

## **Yearly Status Report - 2018-2019**

Part A			
Data of the Institution			
1. Name of the Institution	RAMRAO ADIK INSTITUTE OF TECHNOLOGY		
Name of the head of the Institution	Dr. Mukesh D. Patil		
Designation	Principal		
Does the Institution function from own campus	Yes		
Phone no/Alternate Phone no.	02227709574		
Mobile no.	9987527625		
Registered Email	principal@rait.ac.in		
Alternate Email	hodin@rait.ac.in		
Address	Ramrao Adik Institute of Technology Sector 7, Phase I, Dr. D. Y. Patil Vidyanagar, Nerul, Navi Mumbai		
City/Town	Navi Mumbai		
State/UT	Maharashtra		
Pincode	400706		

Affiliated	
111111111111111111111111111111111111111	
Co-education	
Urban	
private	
Dr. Sharad P. Jadhav	
02227709574	
9769441164	
iqac.rait@rait.ac.in	
hodin@rait.ac.in	
http://www.rait.ac.in/wp-content/uploads/2018/07/AQAR-2017-18.pdf	
Yes	
http://www.rait.ac.in/homepage/academic- calendar-even-sem-2018-19/	

#### 5. Accrediation Details

Cycle	Grade	CGPA	Year of	Vali	dity
			Accrediation	Period From	Period To
1	A	3.09	2016	16-Sep-2016	15-Sep-2021

## 6. Date of Establishment of IQAC 05-Apr-2016

### 7. Internal Quality Assurance System

Quality initiatives by IQAC during the year for promoting quality culture				
Item /Title of the quality initiative by IQAC Date & Duration		Number of participants/ beneficiaries		
RAIT has been ranked	15-May-2019	3675		

172nd in the National Institutional Ranking Framework (NIRF) survey of 2019.	1	
RAIT has been ranked 11th in Times Engineering Ranking	27-May-2019 1	3675
Regular meeting of IQAC for timely submission of AQAR to NAAC	16-Jul-2018 4	25
Academic audit has been conducted at Department level, institute level and by the team of external experts	15-Mar-2019 2	255
Feedback was collected from students, employees, parents, alumni of various departments. These reports were analysed through IQAC team members &necessary improvements were suggested.	10-Apr-2019 3	3675
Participation in NIRF-2019	02-Nov-2018 25	3675
Planning and Conduction of soft skills development courses for final year students by Training and Placement Cell.	05-Aug-2018 30	700
All departments successfully conducted in- house summer and winter internship program.	20-Dec-2018 30	200
Faculty members were encouraged to conduct weekend workshop.	23-Mar-2019 2	50
Faculty members were encouraged to attend & organise different STTP/Workshop/ FDP.	26-Feb-2019 6	45
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# 8. Provide the list of Special Status conferred by Central/ State Government-UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.

Institution/Departmen t/Faculty	Scheme	Funding Agency	Year of award with duration	Amount
RAIT- Electronics & T	AICTE FDP	AICTE	2019 14	505000

elecommunicatio n Department		
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9. Whether composition of IQAC as per latest NAAC guidelines:	Yes
Upload latest notification of formation of IQAC	<u>View File</u>
10. Number of IQAC meetings held during the year :	4
The minutes of IQAC meeting and compliances to the decisions have been uploaded on the institutional website	Yes
Upload the minutes of meeting and action taken report	<u>View File</u>
11. Whether IQAC received funding from any of the funding agency to support its activities during the year?	No

#### 12. Significant contributions made by IQAC during the current year(maximum five bullets)

- The IQAC has conducted total 15 workshop and across the departmentat the National and International Level. Students organized 3-day technical event, called "Technovate 2019", at an expense of 5 Lakhs during 3-4 April 2019, in which 90 project teams participated in project competition, 130 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.
- As suggested by IQAC, training and placement cell of RAIT conducted preplacement training on soft skill development. IQAC also provided guidance/mentorship to faculty directly and indirectly through HODs concerned and DQAs of all departments.
- IQAC continued to guide and help, all departments for successfully conducting in-house summer and winter internship program. IQAC supported 25 weekend workshop across the department, by faculty members for enhancing the subject and practical knowledge of students.
- RAIT was ranked 150\_200 Rank Band in The National Institutional Ranking Framework (NIRF) survey of 2018. RAIT has been ranked 172nd in the National Institutional Ranking Framework (NIRF) survey of 2019. Department of Electronics Engineering, Electronics Telecommunication Engineering and Computer Engineering are accredited for 3 years by NBA.
- IQAC RAIT conducted academic audits of all the department and suggested measures to improve the academic performance. 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 played a very crucial role to implement the AICTE Exam reform in setting question paper of Internal Assessment (IA) and suggested guidelines.

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# 13. Plan of action chalked out by the IQAC in the beginning of the academic year towards Quality Enhancement and outcome achieved by the end of the academic year

Achivements/Outcomes
Substantial increase in placements
? Remedial Class for weaker students in especially English language, Maths, Physics for 1st year students. ? Books, clothes, food, medicine donation camps to slum dwelling children. ? Evening classes for the under privileged.
Helped in publishing Technical papers by faculty and completion of Ph.D programme.
? Workshop conducted for students on recent development in Technological arena. ? Orientation programmes for faculties on teaching and research methodology. ? Counselling session for students. ? Participation in workshop, conferences, seminars and poster presentation by faculty and students.
Students could understand the advanced topics and present technical papers in workshop/conferences.
? Alumni meetings are continuously arranged, annual alumni meet organised to discuss and enhance wholesome education and development. ? Principal of the institute continuously interacts with the students to discuss various aspects.
? Decreased use of paper and plastic. ? Optimization of existing infrastructure. ? Tree plantation
Institute has given best teacher's award based on academic performance of faculty and also institute and department contribution award. The meritorious students were given scholarship during annual convocation day.

14. Whether AQAR was placed before statutory body ?	Yes
Name of Statutory Body	Meeting Date
NBA, University of Mumbai	09-Mar-2018
15. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to assess the functioning ?	Yes
Date of Visit	09-Mar-2018
16. Whether institutional data submitted to AISHE:	Yes
Year of Submission	2019
Date of Submission	31-Dec-2018
17. Does the Institution have Management Information System ?	Yes
If yes, give a brief descripiton and a list of modules currently operational (maximum 500 words)	RAIT uses software's like Power — Builder and e — TDS. A unique feature of RAIT has been the development of machinebased administration which has resulted in a high level of automation in ease of administrative work. This has been done through project works handed out to BE and ME students. The culture of building projects that are ready to use and meaningful and relevant is seen to enhance student satisfaction and motivation. Of course, the administrative staff is all happy to become the end users for this as it eases their day to day burden. The students also tend to gain as their precious time is saved. Some noteworthy recent Contributions are: ? College Website: The following information is displayed on the college website: a. Online fees payment by students. b. Notifications, Instructions, circulars, Exam schedules for students are displayed on the college website. c. Departmental related information is displayed under each departmental link. d. Information related to Placements, alumni, infrastructure, and achievements is displayed. ? On line student registration and payment. ?

Issue of Ebonafide student certificates ? Issue of online railway concession forms ? Epayment of regular and exam fees ? Learning Management System (LMS) - Lesson Plan, Study material, Presentation, case study, Assignments, University Question paper. ? Digital Course File to maintain records ? Digital Feedback System ? Issue of transfer certificate ? Digital Library Open access to all faculty and students. Digital library consists of ejournals, IEEE, Scopus, and Science Direct. Syllabus books, main Library Catalogue, and other ebooks and eJournals. ? College Intranet: The following information is shared through the intranet to all the teaching and nonteaching staff: a. Notices and Circulars. b. Examinations Display of result. f. Bulk SMSs are sent to all faculties and students through sieges, way2sms. g. Students can select open elective subjects through online and also register online The kiosks that handle this activity are now deployed at many places to enhance Student comfort.

