Signal Processing and Control	2	2.214	3	2017
Shilpa Kolte,Dr.J W Bakal	Big Data Summarization using Novel clustering Algorithm and semantic Feature Approach	International journal of rough sets and data analysis	no	0.6	no	July-Sep 2017

Mr. Shirish S. Kulkarni	Diagnosis of Abdominal Cancer Tumour by Fusion Technique and Treatment using Radio Frequency Heat	Indian Journal of Science and Technology				2017-18
Mr. Shirish S. Kulkarni	Biorthogonal Halfband Perfect Reconstruction Filterbank for Multimodal Image Fusion	Indian Journal of Science and Technology				2017-18
Mr. Prashant A. Bansode	Filterbank for Multimodal Image Fusion	International Journal of Dynamics and Control				2017-18
Mr. Sushant N. Pawar	Modified reduced order observer based linear active disturbance rejection control for TITO systems	ISA Transactions		3.394		2017-18

Annexure viii

Consultancy details

Sr. no	Name of consultancy project	Revenue generated
1.	Upgradation of Training and Placement Portal	125000
2.	Certification Course in Advance Computing-I	40,000
3.	Textile Inventory Stimulator	50,000
4.	Six days hands on Java Programming	70,000
5.	Smart Pump Control System	30,000
6.	Design of Laboratory set up	50000
7.	Design of experimental setup	60000
8.	Ambi Technical Campus	500000
9.	Design and deployment of magnetic measurement system for comparison of data and simulation	150000
	Total	1075000

Annexure ix

Conferences organized by the Institution

Sr.No.	Title	Level	Sponsoring agency
1	NSCFET-18	National	RAES
2	Tech-talk	National	RAES
3	Srijan Project Competition	University	RAES
4	Avishkar Interuniversity Research Competition	State	University of Mumbai

Annexure x

Details of collaborations and linkages

Collaborations:

Sr. No.	Industry/Company	Level
1	TCS	International
2	ORACLE	International
3	MICROSOFT	International
4	IBM	International
5	SMURH	National
6	AR research Publication	National
7	IIT B	National
8	BARC	National
9	TCS-Tata Consultancy Services Ltd.	International
10	ORACLE- Oracle Indoa Pvt Ltd.	International
11	ATS Infotech Pvt. Ltd.- MICROSOFT AEP(Authorized Education Partner)	National
12	IBM	International
13	INTERNSHALA(Schollverse Educare Pvt. Ltd.	National
14	Global Talent Track Pvt. Ltd.	International
15	Indeed Inc.	National
16	IBM	International
17	IIT B	National
18	BARC	National
19	NIT	National
20	COEP	National
21	Dambharemic Mexico	International
22	AIIMS,Odisha	National

Linkages:

Sr. no.	Linkages
1	Collabration with IITB
2	Collabration with BARC
3	Guest Lecture at Shah and Anchor Kuchchi Engineering College
4	Guest Lecture at Don Bosco Institute of Engineering
5	Guest Lecture at Karmveer Bhaurao Patil College of Engineering, Satara,
6	Reviwer in Journal of Dynamics and control, Springer
7	Reviwer in ICNTE
8	Reviwer in ICATE
9	Reviwer in IJST
10	Reviwer in ETRI

11	Reviwer in NSCFET
12	Reviwer in ICCASP
13	Reviwer in DAE SSPS
14	TCS-Tata Consultancy Services Ltd.
15	ORACLE- Oracle Indoa Pvt Ltd.
16	ATS Infotech Pvt. Ltd.- MICROSOFT AEP(Authorized Education Partner)
17	IBM
18	Cypress
19	Eduvance
20	Reviewer in NSCFET
21	Guest Lecture at Shah and Anchor Kuchchi Engineering College
22	Guest Lecture at Terna Engineering College
23	Session Chair for Internationl Conference

Annexure xi

Details of patents

Patent Name	Applied By	Year	Applied or Granted
A novel System & Method to find a target in unknown area using Mobile Sensor Node (MSN) equipped with Global Positioning System (GPS).	Dr. Mininath Nighot	2017-18	APPLIED
System and Method for Facilitating Selection and Allocation of Students for Internship Program.	Dr. Vivek Kumar Singh	2017-18	APPLIED
Laboratory setup for learning Fractional-order Control Systems	Ms. Divya Shah, Dr. Mukesh D. Patil , Dr. Vishwesh A. Vyawahare, Mr. Rohit Chaurasiya, Ms. Khushboo Pichhode	2017-18	APPLIED
Efficient Fractional order Propostional-Internal-Derivative(FO-PID) Controller Implementation with Artificial Neural Network Approximation using Digital Signal Processor	Dr. Vishwesh A. Vyawahare, Mr. Pratik Kadam, Mr. Gaurav Datkhile, Dr. M. D. Patil	2017-19	APPLIED
FPGA based hardware system for implementation of complex order dynamical systems	Ms.Divya Shah, Dr. Vishwesh A. Vyawahare , Dr. M. D. Patil, Mr. Rohit Chourasiya, Ms. Khushboo Pichhode	2017-20	APPLIED
Compact Setup for experimentation of Variable-order Systems in Laboratory	Mukesh D. Patil, Sharad P. Jadhav and Vishwesh A. Vyawahare	2017-21	APPLIED
A Novel Laboratory Setup to Study Advanced Nonlinear and Robust Controller Concepts	Prasiddh Trivedi, Mukesh D. Patil, Vishwesh A. Vyawahare, Pratik Kadam, Divya Shah and Gaurav Datkhile	2017-22	APPLIED
Earthquake Rescue and Relief Operations Robot	Mr. Vaibhav N. Kadam Mr. G. H. Saket Seshadri Mr. Pramod S. Jadhav Mr. Anay D. Ghatpande Ms. Divya Shah Dr. Vishwesh A. Vyawahare	2017-18	APPLIED
Portable and Smart Electric Utility Dashboard Outlet (P.S.E.U.D.O.) Device for precondition smart phone charging	Mr. Mukesh Prajapati Mr. Ketan Salvi Mr. Girish Giri Ms Divya Shah Dr Vishwesh A. Vyawahare	2017-18	APPLIED
Braille printer using android smartphone	Mr. Subhrajyoti Halder Mr. Pradeep Harname Mr. Vikas Bankar	2017-18	APPLIED