#### Part B

#### **CRITERION I – CURRICULAR ASPECTS**

#### 1.1 - Curriculum Planning and Implementation

1.1.1 – Institution has the mechanism for well planned curriculum delivery and documentation. Explain in 500 words

RAIT is affiliated to the University of Mumbai and follows the curriculum provided by University. At the university level, the Board of Studies (BOS) is constituted with members from industry and expert faculty. The meetings of the BOS are conducted at regular intervals. 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 feedback collected from the stakeholders for curriculum and suggestions is put up in BOS meetings. The collected feedback is analysed in view of the employability and value-based education. The ideas obtained from the various bodies are thoroughly discussed by the experts and forwarded to UoM. Two (02) Faculty members from the institute are the members of the Board of Studies at University level. Five (05) Faculty members were the members of the core committee and 50 faculty members from the institute were actively involved in the revision of the curriculum. In the academic year 2016-17, the choice based credit grading system (CBCGS) has been introduced by the university for UG and PG programs. A concerted effort has been made to enhance interaction between BOS and the institute resulting in increased participation of RAIT faculty in syllabus revision and orientation program. The faculty played an important role in conducting orientation programs along with the Chairman, BOS. RAIT faculty assists Chairman, BOS in preparing the Question Paper bank. The institute uses

a well-defined process to identify the extent of compliance of the University curriculum. The syllabus provided from University is analyzed by Departmental Quality Assurance (DQA) committee and the best-fit faculties are identified to handle the subjects. The senior faculty members and subject experts from the department interacts with the Chairman and members of Board of Studies of the University of Mumbai (UoM) and come to common understanding regarding the content, delivery, and evaluation scheme for the subject. The group of faculty, in consultation with Head of Departments (HODs), decides the course objectives and outcomes for the subject. For this, the course objectives and outcomes prescribed by the university in curriculum and syllabus book are adopted. Also, a few course objectives and outcomes are included by the faculty concerned to improve the compliance of POs and PSOs of the department. COs statement is framed with the help of Bloom's Taxonomy to get spread over all the POs.

#### 1.1.2 - Certificate/ Diploma Courses introduced during the academic year

Certificate	Diploma Courses	Dates of Introduction	Duration	Focus on employ ability/entreprene urship	Skill Development
NA	NA	02/07/2018	0	NA	NA

#### 1.2 – Academic Flexibility

#### 1.2.1 – New programmes/courses introduced during the academic year

Programme/Course	Programme Specialization	Dates of Introduction
No Data Entered/Not Applicable !!!		

## 1.2.2 – Programmes in which Choice Based Credit System (CBCS)/Elective course system implemented at the affiliated Colleges (if applicable) during the academic year.

Name of programmes adopting CBCS	Programme Specialization	Date of implementation of CBCS/Elective Course System
BE	Electronics Engineering	09/07/2018
ME	Electronics Engineering	01/08/2018
BE	Electronics 09/07/2018 Telecommunication Engineering	
ME	Electronics Telecommunication Engineering	01/08/2018
BE	Instrumentation Engineering	09/07/2018
ME	Instrumentation Engineering	01/08/2018
BE	Computer Engineering	09/07/2018
ME	Computer Engineering	01/08/2018
BE	Information Technology	09/07/2018
ME	Information Technology	01/08/2018

#### 1.2.3 – Students enrolled in Certificate/ Diploma Courses introduced during the year

	Certificate	Diploma Course
Number of Students	0	0

#### 1.3 – Curriculum Enrichment

## 1.3.1 – Value-added courses imparting transferable and life skills offered during the year

Value Added Courses	Date of Introduction	Number of Students Enrolled		
A Workshop on Women Empowering Women	08/03/2019	120		
Sahaj Yoga	19/10/2018	121		
Yoga Day	21/06/2019	105		
TEDx	04/06/2019	10		
Sahaj Yoga	15/03/2019	135		
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### 1.3.2 - Field Projects / Internships under taken during the year

Project/Programme Title	Programme Specialization	No. of students enrolled for Fiel Projects / Internships	
BE	Reliance Jio Industries Limited	3	
BE	Oil & Natural Gas Corportaion Limited	1	
BE	TATAChemicals Magadi Ltd.	1	
BE	RAIT Chatbot	4	
BE	Rastriya Chemicals & Fertilizers Limited	14	
BE	Johnson & Johnson	1	
BE	Hindustan Petroleum Corporation Limited	2	
BE	Siemens	11	
BE	Coca-Cola	2	
BE	Mazagon Dock Shipbuilders Ltd.	2	
BE	Aditya Birla	5	
BE	Expertshub Industry skill development centre	1	
BE	Lab-Smart Car Parking System	1	
BE	Smart Ship sensing Bridge Control	1	
BE	Smart Home Security	2	
BE	College Management System V1.1	. 7	
BE	Prediction of fire spread area in forest using Genetic Algorithm	. 2	
BE	Online Transcript System V2.0	4	
BE	Student Profile System	4	

BE	Website Redesign Eastwest Company	4	
BE	Calibration Software Eastwest Company	3	
BE	Account Software for EastWest company	2	
BE	Bone Dencitometer	4	
BE	Student Leave management	6	
BE	DYP Milan	3	
BE	TPC RAIT	7	
BE	ALPEN DESIGN STUDIO	1	
BE	APPLAB	1	
BE	ATS INFOTECH	1	
BE	BPCL	1	
BE	IIT ROORKEE	1	
BE	INOTRACKS	1	
BE	MAJESCO	1	
BE	STUDY LEAGUE IT SOLUTIONS	1	
BE	TCS	9	
BE	TIAA	2	
BE	TRIVIA SOFTWARES	1	
BE	VIGOROUS QMS	1	
BE	BARC	33	
BE	CAPGEMINI	1	
BE	LTI	1	
BE	L&T	2	
BE	JNPT	3	
BE	Summer Internship on IoT	55	
ВЕ	Summer Internship on Machine Learning using IBM Watson	45	
ВЕ	Summer Internship on Cryptography and real world application,	8	
BE	Snake Robot NMMC	3	
ВЕ	Associate Head HR and PR Sunflag Iron and Steel Company	1	
ВЕ	Wipro Technologivcal Limited, Doddakannelli	1	
BE	Hexaware Company, Mahape	1	

BE	Summer Internship	38	
BE	Winter Internship, Electronics & Telecom department	11	
BE	Three weeks internship program on IOT based Project development	45	
BE	Summer internship on innovative project development	39	
BE	Summer internship training and internship program in industrial Python and Machine learning usingIBM Watson	15	
BE	PLC Programming and Applications(Rockwell Automation & Siemens)	1	
BE	Central Railway	6	
BE	PEPSICO INDIA Holdings Pvt. Ltd.	2	
BE	Jacobs Engineering India Pvt. Ltd.	2	
BE	Reliance Industries Limited	4	
BE	(Student Management System)ApplabTechnologies	3	
BE	MICA Lab	8	
BE	SI Group	1	
BE	TATA Power	3	
BE	Intern in IT-Piramal Realty	1	
BE	Market Research Intern (Hirearchy)	1	
BE	Intershala	1	
BE	Project Trainee(Majesco)	1	
BE	XBRL Project (Software Delivery Department) NSEIT	1	
BE	Vitane Pharamaceutical	1	
BE	TCS Remote Intership	1	
BE	Aerus Infotech	2	
BE	Automatic Fire detection System	1	
BE	Digital Notice Board using IoT	3	
BE	Production and Packaging	4	

	of Choclate "	
BE	Vehicular Sensing and Light duration adjustment and control system	1
BE	Automotive IC Engine & Motor Bike Engineering	1
BE	Moodle development	10
BE	Summer Internship :Machine learning using Python	113
BE	Winter Internship, Electronics department	96
BE	Mazgaon Dock Shipbuilders Ltd	3
BE	Jindal Steel Work coated Products Ltd	1
BE	Ashida Electronics	1
BE	Omkar Sales and Service	3
BE	College Management System A. Examination Management Registration Management"	10
BE	Conquer Exams Be a Warrier	6
BE	RAIT Familiarization	12
BE	Feedback System v.1.2	5
BE	Certification Generation System	6
BE	DAD sofa and furniture website	2
BE	Student Mentoring System	9
BE	QMS feedback	10
BE	Website Security	7
BE	Optimized Waste Management System	4
BE	BEST Organisation	1
BE	BEL(Bharat Electronics Limited)	4
BE	Bharat Electronics Work	1
BE	Bharat Sanchar Nigam Limited (BSNL)	53
BE	Central Railway S and T Workshop Byculla,	5
BE	Century Rayon Shahad,Thane	1
BE	Chief Workshop Manager Central Railway,S & T	6