	Mr. Gaurav Ghatwal Prof. Sharmila J. Petkar		
Gesture Recognition for Alphabet using Motion Sensor and DTW	Ms. Niharika Srivastav Mr. Vignesh Vanniar Mr. Atharva Tipre Mrs. Poornima Talwai	2017-18	APPLIED
IoT Maneuvered Intelligent Cartesian Plotter System on Android Platform	Mr. Mayur Manyar Mr. Nishant Bhangale Mr. Pratik Kadam Mr. Gaurav Datkhile	2017-18	APPLIED
Elevator System to Avoid False call from floor	Mr. Rohan Gavandi Mr. Shubham Mumbaikar Mr. Pratik Magadwar Ms. Poornima Talwai	2017-18	APPLIED
Compact setup for experimentation on variable-order systems in laboratory	Dr. Mukesh D. Patil Dr. Sharad P. Jadhav Dr. Vishwesh A . Vyawahare	2017-18	APPLIED
A Novel Laboratory Setup to Study Advanced Nonlinear and Robust Controller Concepts	Dr. Prasiddh Trivedi Dr. Mukesh D. Patil Dr. Vishwesh A. Vyawahare Mr. Pratik Kadam Ms. Divya Shah Mr. Gaurav Datkhile	2017-18	APPLIED
Novel Special Function Based FPGA Hardware System for Time Domain Response Calculation of Linear Fractional-Order Systems	Mr Sangeeth Sadanand Ms Divya Shah Dr Vishwesh A. Vyawahare	2017-18	APPLIED
DSP Based Hardware Emulator for Complex-Order Fractional Dynamical System Using Artificial Neural Network Approximation Technique	Mr. Pratik Kadam Mr. Gaurav Datkhile Dr. Vishwesh Vyawahare Ms. Divya Shah	2017-18	APPLIED
IoT based Cortic Pad for sleep analysis	Mr Rohan Stanley Dr. Ramesh Vasappanavara, Ms Ananya Iyer Mr Rohit Chaurasiya Ms Divya Shah	2017-18	APPLIED
Low-cost modular laboratory crawler bot setup to demonstrate two axis holonomic motion.	Mr. Girish Giri Mr. Mukesh Prajapati Mr. Ketan Salvi Ms. Divya Shah Dr. Vishwesh A. Vyawahare	2017-18	APPLIED
Digital Drafting apparatus for real time archetyping and supplemented digital rendering	Mr. Girish Giri Mr. Mukesh Prajapati Mr. Ketan Salvi Dr. Vishwesh A. Vyawahare Ms. Divya Shah	2017-18	APPLIED
FPGA Based Hardware System For implementation of Complex-order Dynamical System	Ms. Divya Shah, Dr. M. D. Patil, Dr. Vishwesh Vyawahare, Mr. Rohit Chaurasiya, Ms. Khushboo Pichhode	2017-18	APPLIED
Efficient Fractional-order Proportional-Integral-	Dr. Vishwesh A.	2017-18	APPLIED

Derivative (FO-PID) Controller Implementation with Artificial Neural Network Approximation using Digital Signal Processor	Vyawahare, Mr. Pratik Kadam , Mr. Gaurav Datkhile, Dr. M. D. Patil		
Laboratory setup for learning fractional order control system.	Dr. Vishwesh A. Vyawahare , Dr. M. D. Patil	2017-18	APPLIED
Compact Setup for experimentation of Variable-order Systems in Laboratory	Mukesh D. Patil, Sharad P. Jadhav and Vishwesh A. Vyawahare	2017-18	APPLIED

Annexure xii

Research awards by faculty

Name of faculty	Dept	Award	Level(nat/Inter/university/college)
Ms. Swarup Mhatre	EXTC	Avishkar-2018 2dn Prize	University
Dr. Vishwesh Vyawahare	EL	Book Chapter Published (2)	
Parag Patil	EL	Books/Book Chapter Published	
Navin Singhania	EL	Books/Book Chapter Published	
Chaitanya Jage	EL	Books/Book Chapter Published	
Sujata Mendgudale	EL	Avishkar-2018 1st Prize	University
Mrs.Dipti Jadhav	IT	Avishkar Competition-Consolation in TH category	University
Mr. Nilesh Marathe	IT	Avishkar Competition- 3rdRank PPG category	University
Mrs.Nikita Kulkarni	IT	Avishkar Competition-First Rank in PPG category	State

Annexure xiii

NCC/NSS details

Sr. No.	NSS Events	Date	No. of Participants
1	Christmas celebration 2017 with underprivileged children	23/12/2017	32
2	Diwali celebration with Underprivileged children	11/10/2017	32
3	Holi Celebration 2017 with underprivileged children	03/03/2018	43
4	Kite Festival 2018	1/02/2018	100
5	Joyfest Fun events for underprivileged children	3rd October to 5th October 2017	13
6	Tree Plantation Drive	11/08/2017	197
7	Udaan To organize fund raiser Marathon	11/02/2018	3200
8	Army day Fund Collection	15/01/2018	4275
9	Self Defense Workshop	23rd March 2018	270

Sr. No.	NCC Events
1	Blood Donation
2	Tree Plantation
3	Swach Bharat Abhiyan
4	Road Safety Awareness Campaign
5.	Personality Development
6.	Path Finding Event
7.	Annual Training Camp
8.	Firing Camp

Sr. No.	NCC /NSS Awards
1	Best Garden Award by NMMC
2	Biogas plant award
3	NCC diver
4	NCC ‘C’ Certificate

NSS events:

NCC events:

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xviii	Gender sensitization programmes	9
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Annexure xiv

Details of no. of computers

Department	Desktops		Laptops		e-kiosks	
	Existing	Added	Existing	Added	Existing	Added
Computer	403	0	49	5	1	0
IT	218	35	39	5	1	0
electronics	90	17	49	5	1	0
ET	71	12	58	5	1	0
Instru	55	7	34	2	1	0
Engg. Sciences	26	0	33	5	0	0

Annexure xv

DCF for CO, PO, PEO, vision, mission attainment

PROGRAM OUTCOME ATTAINMENT

Ramrao Adik Institute of Technology, Nerul			
Department :	Computer		
Class :	B.E.	RAIT Admit Code :	13CS1-8
Name of HOD:	Dr. Leena Ragha	SDRN. No. :	150

Semester	Program Outcome Attainment (in %)											
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
I	84.95	85.76	95.02	85.98	85.10	87.15	92.91	85.60	86.48	87.65	84.92	99.30
II	85.44	85.51	93.01	83.48	87.11	85.80	90.69	86.07	82.22	85.31	82.42	97.69
III	77.44	76.08	77.73	83.39	85.91	83.15	74.81	91.84	89.84	90.28	78.75	82.96
IV	82.60	82.50	81.58	81.33	80.43	84.02	83.33	81.98	82.64	87.66	81.88	81.85
V	90.77	89.56	88.48	88.95	89.68	86.66	89.86	92.60	89.30	89.34	85.57	90.98
VI	90.95	88.27	87.76	88.86	89.21	87.91	87.35	91.56	89.61	88.85	90.86	89.68
VII	89.89	88.49	87.81	88.34	88.87	87.63	88.91	87.74	87.88	90.51	89.30	89.08
VIII	87.57	88.56	88.88	88.68	88.73	88.90	87.68	89.07	89.94	88.15	89.08	88.26
Avg. PO Attainmen	86.2	85.59	87.53	86.13	86.88	86.4	86.94	88.31	87.24	88.47	85.35	89.98

PO Attainment

Ramrao Adik Institute of Technology, Nerul			
Department :	Computer		
Class :	B.E.	RAIT Admit Code :	13CS1-8
Name of Faculty :	Dr. Leena Ragha	SDRN. No. :	150

Program Outcome	PO Attainment	Program Educational Objectives								
		PEO-1	PEO-2	PEO-3	PEO-4	PEO-5	PEO-6	PEO-7	PEO-8	PEO-9
P_a	86.2	25.86	17.24	17.24	8.62	8.62	8.62	0	0	0
P_b	85.59	25.68	25.68	8.56	17.12	8.56	8.56	0	0	0
P_c	87.53	17.51	26.26	17.51	17.51	8.76	8.76	0	0	0
P_d	86.13	17.23	25.84	17.23	17.23	8.62	25.84	0	0	0
P_e	86.88	8.69	26.07	17.38	8.69	8.69	17.38	0	0	0
P_f	86.4	8.64	25.92	17.28	17.28	25.92	17.28	0	0	0
P_g	86.94	8.7	17.39	17.39	17.39	26.09	17.39	0	0	0
P_h	88.31	8.84	8.84	17.67	17.67	26.5	17.67	0	0	0
P_i	87.24	8.73	17.45	8.73	26.18	17.45	17.45	0	0	0
P_j	88.47	8.85	26.55	17.7	17.7	17.7	17.7	0	0	0
P_k	85.35	8.54	17.07	17.07	17.07	17.07	17.07	0	0	0
P_l	89.98	9	18	27	9	9	27	0	0	0
PEO Attainment (in %)		86.82	87.01	87.29	87.03	87.14	87.27	0	0	0

Program Education Objective (PEO) atainment (Computer Engineering)

Ramrao Adik Institute of Technology, Nerul			
Department :	Computer		
Class :	B.E.	RAIT Admit Code :	13CS1-8
Name of Faculty :	Dr. Leena Ragha	SDRN. No. :	150

Program Educational Objectives	PEO Attainment						
		Mission-1	Mission-2	Mission-3	Mission-4	Mission-5	Mission-6
PEO-1	86.82	26.05	17.37	8.69	26.05	8.69	0
PEO-2	87.01	17.41	26.11	8.71	17.41	17.41	0
PEO-3	87.29	26.19	17.46	17.46	17.46	8.73	0
PEO-4	87.03	8.71	8.71	17.41	26.11	26.11	0
PEO-5	87.14	8.72	8.72	26.15	26.15	17.43	0
PEO-6	87.27	17.46	26.19	8.73	8.73	26.19	0
Mission Attainment (in %)		87.12	87.14	87.15	87.08	87.14	
Final Mission Attainment		87.126					

Mission attainment (Computer Engineering)

VISION ATTAINMENT

Ramrao Adik Institute of Technology, Nerul			
Department :	Computer		
Class :	B.E.	RAIT Admit Code :	13CS1-8
Name of Faculty :	Dr. Leena Ragha	SDRN. No. :	150

Program Educational Objectives	Mission Attainment	Vision-1	Vision-2	Vision-3	Vision-4	Vision-5	Vision-6
Mission-1	87.12	26.14	17.43	17.43	17.43	17.43	0
Mission-2	87.14	8.72	26.15	26.15	17.43	17.43	0
Mission-3	87.15	8.72	17.43	26.15	17.43	26.15	0
Mission-4	87.08	17.42	26.13	26.13	17.42	17.42	0
Mission-5	87.14	8.72	26.15	17.43	26.15	17.43	0
Total Vision Attainment (in %)		87.15	87.15	87.15	87.15	87.15	
Final Vission Attainment		87.15					

Vision attainment (Computer Engineering)

Annexure xvi

Training/Counselling for Higher Studies, Campus Placement (for 2017-18)