BE	Automotive Pvt Ltd   Ghaziabad, NCR		Workshop,	
DEC.   Technology Bsnk of India.	BE	BE	Automotive Pvt Ltd	1
India.	India.	BE	Mumbai Doordarshan Worli	13
Central Railways,   BE	Central Railways,   EE	BE	•	1
Factory, Devnar	Factory, Devnar   BE	BE		3
Greater Noida.   BE	BE	BE	i i	2
BE	BE	BE		1
BE	BE	BE	HTP Automation	1
BE	BE	BE	Indian Railways	2
Fertilizers   BE	Singnals and   2	BE	Jindal Steel Work	1
Telecommunications   Department Central   Railways, Workshop and   TRAINING Centre (STT)	Telecommunications Department Central Railways, Workshop and TRAINING Centre (STT)  BE Tata Institute of Fundamental Research  BE TEC 1  BE Western Railway 3  BE Bharat Petroleum co.Ltd 1  BE NPCIL 3  BE JSW 2	BE		1
### Fundamental Research  ### BE	### Fundamental Research  ### BE	BE	Telecommunications Department Central Railways, Workshop and	2
BE         TEC         1           BE         Western Railway         3           BE         Bharat Petroleum co.Ltd         1           BE         NPCIL         3           BE         JSW         2           BE         CEAT Ltd.         1           BE         NRSC,ISRO,Hydrabad         1           BE         Metacalfe House DRDO, New Delhi         1           BE         Advaced Data Processing Research Institute Secunderabad,Telangana         1           BE         Spcae Application Centre,ISRO hmadabad         1	BE TEC 1  BE Western Railway 3  BE Bharat Petroleum co.Ltd 1  BE NPCIL 3  BE JSW 2	BE		1
BE Western Railway 3  BE Bharat Petroleum co.Ltd 1  BE NPCIL 3  BE JSW 2  BE CEAT Ltd. 1  BE NRSC,ISRO,Hydrabad 1  BE Metacalfe House DRDO, New Delhi  BE Advaced Data Processing 1  Research Institute Secunderabad,Telangana  BE Spcae Application 1  Centre,ISRO hmadabad	BE         Western Railway         3           BE         Bharat Petroleum co.Ltd         1           BE         NPCIL         3           BE         JSW         2	BE	Tata Power SED	1
### BE ### Bharat Petroleum co.Ltd   1   ### BE	BE         Bharat Petroleum co.Ltd         1           BE         NPCIL         3           BE         JSW         2	BE	TEC	1
BE NPCIL 3  BE JSW 2  BE CEAT Ltd. 1  BE NRSC,ISRO,Hydrabad 1  BE Metacalfe House DRDO, New Delhi  BE Advaced Data Processing 1  Research Institute Secunderabad,Telangana  BE Spcae Application 1  Centre,ISRO hmadabad	BE NPCIL 3 BE JSW 2	BE	Western Railway	3
BE JSW 2  BE CEAT Ltd. 1  BE NRSC,ISRO,Hydrabad 1  BE Metacalfe House DRDO, New Delhi  BE Advaced Data Processing 1  Research Institute Secunderabad,Telangana  BE Spcae Application 1  Centre,ISRO hmadabad	BE JSW 2	BE	Bharat Petroleum co.Ltd	1
BE CEAT Ltd. 1  BE NRSC,ISRO,Hydrabad 1  BE Metacalfe House DRDO, New Delhi  BE Advaced Data Processing Research Institute Secunderabad,Telangana  BE Spcae Application 1  Centre,ISRO hmadabad		BE	NPCIL	3
BE NRSC, ISRO, Hydrabad 1  BE Metacalfe House DRDO, New Delhi  BE Advaced Data Processing 1 Research Institute Secunderabad, Telangana  BE Spcae Application 1 Centre, ISRO hmadabad	BE CEAT Ltd. 1	BE	JSW	2
BE Metacalfe House DRDO, New Delhi  BE Advaced Data Processing 1 Research Institute Secunderabad, Telangana  BE Spcae Application 1 Centre, ISRO hmadabad		BE	CEAT Ltd.	1
Delhi  BE Advaced Data Processing 1 Research Institute Secunderabad, Telangana  BE Spcae Application 1 Centre, ISRO hmadabad	BE NRSC, ISRO, Hydrabad 1	BE	NRSC, ISRO, Hydrabad	1
Research Institute Secunderabad, Telangana  BE Spcae Application 1 Centre, ISRO hmadabad		BE		1
Centre, ISRO hmadabad	Research Institute	BE	Research Institute	1
BE Hindustan Copper Limited 2		BE		1
·	BE Hindustan Copper Limited 2	BE	Hindustan Copper Limited	2

## 1.4 - Feedback System

1.4.1 – Whether structured feedback received from all the stakeholders.

Students	Yes

Teachers	Yes
Employers	Yes
Alumni	Yes
Parents	Yes

1.4.2 – How the feedback obtained is being analyzed and utilized for overall development of the institution? (maximum 500 words)

#### Feedback Obtained

At RAIT, we firmly believe that building a quality academic institution conducting technology related courses requires a conscious and sustained effort spread over several years. That is why from its inception in 1983, there has always been an eye on future, and more importantly, a vision held by the founders of RAIT who have worked hard to see this institution progressively grow in quality and reputation. Quality enhancement is not just adequate infrastructure but much more intensive in terms of commitment and extra effort on the part of Management, Principal, Teachers, and Students. RAIT believes in the allround development of students. All efforts and indices that enhance the preparedness of students to take up independent roles post RAIT education are given a top priority. The stakeholders feedback is considered as a valuable source of information to measure their level of satisfaction. The institution has a well defined policy and a streamlined procedure to collect feedback from internal stockholders (Management, Governing Board Members, faculty, support staff, students, etc) and external stakeholders (employers, industry, alumni, funding agencies, etc.) We conduct a feedback process every semester to improve the teaching learning process, infrastructure, and the entire learning experience for the students during their tenure. The college has initiated an online feedback system (Digital Feedback) to obtain feedback on Vision Mission, academic (subject), teaching faculty, facilities, and various academic activities. Our mission is to continuously upgrade the knowledge base of our manpower, improve infrastructure and use of latest technology/pedagogical tools and update curriculum through periodic feedback from stakeholders to enable students to meet professional requirements and their expectations. The feedback collected from the students and alumni for curriculum and suggestions are communicated to University. RAIT has committees at institute level (IQAC) and department level (DQA) to analyse the collected feedback on regular basis and necessary corrective actions are taken. Every semester the institute conducts an academic and administrative audit. Department level Audit Committee comprises of departmental, interdepartmental as well as external members. Observations and suggestions received during an audit are discussed in the DQA and IQAC committee and corrective measures are taken. The remedial measures are tuned well to be effective. The problem nature, the faculty viewpoint and institute quality standards are all taken into account before the remedial measures are communicated for implementation. IQAC suggests these measures to HODs who then brief the concerned faculty members and ensure implementation. The Action Taken Report or ATR is submitted by HODs to management to complete the cycle of corrective measures and this cycle is repeated every year. This self correcting process is the bedrock of improvement. To cultivate the research initiative and promote academic excellence of faculties annual Research Development award and emerging teacher award are announced during the Teacher's day event. Also, Best Teacher Award has been rewarded from all departments based on Performance Appraisal System and faculty contribution towards administrative work is rewarded with timely benefits.