Sr.No	Program	Target Group	Duration	Month-Year
1	Tata Consultancy Services (TCS) : FDP by Mr. Sanjay Kimbahune and Mr. Akhilesh Srivastava	Faculty	1 day	10-01-18
2	T.I.M.E. : Aptitude Workshop for Final Year Students	B.E Students	7 days	27-06-17
3	T.I.M.E. : Aptitude Workshop for Final Year Students	B.E Students	7 days	16 to 27/06/2017
4	Roy Eddington-Charles & Associates : SoftSKills Workshop for Final year students	B.E Students	7 days	16 to 27/06/2017
5	-T.I.M.E. : Aptitude Workshop for Final Year Students	B.E Students	7 days	28 to 07/06/2017
6	Roy Eddington-Charles & Associates : SoftSKills Workshop for Final year students	B.E Students	7 days	28 to 07/06/2017
7	T.I.M.E. : Aptitude Workshop for Final Year Students	B.E Students	7 days	17 to 09/07/2017
8	-Roy Eddington-Charles & Associates : SoftSKills Workshop for Final year students	B.E Students	7 days	17 to 09/07/2017
9	T.I.M.E. : Aptitude Workshop for Final Year Students	B.E Students	7 days	15 to 06/08/ 2017
10	Roy Eddington-Charles & Associates : SoftSKills Workshop for Final year students	B.E Students	7 days	15 to 06/08/ 2017
11	T.I.M.E. : Aptitude Workshop for Final Year Students	B.E Students	7 days	15 to 06/08/ 2017
12	- Roy Eddington-Charles & Associates : SoftSKills Workshop for Final year students	B.E Students	7 days	15 to 06/08/ 2017
13	Morgan Stanley : Aptitude for Internship Program	B.E Students	1 day	19-07-17
14	Tata Consultancy Services (TCS) : TCS remote internship Seminar	T.E Students	1 day	11-08-17
15	Tata Consultancy Services (TCS) : TCS student connect seminar	B.E Students	1 day	05-09-17
16	Tata Consultancy Services (TCS) : TCS Technova	B.E Students	1 day	19-01-18
17	Tata Consultancy Services (TCS) : Java Query Solving sessions	B.E Students	1 day	05-02-18
18	Tata Consultancy Services (TCS) : Pre-ILP Training	B.E Students	2 days	12 & 13/02/2018
19	Tata Consultancy Services (TCS) : FDP by Mr. Sanjay Kimbahune and Mr. Akhilesh Srivastava	B.E Students	1 day	10-01-18
20	GNU : GNU Java training session	B.E Students	3 days	19 to 24/12/2017

21	QSpider : QSpider java training session	B.E Students	1 day	13-08-17
22	Surya Media Ventures : workshop on written communication skills	B.E Students	1 day	24-08-17
23	Morgan Stanley : PPT for Internship Program	B.E and T.E students	1 day	15-07-17
24	Indian Navy : Indian Navy seminar	B.E and T.E students	1 day	31-07-17
25	Mastek Deep Blue : brief idea about the deep blue competition.	B.E and T.E students	1 day	10-08-17
26	Barclays Visit : Youth Employablity Initiative	B.E Students		
27	JPMC : Interaction	B.E Students	1 day	28-02-18
28	QSpider : QSpider C training session	B.E Students	3 days	09 to 11/09/2017
29	Tata Consultancy Services (TCS) : Agile methodology and Scrum	B.E Students	1 day	14-07-17
30	Tata Consultancy Services (TCS) : AIP session by TCS	B.E Students	1 day	01-09-17
31	Barclays GTT : Barclays connect with program	B.E Students	1 day	06-02-18
32	- Tata Consultancy Services (TCS) : Jile project Promotion	B.E Students	1 day	15-02-18
33	Barclays GTT : Workshop by Mr. Rajeev Gadhi	B.E Students	1 day	24-02-18
34	GNU : GNU Java training session	B.E Students	5 days	19 to 24/12/2017
35	QSpider : QSpider java training session	B.E Students	1 day	13-08-17
36	- Surya Media Ventures : workshop on written communication skills	B.E Students	1 day	24-08-17

Annexure xvii

Parent-Teacher Meeting and counseling of students

Annexure xviii

Gender sensitization programs

Self defense workshop for women

Annexure xix

Student participation and awards in sports and cultural and technical events

1) Student participation in sports:

Sr. No.	Event (games / sports)	No. of participants	Level
1	Football boys	15	National
2	Football girls	5	National
3	Table tennis	5	National
4	Badminton	5	National
5	Volleyball	12	National
6	Taekwondo	5	National
7	Cricket	15	National
8	Swimming	4	National
9	Snooker	4	National
10	Athletics	4	National
11	Carrom	4	National

2) Awards in sports:

Sr. No.	Event (sports)	No. of Students	Rank/Medal	Level (st/nat/int)
1	Football boys	15	1	National
2	Football girls	1	1	International
3	Table tennis	5	3	Mumbai University
4	Carrom	5	1	National
5	Snooker	4	3	National
6	Badminton	5	3	Mumbai Univeristy

7	Taekwondo	5	1	National
8	Volleyball	15	1	State

3) Student participation in cultural events:

Mumbai University Youth Fest'17-18

Electronics Department

Sr No.	Name	Event
1	Smruti Bandgar	Marathi Monoact
2	Purva Ambavane	Marathi One act play
3	Aniket Pawar	Hindi skit
4	Rohan Bhanushali	Marathi One act play
5	Nikita Kadam	Hindi skit

Computer Engineering

Sr No.	Name	Event
1	Shubham Gurav	Marathi Skit
2	Bhushan Patil	Marathi One act play
3	Parvati Sohani	Marathi One act play

Electronics and Telecommunication

Sr No.	Name	Event
1	Sayan Bhattacharya	English Debate
2	Chhayal Bharambe	Marathi Skit
3	Ekta Dhobley	Marathi Skit
4	Aniket Rathod	Hindi Skit, Marathi One Act Play
5	Amey Karbhari	Marathi One act play
6	Utkarsha Devikar	Installation

Instrumentation

Sr No.	Name	Event
1	Unmesh Dange	Marathi Skit
2	Udaipurwala Ali Asgar	Hindi Skit
3	Prasad Phadke	Marathi Skit
4	Abhay Patole	Hindi Skit, MarathiOneact play
5	Dhanashree Gadhikar	Hindi Monoact
6	Geet Gori	Marathi One act play
7	Ramakrishna Iyer	Hindi Skit
8	Rupesh Kadam	Hindi Skit, Marathi Skit
9	Aditya Ayyar	Hindi Skit, Marathi Skit

Information Technology

Sr No.	Name	Event
1	Leena Nandrekar	Marathi Skit
2	Mrunalini Sonavale	Installation
3	Aniket Singh	Installation

4) Awards in cultural events:

Mumbai University's Youth Festival (Zonal Round)

Sr.no	Event	Prize Won
1.	Marathi mono-act	First Prize
2.	Marathi one act play	second prize
3.	Marathi skit	second prize
4.	Hindi skit	consolation prize
5.	Hindi mono-act	consolation prize
6.	Debate (English)	consolation prize

Mumbai University's Youth Festival (Final Round)

Sr.no	Event	Prize Won
1.	Hindi Skit	First Prize
2.	Installation	Second Prize
3.	Marathi Monoact	Third Prize
4.	Marathi Skit	Consolation
5.	Short Film Making	First Prize

INTERCOLLEGE COMPETITIONS

Sr.no	Institute Name	Prize Won
1.	Mumbai University's Youth Festival 2017-18	Hindi Skit- First Prize
2.	University of Mumbai Thane sub campus.	Hindi Skit- First Prize
3.	K J Somaiya college of engineering, Vidyavihar.	Hindi Skit- First Prize
4.	Joshi Bedekar college, Thane.	Hindi Skit- First Prize
5.	Fr.C.Rodrigues Institute of Technology, Vashi.	Hindi Skit -Second Prize
6.	Institute of Chemical Technology, Matunga.	Hindi Skit -Second Prize

7.	Terna college of Engineering, Nerul.	Hindi Skit -Second Prize
8.	Mumbai University's Youth Festival	Marathi skit- Consolation Prize
9.	Pillai's College of Engineering, Panvel.	Marathi Skit-Second Prize
10.	DY Patil college of Biotechnology, Belapur.	Marathi One Act Play - First Prize
11.	"Species'18 " DY Patil college of Biotechnology, Belapur.	Marathi One Act Play -Best Actress
12.	Dr.D.Y. Patil School of Biotechnology, Belapur.	Second Prize in Duet singing
13.	Fr.C.Rodrigues Institute of Technology, Vashi.	First prize in Duet Singing
14.	KJ Somaiya Medical College.	First prize in Duet Singing
15.	Vidyalankar Institute of Technology	F irst Prize in Solo Singing
16.	Fr.C.Rodrigues Institute of Technology, Vashi.	F irst Prize in Solo Singing
17.	KJ Somaiya Medical College	F irst Prize in Solo Singing
18.	Pillais College of Engineering	F irst Prize in Solo Singing
19.	VJTI, Matunga.	F irst Prize in Solo Singing
20.	Joshi Bedekar college, Thane.	F irst Prize in Solo Singing
21.	MIT College, Kothrud.	Second Prize Solo Singing
22.	National Level Qawwali Competition	Silver Medal
23.	Indian Group Song in Indradhanushya State Level Inter-University Competition.	Gold Medal
24.	Western Group Song in Indradhanushya State Level Inter-University Competition.	Gold Medal
25.	Dr. D.Y. Patil College of Law. Footloose Dance Crew	First Prize

26.	KJ Somaiya Institute of Management Studies & Research, Vidyavihar.	First Prize
27.	Sydenham Institute of Management Studies, Churchgate. Footloose Dance Crew	First Prize
28.	Birla Institute of Technology & Science Hyderabad Footloose Dance Crew	First Prize
29.	LTCOE, Koparkhairne. Footloose Dance Crew	First Prize
30.	Fr.C.Rodrigues Institute of Technology, Vashi. Footloose Dance Crew	First Prize
31.	Amity University, Panvel. Footloose Dance Crew	Third Prize

5. Awards in technical events.

Sr. No.	Event	Name of Student	Level	Type of award
1.	Smart India Hackathon, Kolkata Ministry of Health and Welfare.	Akash Jaiswal Ramit K. Harshal Desale Shrey Dingra Ayushi Agrawal Pratik Salunke	National	1st Prize
2.	Mumbai Hackathon	YashPuthran SauravKanchan Jatin Parab Owais Khan	Inter College	3rd Prize
3.	Algorithm 4.0, Hackathon, Held at AIKTC Panvel	Dhanesh Katre Anurag Ghosh Amaan Shaikh Monis Bana	Inter College	2nd Prize
4.	CSI Mumbai chapterTechnext2018 held at IIT Bomaby.	AditiSakhare Abhisavaliya DeveshNaik HarshitVirkar	District	Best student project award
5.	CSI Hackathon 2018 Pre event held at Fr.Conceicao Rodrigues Institute of Technology,Vashi	YashPuthran SauravKanchan Pratik Salunkhe Owais Khan	District	1st prize
6.	Bytecamp 2018, The theme for hackathon was IoT. 57 teams from various college participated in the event. It was held in SIES, Navi Mumbai	YashPuthran SauravKanchan Pratik Salunkhe Owais Khan	District	1st prize
7.	Intercollege technical Quiz Organised by CSI St. Francis Institute of Technology Pre event under Technext 2018 Felicitation at IIt Bombay	Saurabh Jain Sagar Thacker Lalima Sharda	Inter College	3rd prize
8.	Civil war held at Melange-2018, KJ Somaiya college, SIMSR	Saurabh Jain AnitBasu	District	2nd prize
9.	33rd All India University Association Inter University Youth festival, West Zone	Saurabh Jain AnitBasu	State	1st prize Gold medallist
10.	Mumbai University 50th Youth festival, Inter college team quiz	Saurabh Jain	District	1st Runners up