#### CRITERION II – TEACHING- LEARNING AND EVALUATION

#### 2.1 - Student Enrolment and Profile

#### 2.1.1 - Demand Ratio during the year

Name of the Programme	Programme Specialization	Number of seats available	Number of Application received	Students Enrolled
BE	Electronics Engineering	240	300	221
BE	Electronics & T elecommunicatio n Engineering	240	310	245
BE	Instrumentation Engineering	120	110	73
BE	Computer Engineering	180	231	185
BE	Information Technology	120	157	127
ME	Instrumentation Engineering	18	5	5
ME	Electronics Engineering	18	3	3
ME	Electronics and Telecommunicati on Engineering	18	1	1
ME	Computer Engineering	18	7	4
ME	Information Technology	18	3	3
		<u> View File</u>		

#### 2.2 - Catering to Student Diversity

2.2.1 - Student - Full time teacher ratio (current year data)

Year	Number of students enrolled in the institution (UG)	Number of students enrolled in the institution (PG)	Number of fulltime teachers available in the institution teaching only UG courses	institution	Number of teachers teaching both UG and PG courses
2018	3975	38	240	15	0

#### 2.3 – Teaching - Learning Process

2.3.1 – Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), Elearning resources etc. (current year data)

Number of Teachers on Roll	Number of teachers using ICT (LMS, e- Resources)	ICT Toolsand resources available	Number of ICT enabled Classrooms	Numberof smart classrooms	E-resources and techniques used
255	255	10	52	50	10

2.3.2 – Students mentoring system available in the institution? Give details. (maximum 500 words)

RAIT has well defined policy and an active guidance and counselling mechanism. Institute believes in all round development of students and well supported mentoring system which take care of professional, academic, personal and career advancement counselling. Each class has 1 class counsellor and each batch has a mentor

assigned. Mentormentee ratio is 1:16. Objectives of mentoring program are to identify and clarify students' personal and professional goals, encourage students to face challenges with greater ease and confidence, improve teacher student relationship, help them to get back on track when distracted and counsel students and interact with them in one to one manner. Mentors meet with each group regularly to discuss academic and nonacademic issues. The issues include understanding students' study habits, their study planning and techniques, students' attendance, examination preparation, slow learner and weaker student identification and scheduling remedial classes. Each mentor maintains the student's database and reports the same to respective HOD. Professional guidance: Experts are invited for conducting special training on wellness among students at least once in a semester. Around 2000 students have been benefited from this mechanism. RAIT offers several workshops and seminars on recent technological advancements by academic experts from renowned institutes like IIT, IISc, BARC and Industry experts from TCS, Infosys, ORACLE, etc. In addition to these, each department conducts regular sessions/expert talk/Industrial visits to increase awareness regarding professional culture. A) Academic and Personal: The institute provides regular counselings to the students to address issues relating to their academic shortfall and obstacles. Institute has constituted a dedicated team of Faculty members to counsel the students academically. ? Class counsellors and Mentors look after their academic requirements, attendance and makes arrangements for remedial and tutorial classes. ? Class counsellor also arranges a regular meeting with students to get various suggestions, views and demand for any additional facility required. ? Parents are provided an opportunity to meet the department teachers, HOD, and Principal to ascertain the progress of their wards. They are regularly informed about the progress twice a semester. B) Career advancement: Training and Placement Cell at RAIT is primarily involved in Career Guidance. All the students are provided with intense and multidimensional career guidance through inplant training, career counselling, and entrepreneurship development programs. Online assessment tests are conducted for the students so that they can analyse their strengths and weaknesses. RAIT Alumni Association (RAA) helps needy and deserving students through scholarship. C) Allround development: Our dedicated team of class counsellors and mentors also takes personal care in the case of academic irregularity. RAIT has conducted several wellness and stress removal programs for the benefit of students from reputed social groups such as Vivekananda Society, Brahmakumari's organization, etc. A regular yoga instructor has also been appointed to give daily exposure of Yoga to our students. The effective Mentorship activities observed by the institute has resulted in improved teacherstudent relationship, improvement of academic performance and improvement in student's discipline and their involvement in various college activities.

Number of students enrolled in the institution	Number of fulltime teachers	Mentor : Mentee Ratio
3975	255	1:16

#### 2.4 - Teacher Profile and Quality

#### 2.4.1 – Number of full time teachers appointed during the year

No. of sanctioned positions	No. of filled positions	Vacant positions	Positions filled during the current year	No. of faculty with Ph.D
195	255	0	13	46

## 2.4.2 – Honours and recognition received by teachers (received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the year)

Year of Award	Name of full time teachers receiving awards from state level, national level, international level	Designation	Name of the award, fellowship, received from Government or recognized bodies
2018	Ms. Puja Padiya	Assistant Professor	NPTEL 5 percent topper Award
2018	Ms. Nikita Kulkarni	Assistant Professor	Best Paper of Track at International Conference on Smart Internet of Things
2018	Mr. Swapnil Shinde	Assistant Professor	NPTEL Elite Award
2018	Ms. Sujata Oak	Assistant Professor	NPTEL Elite Silver Award

2018	Dr. Gautam Borkar	Associate Professor	NPTEL Elite Award
2018	Ms. Anitha Senathi	Assistant Professor	NPTEL Elite Award
2018	Dr. Pallavi Chavan	Assistant Professor	NPTEL Elite Award
2018	Dr. Vishwesh Vyawahare	Professor	NPTEL Elite Award
2018	Dr. Dhiraj Magare	Associate Professor	NPTEL Elite Award
2018	Dr. Mukesh D. Patil	Vice Principal	Avishkar regional level coordinator
2019	Dr. Ashish Jadhav	Professor	Nptel 1 percent topper award
2018	Mr. Pramod Kachare	Assistant Professor	Nptel 5 percent topper award
2018	Ms. Nisha Narwani	Assistant Professor	Nptel 5 percent topper award
2019	Mr. Gajraj Singh	Assistant Professor	Nptel 1 percent topper award
2018	Ms. Shweta S. Ashtekar	Assistant Professor	NPTEL Elite Award
2018	Ms. Hemlata G. Biradar	Assistant Professor	NPTEL Elite Award
2018	Ms. Sthuthi Rachel Joshua	Assistant Professor	NPTEL Elite Award
2019	Mr. Gajraj singh	Assistant Professor	Regional Finalist in EYIC2019, IIT Mumbai
2018	Ms. Sujata Kadam	Assistant Professor	Avishkar, District level Finalist Mumbai University
2018	Ms. Swaroop Mhatre	Assistant Professor	Avishkar,State level Finalist, Mumbai University
2018	Ms. Chitra Suresh	Assistant Professor	Avishkar, District level Finalist Mumbai University
2019	Ms. Amruta Chintawar	Assistant Professor	NPTEL Elite Award
2018	Dr. Sharad Jadhav	Professor	Participate of Merit (Avishkar 2018)
2018	Mr. Prashant Bansode	Assistant Professor	Participate of Merit (Avishkar 2018)
2018	Ms. Shital Patil	Assistant Professor	Participate of Merit (Avishkar 2018)
2018	Mr. Mandaar Ghodekar	Assistant Professor	NPTEL Elite Silver Award
2019	Ms.Rajashree Shedge	Assistant Professor	Avishkar 2019 2nd

			Position at University Level	
2019	Dr. Leena Ragha	Professor	Avishkar 2019 Merit at District Level	
2019	Ms. Namita Pulgam	Assistant Professor	Avishkar 2019 Merit at District Level	
2018	Dr. Bharati Joshi	Professor	NPTEL Elite Gold Award	
2018	Ms. Snehal Mumbaikar	Assistant Professor	NPTEL Elite Award	
2019	Ms. Rashmi Dhumal	Assistant Professor	NPTEL Elite Silver Award	
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#### 2.5 – Evaluation Process and Reforms

2.5.1 – Number of days from the date of semester-end/ year- end examination till the declaration of results during the year

The year				1
Programme Name	Programme Code	Semester/ year	Last date of the last semester-end/ year- end examination	Date of declaration of results of semesterend/ year- end examination
BE	317437210	4/2	29/05/2019	22/07/2019
BE	317437210	6/3	03/06/2019	22/07/2019
BE	317437210	8/4	24/05/2019	07/08/2019
BE	317446610	3/2	17/12/2018	15/02/2019
BE	317446610	5/3	12/12/2018	15/02/2019
BE	317446610	7/4	14/12/2018	18/02/2019
BE	317446610	4/2	29/05/2019	06/08/2019
BE	317446610	6/3	03/06/2019	06/08/2019
BE	317446610	8/4	24/05/2019	15/07/2019
BE	317424510	3/2	17/12/2018	05/02/2019
BE	317424510	5/3	12/12/2018	05/02/2019
BE	317424510	7/4	14/12/2018	20/02/2019
BE	317424510	4/2	29/05/2019	18/07/2019
BE	317424510	6/3	03/06/2019	18/07/2019
BE	317424510	8/4	25/05/2019	05/07/2019
BE	317424610	3/2	17/12/2018	05/02/2019
BE	317424610	5/3	12/12/2018	05/02/2019
BE	317424610	7/4	14/12/2018	07/03/2019
BE	317424610	4/2	29/05/2019	18/07/2019
BE	317424610	6/3	03/06/2019	18/07/2019
BE	317424610	8/4	24/05/2019	05/07/2019
BE	317437610	1/1	30/11/2018	27/12/2018
BE	317437210	1/1	30/11/2018	27/12/2018