	2017	AnitBasu		
11.	NTPC electron quiz 2017, National finals	Saurabh Jain AnitBasu	National	3rd prize
12.	NTPC electron quiz 2017, Mumbai qualifier	Saurabh Jain AnitBasu	District	3rd prize
13.	ACM ICPC Asia Amritapuri Double –Site Regional 2017, Coimbatore	SauravKanchan AkshayPakhle PratilSalunkhe	National	Participation
14.	"Public key searchable encryption using elliptice curve Diffie-Hellman cryptography" ICIRTE2017, in association with IEEE Bombay section	SauravKanchan AkshayPakhale AnimeshBarmekh JitendraRajpurohit	National	Best paper award
15.	National Conference on advancements in computer and information technology, NCACIT -18 Ambi, Pune	Kshitija Suryanvanshi Swati Rao AnujaShinde KarishmaBagla	Intercollege	Best paper award
16.	International Conference on Innovation and Research in Technology and Engineering, Mumbai	AkshayPakhale	National	Best poster award
17.	National Conference on Advancements in computer and Information Technology- 18, D.Y Patil college of Engineering, Pune with paper titled Get Set Shop	Rakshanda Parande,Taishna Patel,Aniket Phatane,Sohan Karkera,Vanita mane	Inter College	Best paper award
18.	National Conference on Advancements in computer and Information Technology- 18, D.Y Patil college of Engineering, Pune with paper titled Web personalization for Restaurant Recommendation System	Charulata Joshi, Rubi Mandal,Dipasha Sodhia,Palakh kanwar	Inter College	Best paper award
19.	National Conference on Advancements in computer and Information Technology- 18, D.Y Patil college of Engineering, Pune with paper titled Determining Document Relevance using keyboard extraction	Sachin Jadhav,Vinay patil,Akash Mhatre,Tushar Ghorpade, pawan Lokapur	Inter College	Best paper award

20.	National Conference on Advancements in computer and Information Technology- 18, D.Y Patil college of Engineering, Pune with paper titled Multimedia Content Security using AES RSA	Varada Shanware,Dhanashree Patil,Sumithra TV, Pranjal Gomare,Pranjali	Inter College	Best paper award
21.	National Conference on Advancements in computer and Information Technology- 18, D.Y Patil college of Engineering, Pune with paper titled Student Performance analysis and Prediction	KshitijaSuryvanshi Swati Rao AnujaShinde KarishmaBagla, Rashmi Dhumal	Inter College	Best paper award
22.	National Conference on Advancements in computer and Information Technology- 18, D.Y Patil college of Engineering, Pune	SuhasJiman AkshayJadhav RupeshTayde	National	Participation
23.	TCS Finorama held at VJTI,Technovanza	Saurabh Jain Pushkaraj Joshi	Inter College	Ist Runner Up
24.	Workshop on Information Security & Cyber Forensics	Rupesh Tayde	Inter College Level	Participation
25.	E Fest 18 Organised by Bghaus Enterpreneur Cell,COE,Pune	Anit Basu	Inter College Level	Participation
26.	Cognition 2017, SIES Graduate School of Technology	Jayesh Chavan	Inter College	Participation
27.	Web Master Cognition 2017, SIES Graduate School of Technology	KunalIndore	Inter College	Participation
28.	ICIT 2017 Student Research Symposium, Bhuvneshwar	NileshUnde SandeepYadav KshitijaKulkarni PrajktaUgalmugle SiddharthKaul	National	Participation
29.	Snack Down 2017	SauravKanchan	National	Secured rank 729 pre elimination round
30.	Cerebration The Business Line Quiz	Saurabh Jain AnitBasu Thakur	District	Participation
31.	Sweden India Nobel Memorial	Saurabh Jain	Inter College	Participation

	Quiz, Prin. L. N. Welingker Institute of Management and Research,Mumbai-2017	AnitBasu Thakur		
32.	Avishkar Research Convention 17-18, Presented Research Project titled “Motion Mirror”	Aishwarya Tandel	District	Participation
33.	Bitcamp 2018, SIES Graduate School of Technology,navi Mumbai	Jayesh Chavan	Inter College	Participation
34.	Ultimate Coder,VJTI, Matunga	Siddhant Singh	InterInstitute	Second prize
35.	Economic Reforms 2025 ,D. Y. Patil University	Amit Gawai	InterInstitute	Participation
36.	Project competition Mastek Ltd.	Rohini Girase,Shweta Godse	National	Second Runnerup
37.	International Journal of Engineering Research in Computer Science and Engineering (IJERCSE):Video Compression using GSM and Satellite Telemetry	1. Shivani Bhalerao 2. Shweta Kamat 3. Simran Gosai		Participation
38.	(IJERCSE):Network Security Implementation Layer using Voice Biometric	Amit Gawai	National	Participation
39.	3rd National Conference on Advancement in Computer and Information Technology(NCACIT-18) :Two step authentication using colour codes and variable length password	1. Chirag Pilane 2. Akshay Patil 3. Rohan Pawar	National	Participation
40.	(NCACIT-18):Image Forgery Detection	1. Pallavi Singh 2. Atharv Rege 3. Siddhesh Shinde	National	Participation
41.	(NCACIT-18):Automated Indicators for Vehicles	1. Akshay Mulik 2.Sanchita Bhadani	National	Participation
42.	(NCACIT-18):Security Implementation using E-LogBook	1.Dhiren Kumar Wadhe 2. Ryan Raj 3.Yogendra Shinde 4.Mayuresh Shinde	National	Participation
43.	(NCACIT-18):Identifying users across multiple different Social	1.Nimisha Gopalakrishnan	National	Participation

	Networks	2. Ajinkya Pawar 3. Divya Reddy 4.Zahra Thanawala		
44.	(NCACIT-18):BooksStack	1.Aishwarya Shetty 2. Aman Banka 3. Nilesh Prajapati 4. Rhea Pradhan	National	Participation
45.	(NCACIT-18)Geofenching for a disaster information system	1. Ganesh Satpute 2. Prashant Jinde 3. Prasad Chavan 4.Pawan Chaudhary	National	Participation
46.	(NCACIT-18):BI for Restaurant Start ups	1. Aniket Singh 2.Aniruddha Prabhu 3. Shikhar Rattan 4. Abhishek Rao	National	Participation
47.	Avishkar:Character Recognition Using Nueral Network	1. Shweta Godse 2. Rohini Girase	State	Participation
48.	Avishkar:AgriGuruZ	1. Niyati Chopra 2. Gaurav Mulchandani 3. Riya Bhargava 4. Rajit Gohel	State	Participation
49.	Avishkar:Smart RTO System	1. Namita Bhandoli 2. Shrishti Gupta 3. Suyog Bilaskar 4. Nikita Gawde	State	Participation
50.	Avishkar:Optic Writer	1. Krishnakant Thakur 2. Shivani Jadhav 3. Bhuvana Iyer 4. Sanjana kale	State	Participation
51.	eyantra	Ajit Mutalik , Vineet Vinod Menon	National	Best Hardware Design
52.	Avishkar	Swarup Mhatre	National	Zonal PG - 2nd price
53.	IoT based Intelligent 2D Plotter	Mayur Manyar, Nishant Bhangale	National	Cresendo -2018 2nd prize
54.	IoT based Intelligent 2D Plotter	Mayur Manyar, Nishant Bhangale	National	Prakalpa – 2018 1st prize
55.	Library assistant robot	Vivek Bhandigare, Tejas Bhoir, Shubham Chavan, Swapnil Patil	National	Prakalpa – 2018 1st Prize
56.	Omni_Crawler	Girish Giri, Mukesh	National	Matrix-2017 1st Prize