		_		
BE	317446610	1/1	30/11/2018	27/12/2018
BE	317424510	1/1	30/11/2018	27/12/2018
BE	317424610	1/1	30/11/2018	27/12/2018
BE	317437610	2/1	09/05/2019	07/06/2019
BE	317437210	2/1	09/05/2019	07/06/2019
BE	317446610	2/1	09/05/2019	07/06/2019
BE	317424510	2/1	09/05/2019	07/06/2019
BE	317424610	2/1	09/05/2019	07/06/2019
BE	317437610	3/2	17/12/2018	05/02/2019
BE	317437610	5/3	12/12/2018	05/02/2019
BE	317437610	7/4	14/12/2018	07/03/2019
BE	317437610	4/2	29/05/2019	22/07/2019
BE	317437610	6/3	03/06/2019	22/07/2019
BE	317437610	8/4	24/05/2019	15/07/2019
BE	317437210	3/2	17/12/2018	05/02/2019
BE	317437210	5/3	12/12/2018	05/02/2019
BE	317437210	7/4	14/12/2018	07/03/2019
		<u>View File</u>		

2.5.2 – Reforms initiated on Continuous Internal Evaluation(CIE) system at the institutional level (250 words)

University. Institute has developed an internal assessment mechanism as Digital Course File (DCF) for Continuous Internal Evaluation (CIE) or Internal Assessment (IA). The syllabus published by UoM provides evaluation scheme for all subjects. As per guidelines issued by University for Evaluation System of each individual subject varies somewhat in the pattern but the categorization is same the guidelines are given below: Internal Assessment (IA) (20 Marks): Two tests must be 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 (80 Marks): Question paper will comprise 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 must be given during the class wise tutorial. The assignments should be students centric and an attempt should be made to make assignments more meaningful, interesting and innovative. Term work assessment must be based on the overall performance of the student with every assignment graded from time to time. The grades will be converted to marks as per credit and grading system manual and should be added and averaged. Based on above scheme grading and term work assessment should be done.Practicals: University provides list of experiments and some additional experiments are designed and conducted with well predefined inference and conclusion. Computation/simulation based experiments are also encouraged. The experiments should be students centric and attempt should be made to make experiments more meaningful, interesting and innovative. End semester examinations are held as per schedule published by University. The evaluation system adopted by the Institute, has two components 1. The Internal Assessment (IA). 2. The End Semester Examination (ESE). The ratio of weightage is 20 for IA and 80 for ESE for theory. For effective implementation of IA system at the institutional level, the institute conducts prerequisite test and two unit tests and per course per semester. The answer scripts are given back to the

students after evaluation for their information, providing sufficient transparency and accountability. CIE marks are shown to students along with their answer scripts by the teacher concerned enabling them to have access to the evaluated answer scripts before the marks are forwarded to the examination section. CIE Components also includes assignments, Lab exercises and Practical. Assessment strategies - Measuring the academic progress of the students through internal assessment, result analysis, attendance, project method and through academic units and functionaries. ? Student's feedback - The institution conducts student feedback process every semester to improve teaching, infrastructure, and the entire learning experience for the students during their tenure. The student's feedback is considered as a valuable source of information to measure their level of satisfaction. ? Academic audit - Regular academic audit both internal/external are conducted. The audit reports are reviewed and approved by the management.

2.5.3 – Academic calendar prepared and adhered for conduct of Examination and other related matters (250 words)

RAIT as an affiliated institute prepares its own academic calendar based on university academic calendar. It clearly specifying the date/time of various academic as well as extracurricular activities scheduled during the academic session and it is notified prior to the commencement of the academic session. The registration process for newly admitted students' for the ODD semester of academic year 201819 started in the month of June and S.E, T.E and B.E classes commenced on July 9, 2018. F.E academic started on August 1, 2018. Internal Assessment TestI was scheduled and conducted on 21st August to 24th August, 2018. 2018. IA TestII was scheduled from 15th to 17th October, 2018. Term end was 27th October, 2019. Practical Examinations VivaVoce November was scheduled to be from 29nd October to 5th November. Theory Examinations took place from November 15 to December 25, 2018. EVEN semester of AY 201819 commenced on 7th January, 2019 and 20th April, 2019. IA Test -I conducted on 2022nd February, 2019 and TestII was conducted 1115th April, 2019. University exam commenced from 8th May, 2019.

#### 2.6 - Student Performance and Learning Outcomes

2.6.1 – Program outcomes, program specific outcomes and course outcomes for all programs offered by the institution are stated and displayed in website of the institution (to provide the weblink)

http://www.rait.ac.in/wp-content/uploads/2019/12/co-po-pso.pdf

#### 2.6.2 - Pass percentage of students

-			-		
Programme Code	Programme Name	Programme Specialization	Number of students appeared in the final year examination	Number of students passed in final year examination	Pass Percentage
317437610	BE	Electronics Engineering	299	275	91.97
317437210	BE	Electronics & Telecommun ication Engineering	313	301	96.16
317446610	BE	Instrumentat ion Engineering	154	141	91.56
317424510	BE	Computer Engineering	200	195	97.5

317424610	BE	Information Technology	154	148	96.1
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#### 2.7 - Student Satisfaction Survey

2.7.1 – Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design the questionnaire) (results and details be provided as weblink)

http://www.rait.ac.in/wp-content/uploads/2019/12/SSS-Questinnaire\_Students.pdf

#### **CRITERION III - RESEARCH, INNOVATIONS AND EXTENSION**

#### 3.1 - Resource Mobilization for Research

3.1.1 - Research funds sanctioned and received from various agencies, industry and other organisations

Nature of the Project	Duration	Name of the funding agency	Total grant sanctioned	Amount received during the year
Projects sponsored by the University	365	University of Mumbai	649000	375000
Projects sponsored by the University	365	RAES	376000	376000
Students Research Projects (Other than compulsory by the University)	365	RAES	170478	170478
Major Projects	365	RAES	50230	50230
Minor Projects	365	RAES	39900	39900
Minor Projects	180	NMMC	50000	50000
Interdisciplina ry Projects	365	RAES	123275	38275
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#### 3.2 - Innovation Ecosystem

3.2.1 – Workshops/Seminars Conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the year

Title of workshop/seminar	Name of the Dept.	Date
Hands on session Data Science and Analytics with R programming	COMPUTER ENGINEERING	26/02/2019
Hands on session Recent trends in Web Technology	COMPUTER ENGINEERING	06/09/2018
Overview of BARC activities	ELECTRONICS ENGINEERING	29/03/2019
VLSI electronics for signal processing INO project as a case study	ELECTRONICS ENGINEERING	25/03/2019
Hands on Training on	ELECTRONICS ENGINEERING	22/03/2019