		Prajapati, Ketan Salvi		
57.	Omni_Crawler	Girish Giri, Mukesh Prajapati, Ketan Salvi	National	Srijan – 2018 3rd Prize
58.	Omni_Crawler	Girish Giri, Mukesh Prajapati, Ketan Salvi	National	Cresendo -2018 Consolation Prize
59.	Glassified	Girish Giri, Mukesh Prajapati, Ketan Salvi	National	PROCOM 1st Prize
60.	Glassified	Girish Giri, Mukesh Prajapati, Ketan Salvi	National	NSCFET-2018 Best Paper
61.	Ball Balancing Robot	Anay Ghatpande,Vaibhav kadam,Pramod Jadhav,G.H. Saket Seshadri	National	NSCFET 2018 1st Prize
62.	Neural Network Based Motorcycle Ecosystem	Rohan Mahajan, Heramb Khanvilkar, Kartikey Kawadkar, Viraj Rane	National	Crescendo 2018 2nd prize
63.	Neural Network Based Motorcycle Ecosystem	Rohan Mahajan, Heramb Khanvilkar, Kartikey Kawadkar, Viraj Rane	National	Prakalpa 2018 Consolation
64.	Neural Network Based Motorcycle Ecosystem	Rohan Mahajan, Heramb Khanvilkar, Kartikey Kawadkar, Viraj Rane	State	EYIC 2018 Merit
65.	Neural Network Based Motorcycle Ecosystem	Rohan Mahajan, Heramb Khanvilkar, Kartikey Kawadkar, Viraj Rane	National	Tantragyan 2018 1st Prize
66.	Neural Network Based Motorcycle Ecosystem	Rohan Mahajan, Heramb Khanvilkar, Kartikey Kawadkar, Viraj Rane	National	Srijan 2018 2nd Prize
67.	Neural Network Based Motorcycle Ecosystem	Rohan Mahajan, Heramb Khanvilkar, Kartikey Kawadkar, Viraj Rane	National	NSCFET 2018 Best Paper
68.	Indian Language Identification using spectogram based textual features	Ashish Jog, Omkar Jugade, Atharva Shrikant	National	TECHPLUSE 18 1st Prize

69.	Indian Language Identification using spectogram based textual features	Ashish Jog, Omkar Jugade, Atharva Shrikant	National	ICARUS 18 2nd Prize

Annexure xx

Recruited faculty details

Sr. No.	Name of person	Qualification	Designation
1.	DR VIVEK KUMAR SINGH	Ph.D. Information Technology	ASSTT. PROFESSOR
2.	DR BHARTI ANURAG JOSHI	Ph.D in computer Science and information tech	PROFESSOR
3.	DR. BHARTI VISHANDAS NATHWANI	Ph.D Mathamatics	ASSTT. PROFESSOR
4.	Dr. AMIT KAILASH BARVE	Ph.D. Computer Engineering	Associate Professor
5.	Dr. YOGESH BHASKAR GURAV	Ph.D. Computer Science and Engg.	PROFESSOR
6.	DR GAWANDE JAYANAND PRALHADRAO	Ph.D INSTRUMENTATION	PROFESSOR
7.	DR. MININATH K. NIGHOT	Ph.D. Computer Science and Technology	PROFESSOR
8.	DR C. VARALAKSHMI	Ph. D. Chemistry	PROFESSOR
9.	VAIRAGKAR RAVINDRA RAMESH	ME MECHANICAL	ASSTT. PROFESSOR
10.	GHOGARE SAYALI RAJESH	ME EXTC	ASSTT. PROFESSOR
11.	MAHAJAN MADHURA VISHWAS	ME EXTC	ASSTT. PROFESSOR
12.	DR. TRIVEDI PRASIDDH K.	Ph.D. Control System	Associate Professor

13.	DESHMUKH SAYALI S.	M.TECH IN Electrical Engg.(CONTROL SYSTEM)	ASSTT. PROFESSOR
14.	DESHMUKH SHITAL BHARAT	ME COMPUTER	ASSTT. PROFESSOR
15.	PATHAN SANOBAR ADNAN KHAN	M.E Computer Engineering	ASSTT. PROFESSOR
16.	SAWARBANDHE MAHESH DIGAMBAR	M.Tech in Communication Systems	ASSTT. PROFESSOR
17.	GUPTA SURENDRA KUMAR	M.Tech Digital Communication	ASSTT. PROFESSOR
18.	SANGEETH SADANAND	ME ELECTRONICS	ASSTT. PROFESSOR
19.	DAMAHE ROHINI LAKHANLAL	ME COMPUTER ENGG.	ASSTT. PROFESSOR
20.	GANDHI NEHA BIPIN	ME COMPUTER	ASSTT. PROFESSOR
21.	KAMBLE ASHWIN PUNA	M.Tech EXTC	ASSTT. PROFESSOR
22.	PAWAR SOMNATH BHAGWAN	M.Sc. MATHAMATICS	ASSTT. PROFESSOR
23.	RAUT NEHA VIDUSHAK	M.Tech (Power)	ASSTT. PROFESSOR
24.	SHELAR DEEPAK PRAKASH	Ph.D org Chemistry	ASSTT. PROFESSOR
25.	PATIL MEENAKSHI KIRAN	Ms.c. Organic Chemistry	ASSTT. PROFESSOR
26.	WADHAI VIKAS PUNDALIK	M.Tech Instrumentation	ASSTT. PROFESSOR
27.	AGARWAL SHIVANGI SATYENDRA K.	Ph.D. THesis Submitted, M.Tech Electrical	Associate Professor
28.	DANGE SUCHITA SURESH	M.Tech Computer	ASSTT. PROFESSOR