Fiber optics communication andsensors		
Workshop on Familiarisation with dspace Microlab Box	ELECTRONICS ENGINEERING	15/02/2019
Proteus circuit designing and simulation	ELECTRONICS ENGINEERING	09/02/2019
Expert talk on lean manufacturing Industrial Interaction	ELECTRONICS ENGINEERING	08/02/2019
Workshop on industry standard PCB design with AI CADTECH	ELECTRONICS ENGINEERING	10/01/2019
Carrier opportunities in mixed signal VLSI design circuit	ELECTRONICS ENGINEERING	10/01/2019
Workshop on Robot operating system	ELECTRONICS ENGINEERING	08/01/2019
Expert talk on Possible research problems with Dspace setup	ELECTRONICS ENGINEERING	27/12/2018
Hands on high level systhesis and implementstion using xlinx vivado design suit	ELECTRONICS ENGINEERING	08/10/2018
Workshop on Introduction to GPU computing with CUDA	ELECTRONICS ENGINEERING	03/10/2018
Webinar on Modelling Piezoelectric devices with COMSOL	ELECTRONICS ENGINEERING	04/10/2018
Expert Talk and Demonstration on " Advanced PCB design"	ELECTRONICS ENGINEERING	06/09/2018
A webinar on modelling MEMS devices with COMSOL Multiphysics	ELECTRONICS ENGINEERING	23/08/2018
Demonstration of patent and IP discovery and analytics tool Innovation Q Plus	ELECTRONICS ENGINEERING	10/08/2018
Workshop on Under water signal and image processing using experimental setup	ELECTRONICS ENGINEERING	06/08/2018
An Expert talk on Power electronics	ELECTRONICS ENGINEERING	03/08/2018
Expert talk on "Slosh Container System:Omportance, Characterization and	ELECTRONICS ENGINEERING	20/07/2018

Realization using MATLAB/Simulik		
Workshop on Robot Operating System(ROS)	ELECTRONICS ENGINEERING	06/07/2018
Webinar on post processing and visualization in COMSOL multiphysics	ELECTRONICS ENGINEERING	28/06/2018
An expert talk on Developing industial skills for electronics engineers and Entrepreneurship"	ELECTRONICS ENGINEERING	20/06/2018
Expert talk on "My experience with master's program in US"	ELECTRONICS ENGINEERING	04/06/2018
Handson Session on Compurter Networking Tools	COMPUTER ENGINEERING	28/09/2018
Basic PLC by Siemens	INSTRUMENTATION ENGINEERING	09/10/2018
Basic PLC by Siemens	INSTRUMENTATION ENGINEERING	20/10/2018
DCS training by Yokogawa	INSTRUMENTATION ENGINEERING	28/03/2019
Embedded System and its Applications	INSTRUMENTATION ENGINEERING	31/01/2019
Patentability and Patent Search	INFORMATION TECHNOLOGY	25/01/2019
High Power MicrowaveSeminar	ELECTRONICS AND TELECOMMUNICATION ENGINEERING	02/11/2018
Satellite CommunicationSeminar	ELECTRONICS AND TELECOMMUNICATION ENGINEERING	02/12/2018
Agile Methodologies	INFORMATION TECHNOLOGY	22/01/2019
Machine Learning using IBM Watson	INFORMATION TECHNOLOGY	12/10/2018

## $3.2.2-{\small Awards for Innovation won by Institution/Teachers/Research scholars/Students during the year}\\$

Title of the innovation	Name of Awardee	Awarding Agency	Date of award	Category
Medical Assistiant Robotic System (M.A.R.S.)	Pankaj Patil Kaival Trapasia Pradyumn Pathak Sumegh Thale Guide: Pratik Kadam	IIT B	28/02/2019	eYIC 2019 regional round qualifier
Language Identification using TimeFrequency	Amit Chaudhary Balaji Shinde Rohit Phadke Guide: Dr.	Shah Anchor Kutchhi Engineeering College, Mumbai	26/02/2019	First Prize in National Level Paper Presentation

Image Textural Descrptors and GWO based feature selection on Nvdia Tesla K80	Gajanan Birajdar			2019. Nucleus
Underwater image enhanement with wavelet transform Based novel fusion	Ashish Jog Omkar Jugade Atharva Kadegaonkar Guide:Dr. Gajanan Birajdar	K. J. Somaiya College of engineering, Vidyavihar	22/03/2019	First Prize in Prakalp2019 (Technical Paper Presentation)
Autonomous Room Cleaner Bot	Shravan Singh Vedant Mahajan Guide: Mr. Navin Singhania	K. J. Somaiya College of engineering, Vidyavihar	23/03/2019	First Prize in prakalp2019 (Project competition)
Pyrobot	Kishan Kumar, Sajith Kumar, Suraj Dakua	Eyantra	28/02/2019	Regional Finali stHardware
Pyrobot	Kishan Kumar, Sajith Kumar, Suraj Dakua	Srijan2019 RAIT, Nerul, Navi Mumbai	03/04/2019	2nd PrizeHardware
Partice Tracking of an A6 relativestic Magnetron using particle in cell code	Abhishek Saste, Preeti Chavan, Arati Manjare, Sweta Nikam	NSCFET 2019	03/04/2019	2nd PrizeConference Paper award
Performance analysis of Decentralized MAC protocol	Chaitali chaudhari	Avishkar 2018	23/12/2018	Regional FinalistPaper Presentation
IoT aided hydro ponicsSystem	Mohit Dongargaonkar, Navneet Bharti, Isha Kudkar	ByteCamp 19 Hackathon,SIES college , Nerul	23/02/2019	Ist Runner up
OilTanker Security system	Amey Parulekar, Atharav Sanay, Ayush Guha, Shashank Shetty	Chrysalis2019, RAIT ,Nerul	04/01/2019	1st prize
OilTanker Security system	Amey Parulekar, Atharav Sanay, Ayush Guha, Shashank Shetty	Srijan 2019,RAIT ,Nerul	05/04/2019	3rd prize
Rocker Bogie Rover	Aliasgar Udaipurwala, Suraj Rasam, Shruti Mishra, Rudresh Zadkhande	Chrysalis2019,R AIT ,Nerul	04/01/2019	2nd prize
Inhouse Design and Development	Himanshu Bedgujar,Tanmay	Srijan 2019,RAIT	05/04/2019	2nd prize

ofIIOT for 3Phase Induction Motor	Goydhali,Yashad a Shinde,	,Nerul		
Suspicius Object Detection using Convolutional Nural Network	Shubham Sonje, Harshad Shinde,Shefali Sarang, Vaishanvi Raut	NSCFET2019 RAIT,nerul	05/04/2019	Best paper award
Suspicius Activ ityDetection using ANN	Shubham Sonje, Harshad Shinde,Shefali Sarang, Vaishanvi Raut	Vector 2019, AC Patil college of engg.	28/03/2019	Best paper award
Eventtriggered distributed resource allocation using fitness dynamics	Prashant Bansode Ramya	Avishkar Project Competition, University of Mumbai	23/12/2018	Participate of Merit
Prakiti, Techathon	Shubham Rai, Shivani Pal,Shruti Saha, Soumya Rani,Ayushi Sharma	RAIT,Nerul	04/04/2019	Project Competition 3rd prize
Mixed waste segregation	Imran Shaikh, Srinivas Shah, Paritosh Patil	SIES, Nerul	15/02/2019	Innovative ideas presentation 1st prize
Mixed waste segregation	Imran Shaikh, Srinivas Shah, Paritosh Patil	SIES, Nerul	14/03/2019	Paper Presentation 1st prize
Brain Cancer Identification using CNN	Sakshi Kabadi Mithil Moon Sayali Mahajan Aditya narayan Pandey	RAIT	05/04/2019	Third prize,Srijan 2019 Project Competition
Smart Signal Adaptive Traffic Signal Control	Kalpesh dhande, Monis bana, Aniket dhagavkar, Neel bhave	RAIT	05/04/2019	Third prize,NSCFET 2019
Light Pollution Prediction System	Aastha Sainger Rishikesh Yadav Samidha Waghralkar Pradnya Tipare	RAIT	05/04/2019	Srijan 2019 Project Competition
Interactive Physiotheraphy using Kinect 2.0	Akshay Pakhle Animesh Barmukh Ashvin Khairnar Mohammed Waqar Ali	Avishkar , Mumbai University	23/12/2018	Project Competition
Sign Language	Swapnali N.	RAIT	05/04/2019	NSCFET, Paper