29.	MAGARE DHIRAJ BRIJLAL	M.Tech Instrumentation	Associate Professor
30.	DR. PRAGNAN CHAKRAVORTY	Ph.D. NIT Durgapur ECE	PROFESSOR
31.	MANDHARE ARCHANA PRABHAKAR	BE EXTC	ASSTT. PROFESSOR
32.	SHETTY SHWETHA C.	M.TECH DIGITAL ELECTRONICS AND COMMUNICATION	ASSTT. PROFESSOR
33.	SANJOSE MARY	ME IN VLSI DESIGN ELECTRONICS	ASSTT. PROFESSOR
34.	KARBHARI SIDDHESH NITIN	BE ELECTRONICS AND TELECOMMUNICATIO	ASSTT. PROFESSOR
35.	JADHAV PRAJAKTA ASHOK	M. Sc. Mathamatics	ASSTT. PROFESSOR
36.	CHUDIWAL ROHIT MAHAVIR	M.Tech Communication engg	ASSTT. PROFESSOR
37.	JAWALE HIMANI MOHAN	M. Tech Computer Engineering	ASSTT. PROFESSOR
38.	DR. NAMRATA SINGH	Ph. D Chemistry	ASSTT. PROFESSOR
39.	DR. SABUT SUKANTA KUMAR	Ph.D. ELECTRONICS IIT KHARAKPUR	PROFESSOR
40.	CHOUBEY PRIYANKA	M.Tech Computer Science	ASSTT. PROFESSOR
41.	HECTOR IDA LIONEL	M.TECH IT	ASSTT. PROFESSOR
42.	GUTTE PRIYANKA RAMRAO	B. TECH EXTC	ASSTT. PROFESSOR
43.	SUTAVANI SARANG SUNIL	BE ELECTRONICS	ASSTT. PROFESSOR

44.	SATHE SNEHA CHANDRAKANT	BE IT ME IT	ASSTT. PROFESSOR
45.	WANI SAYALI MANOHAR	M.Tech Extc	ASSTT. PROFESSOR
46.	BANSODE PRASHANT ASHOK	BE Instru, ME Biomedical Instru.	ASSTT. PROFESSOR
47.	DR. SHARMA NEERAJ KUMAR	ME CSE	PROFESSOR
48.	BORKHADE GAURI PANDIT	M.Tech, Electronics System and Communication	ASSTT. PROFESSOR
49.	INGALE GANESH BALIRAM	M.Tech Electroncis and Instrumentaion	ASSTT. PROFESSOR
50.	CHAKOTE SANJIVANI CHANNAPPA	M. TECH ELECTRONICS	ASSTT. PROFESSOR
51.	BORASE RAKESH PRABHAKAR	ME INSTRUMENTATION	Associate Professor
52.	PAWAR SUSHANT NANDKUMAR	M.Tech Instrumentation	ASSTT. PROFESSOR
53.	NAGARE MUKUND BHAUSAHEB	M. Tech Instrumentation	ASSTT. PROFESSOR
54.	JUNWALE PRACHI DEEPAK	M.Tech Computer Science and Engineering	ASSTT. PROFESSOR

Annexure xxi

Best practices

The two best practices outlined in our SSR to NAAC mentioned two entries; Digital Initiative Program or DIP-RAIT and Quality Management Services or QMS-RAIT. These two initiatives had a fairly broad span in spirit and hence a long period of enforcement. Hence they continue in the present year 2017-18 with consolidation of activities and points covered last year and also addition of new activities this year. The goal of these best practices, Their Context and The Practice remains as envisaged and described I SSR- RAIT 2016 presented to NAAC.

Some additions have been done in both the Best Practices to further the cause of betterment and extend the scope. These are described below with benefits perceived from their use by all concerned.

The newly added activities in DIP-RAIT for 2017-18 are

- Introduction of RAIT as a local NPTEL chapter. This has resulted in higher reach for students.
- Implementation of a software project providing Vision-Mission mapping and attainment of the institute with increased scope.
- Implementation of more inclusive indirect attainment measurements in DCF through feedbacks.
- Introduction of Unnati program for first year students to enhance their performance.
- Introduction and wider use of Auto grader (Embedded system) gradeMe.
- Increase of scope and participation in Summer and Winter interships.
- Enhancement in Industrial visits.

These inclusions described above have resulted in greater satisfaction of stakeholders (primarily students) who have generously given good feedback describing the benefits they derived from use of above initiatives.

Similarly, for IQAC-RAIT the additions in 2017-18 are

- A more comprehensive inclusion of Direct and Indirect attainment of COs and POs of each course as outlined in the Digital Course File or DCF to signal the goodness of the results of teaching and learning of each course to the entire class. A good attainment signals a sound T&L and relatively lesser signals a need to revise the course delivery/content.

- Stress on more internships for students and also more industrial visits.
- Enhanced incentives for promoting good research resulting in good publications in non paid journal publications.

- (RAIT Alumni Mentorship program) has been re-launched with the release of a brochure. This initiative introduced avenues for alumni to help students through internships, workshops, training programs and scholarships.
- Continuous uninterrupted operations of biogas facility resulting in running of gas burners in hospital canteen. A larger saving on LPG above 3 to 4 gas cylinders per month and also larger generation from the solar panel was achieved.
- Evaluating outcomes of the training programs/workshops**:** The evaluation method consisted of conducting quiz for the participants and then analyzing their performance and finally coming out with the outcome based on objectives.
- Organization of book fair to promote ease of procuring books for library was held in the institute.

Annexure xxii

Renewable energy (biogas, solar) details