Translator Blind and Dumb Communication using Convolution Neural Network	Dorage Sanchal D. Dhumal Manjari Kasle Akshay Pawar			Presentation
Placement Wizard Company Recommender System using Neural Networks and Clustering	Mayur Kurup Dhanesh Katre Chetan Kuchian Viraj Khedekar	RAIT	04/04/2019	NSCFET, Paper Presentation
Soil Analysis and Crop Prediction	Susmita Patil Rohit Chougule Pooja Chavan Apeksha Kamble	RAIT	05/04/2019	NSCFET, Paper Presentation
Accident Detection and Alert System	Akshay Parkar Abhshek Shetty Sahil Pendhari	RAIT	05/04/2019	NSCFET, Paper Presentation
Malicious URL Detection	Simaran Munot Jinal Waykar Mitali Yevale	RAIT	05/04/2019	NSCFET, Paper Presentation
Best Design Prize	Sachin Kamath	BITCAMP 2019 CSI RAIT	30/03/2019	Hackathon
Concept extrction using NLP	Rajashree Shedge	Avishkar , Mumbai University	23/12/2018	Project Competition
Defense Mechanism system using image processing	Mohitosh Chaudhari Jagrut Jadhav Rahul Chandak Snehal Bondre Guide: Dr. Vishwesh Vyawahare	IIT B	28/02/2019	Project competitionBest Presentation Award

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#### 3.2.3 - No. of Incubation centre created, start-ups incubated on campus during the year

Incubation Center	Name	Sponsered By	Name of the Start-up	Nature of Start- up	Date of Commencement
RAIT Incubation Centre	RIC	RAES	NA	NA	02/07/2018
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#### 3.3 - Research Publications and Awards

#### 3.3.1 – Incentive to the teachers who receive recognition/awards

State	National	International
0	6	3

### 3.3.2 - Ph. Ds awarded during the year (applicable for PG College, Research Center)

Name of the Department	Number of PhD's Awarded

PARTMENT OF ELECTRONICS ENGINEERING	2
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#### 3.3.3 - Research Publications in the Journals notified on UGC website during the year

Туре	Department	Number of Publication	Average Impact Factor (if any)	
International	COMPUTER ENGINEERING	9	2.77	
International	ELECTRONICS ENGINEERING	11	2.10	
International	ELECTRONICS TELECOMMUNICATION ENGINEERING	10	2.45	
International	INSTRUMENTATION ENGINEERING	2	0.54	
International	INFORMATION TECHNOLOGY	7	0.80	
International	ENGINEERING SCIENCE	2	10.5	
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# 3.3.4 – Books and Chapters in edited Volumes / Books published, and papers in National/International Conference Proceedings per Teacher during the year

Department	Number of Publication
COMPUTER ENGINEERING	14
ELECTRONICS ENGINEERING	27
ELECTRONICS TELECOMMUNICATION ENGINEERING	31
INSTRUMENTATION ENGINEERING	13
INFORMATION TECHNOLOGY	33
ENGINEERING SCIENCE	4
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## 3.3.5 – Bibliometrics of the publications during the last Academic year based on average citation index in Scopus/Web of Science or PubMed/Indian Citation Index

Title of the Paper	Name of Author	Title of journal	Year of publication	Citation Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self citation
Influence of solar spectrum on perform ance of different photovolta ic technology modules	Dhiraj Magare	Journal of Applied Science and comput ations	2018	0	RAIT, Nerul	0
Speech and music clas sification	Gajanan K. Birajdar	Multimedia Tools and Applicatio	2018	1	RAIT, Nerul	0

using spec	I	ns				
trogram based stat istical de scriptors and extreme learning machine		115				
Speech/mus ic classif ication using visual and spectral chromagram features	Gajanan K. Birajdar	Journal of Ambient In telligence and Humanized Computing	2019	0	RAIT, Nerul	0
Indian language i dentificat ion using timefreque ncy image textural d escriptors and GWObased feature selection	Gajanan K. Birajdar	Journal of Experiment al Theoret ical Artificial Intelligen ce	2019	0	RAIT, Nerul	0
Constraine d Model Predictive Control for Linear Fractional order Systems with Rational A pproximati on	Vishwesh Vyawahare	Journal of Applied Nonlinear Dynamics	2019	0	RAIT, Nerul	0
Design of novel optimal co mplexorder controller s for systems with fract ionalorder dynamics	Vishwesh Vyawahare	Journal In ternationa 1 Journal of Dynamics and Control	2018	0	RAIT, Nerul	0
System Ide ntificatio n with Fra ctionalord er Models:	Vishwesh Vyawahare	Journal Progress in Fractional Differenti	2018	0	RAIT, Nerul	0

A Comparat ive Study with Different Model Structures		ation and Applicatio ns				
Automated Aircraft Monitoring system	Savita Bhosale	Journal of Applied Science and comput ations	2018	0	RAIT, Nerul	0
Performanc e Enhancem ent for VANET Security Using Atta ckResistan t Trust (ART)	Dongre Manoj M	Innovation s in Elect ronics and Communicat ion Engine ering	2019	0	RAIT, Nerul	0
PCA Fusion for ANNBased Diabetes Diagnostic	Sangle Sandeep	Computing, Communicat ion and Signal Processing	2019	0	RAIT, Nerul	0
CurrentPha se Synthesis of Linear Antenna Arrays using Particle Swarm Opti mization Variants	Chakravort y Pragnan	Advances in Intelli gent Systems and Computing, Springer	2019	0	RAIT, Nerul	0
What Is a Signal?[Le cture Notes]	Chakravort y Pragnan	IEEE Signal Processing Magazine	2018	4	RAIT, Nerul	4
Secure and Robust ECG Steganogra phy Using Fractional Fourier Transform	Mukesh D Patil	Cryptograp hic and In formation Security Approaches for Images and Videos	2018	0	RAIT, Nerul	0
Bispectrum based technique to remove crossterms in quadratic systems	Gaikwad Ch andrakant	Signal, Image and Video Processing	2018	2	RAIT, Nerul	2

and Wigner -Ville dis tribution						
GPU Computing of Special Mathematic al Functions used in Fractional Calculus	Mukesh D Patil	Frontiers in Fractional Calculus1	2018	1	RAIT, Nerul	1
On Determination of Tonic Note for Singers of Indian Music	Chandrakan t J. Gaikwad	IETE Technical Review (Taylor and Francis)	2018	0	RAIT, Nerul	0
Active dis turbance rejection control with adaptive rate limitation for process control application	Sushant Pawar	Indian Control conference 2018	2018	1	RAIT, Nerul	1
Data acqui sition techniques in mobile forensics	Nilima Dongre	Data acqui sition techniques in mobile forensics	2018	4	RAIT, Nerul	4
Solid Waste Collection as a Service using IoT Solution for Smart Cities	Sangita Chaudhary	IEEE Inter national Conference on Smart City and Emerging T echnologie s (ICSCET 2018)	2018	1	ACPCE, Kharghar	1
Digital Wa termarking of Geospatial Data	Sangita Chaudhary	Geospatial Infrastruc ture, Appl ications and Techno logies: India Case Studies (Springer Book Chapter)	2018	1	ACPCE, Kharghar	1

A novel he teromateri al gateund erlap elec trically doped TFET for improving DC/RF and ambipolar behaviour	Neeraj Sharma	Superlatti ces and Mi crostructu res	2018	5	RAIT, Nerul	5	
Performanc e analysis of DWT and FMH in Cla ssifying Hand motions using sEMG signals	Shivangi Agarwal	Journal of Intelligen t and Fuzzy Systems, IOSpress [SCIE]	2019	1	RAIT, Nerul	0	
Assessment of different correlatio ns to estimate distinct technology PV module operating temperatur e for Indian site	Dhiraj Magare	Energy Science En gineering, 2019	2019	0	RAIT, Nerul	0	
Interactio n of copper (II) complexes with bovine serum albumin: s pectroscop ic and cal orimetric insights	Singh Namrata	Journal of Biomolecul ar Structure and Dynamics	2018	21	RAIT, Nerul	20	
Design of Microheate r on 3DSnO2 Gas Sensor	Sandip Dhobale	Springer Nature Singapore Pte Ltd.	2019	0	RAIT, Nerul	0	
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3.3.6 – h-Index of the Institutional Publications during the year. (based on Scopus/ Web of science)

Title of the Paper	Name of Author	Title of journal	Year of publication	h-index	Number of citations excluding self citation	Institutional affiliation as mentioned in the publication
Proactive CoLeader Nomination in Platoon Based VANETS	Vidhate Amarsinh	Internatio nal Journal of Engineerin g Technology (UAE) (Scopus Indexed)	2018	7	0	Ramrao adik institute of technol ogy, Nerul (RAIT)
Review on Smart Healthcare System using Cloud and Big Data Analysis	Prachi D. Junwale	Internatio nal Journal of Computer Science En gineering and Inform ation Technology Research ( IJCSERITR)	2018	1	0	Ramrao adik institute of technol ogy, Nerul (RAIT)
Sorting over encrypted data on the cloud	Rashmi Dhumal	Internatio nal Journal for Research Trends and Innovation	2018	3	0	Ramrao adik institute of technol ogy, Nerul (RAIT)
Design of twodimensi onal PR quincunx filter banks with Euler-Frob enius polynomial and lifting scheme	Mukund B. Nagare	Journal of S?dhan? ,springer	2019	2	0	Ramrao adik institute of technol ogy, Nerul (RAIT)
Estimation of operating condition frequency distributi on and power prediction by extending applicatio n of IEC	Dhiraj Magare	Journal of Renewable and Sustai nable Energy	2018	4	0	Ramrao adik institute of technol ogy, Nerul (RAIT)

618531 standard for different technology photovolta ic modules						
Influence of solar spectrum on perform ance of different photovolta ic technology modules	Dhiraj Magare	Journal of Applied Science and comput ations	2018	4	0	Ramrao adik institute of technol ogy, Nerul (RAIT)
Indian language i dentificat ion using timefreque ncy image textural d escriptors and GWObased feature selection	Gajanan K. Birajdar	Journal of Experiment al Theoret ical Artificial Intelligen ce	2019	6	0	Ramrao adik institute of technol ogy, Nerul (RAIT)
Constraine d Model Predictive Control for Linear Fractional order Systems with Rational A pproximati on	Vishwesh Vyawahare	Journal of Applied Nonlinear Dynamics	2019	8	0	Ramrao adik institute of technol ogy, Nerul (RAIT)
Design of novel optimal co mplexorder controller s for systems with fract ionalorder dynamics	Vishwesh Vyawahare	Journal In ternationa 1 Journal of Dynamics and Control	2018	8	0	Ramrao adik institute of technol ogy, Nerul (RAIT)
System Ide ntificatio n with Fra ctionalord er Models:	Vishwesh Vyawahare	Journal Progress in Fractional Differenti	2018	8	0	Ramrao adik institute of technol ogy, Nerul

A Comparat ive Study with Different Model Structures		ation and Applicatio ns				(RAIT)
Automated Aircraft Monitoring system	Savita Bhosale	Journal of Applied Science and comput ations	2018	2	0	Ramrao adik institute of technol ogy, Nerul (RAIT)
Speech/mus ic classif ication using visual and spectral chromagram features	Mukesh D Patil	Journal of Ambient In telligence and Humanized Computing	2019	8	0	Ramrao adik institute of technol ogy, Nerul (RAIT)
Speech and music clas sification using spec trogram based stat istical de scriptors and extreme learning machine	Mukesh D Patil	Multimedia Tools and Applicatio ns	2019	8	1	Ramrao adik institute of technol ogy, Nerul (RAIT)
Secure and Robust ECG Steganogra phy Using Fractional Fourier Transform	Mukesh D Patil	Cryptograp hic and In formation Security Approaches for Images and Videos	2018	8	0	Ramrao adik institute of technol ogy, Nerul (RAIT)
GPU Computing of Special Mathematic al Functions used in Fractional Calculus	Mukesh D Patil	Frontiers in Fractional Calculus1	2018	8	1	Ramrao adik institute of technol ogy, Nerul (RAIT)
Bispectrum based technique to remove crossterms in quadratic systems	Chandrakan t J. Gaikwad	Signal, Image and Video Processing	2018	2	2	Ramrao adik institute of technol ogy, Nerul (RAIT)

and Wigner -Ville dis tribution						
On Determination of Tonic Note for Singers of Indian Music	Chandrakan t J. Gaikwad	IETE Technical Review (Taylor and Francis)	2018	2	0	Ramrao adik institute of technol ogy, Nerul (RAIT)
Performanc e Enhancem ent for VANET Security Using Atta ckResistan t Trust (ART)	Dongre Manoj M	Multimedia Tools and Applicatio ns	2019	3	0	Ramrao adik institute of technol ogy, Nerul (RAIT)
What Is a Signal?[Le cture Notes]	Chakravort y Pragnan	IEEE Signal Processing Magazine	2018	5	4	Ramrao adik institute of technol ogy, Nerul (RAIT)
CurrentPha se Synthesis of Linear Antenna Arrays using Particle Swarm Optimization Variants	Chakravort y Pragnan	Advances in Intelli gent Systems and Computing, Springer	2019	U	0	Ramrao adik institute of technol ogy, Nerul (RAIT)
PCA Fusion for ANNBased Diabetes Diagnostic	Kachare Pramod	Computing, Communicat ion and Signal Processing	2019	6	0	Ramrao adik institute of technol ogy, Nerul (RAIT)
Heart Sound Signal Analysis and Its Im plementati on in VHDL	Jayanand P. Gawande	Innovation s in Elect ronics and Communicat ion Engine ering. Lecture Notes in Networks and Systems, vol 33. Springer, Singapore	2018	5	0	Ramrao adik institute of technol ogy, Nerul (RAIT)

Adulterati on Detection of Grape Fruit Juice Using PCA and LDA Pattern Re cognition Technique	Siuli Das	IEEE Applied Signal Processing Conference (ASPCON)	2018	7	0	Ramrao adik institute of technol ogy, Nerul (RAIT)
Automatic detection of Orange juice adul teration using Constant Phase elem entbased impedance sensor	Siuli Das	IEEE 4th I nternation al Conference for Conver gence in Technology (12CT) 2018	2018	7	0	Ramrao adik institute of technol ogy, Nerul (RAIT)
Determinat ion of adu lteration in milk using PCA over a wireless sensor network.	Siuli Das	IEEE 5th I nternation al Conference for Conver gence in Technology 2019	2019	7	0	Ramrao adik institute of technol ogy, Nerul (RAIT)
Real Time Suspicious Activity Dectection	Gargi Phadke	2nd Intern ational Conference On Soft Computing and Signal Processing (ICSCSP201 9)	2019	6	0	Ramrao adik institute of technol ogy, Nerul (RAIT)
Strawberry Leaf Diseases and Suggestion for Pesticides Using Artificial Neural Network	Gargi Phadke	2nd Intern ational Conference On Soft Computing and Signal Processing (ICSCSP201 9)	2019	6	0	Ramrao adik institute of technol ogy, Nerul (RAIT)
Optimizati on of DC Motor Speed Control	Gargi Phadke	Internatio nal conference on Data Sciences,	2019	6	0	Ramrao adik institute of technol ogy, Nerul

Using LQR Technique		Machine Learning and Applic ations				(RAIT)
Design and Implementa tion of Modified Guo Taos Algorithm for Optimized PI Controller for a Level Control System	Gargi Phadke	IEEE 4th I nternation al Conference for Conver gence in Technology (I2CT )2018	2018	9	0	Ramrao adik institute of technol ogy, Nerul (RAIT)
Automated vehicle guided in store management	Gargi Phadke	IEEE 4th I nternation al Conference for Conver gence in Technology (I2CT )2018	2018	6	0	Ramrao adik institute of technol ogy, Nerul (RAIT)
Satellite Image Edge Detection using Fractional order method	Gargi Phadke	IEEE 13th Internatio nal Conference on Industrial and Inform ation Systems (ICIIS)	2018	6	0	Ramrao adik institute of technol ogy, Nerul (RAIT)
A Paramete rized Halfband Filterbank Design for Image Encryption	Vivek P. Khalane	IEEE 13th Internatio nal Conference on Industrial and Inform ation Systems (ICIIS)	2018	1	0	Ramrao adik institute of technol ogy, Nerul (RAIT)
EgTBS: An Approach Towards Energy Efficient WSN	Vivek S. Kadam	5th Intern ational Conference for Conver gence in Technology (I2CT) Pune	2019	1	0	Ramrao adik institute of technol ogy, Nerul (RAIT)

Performanc e Analysis of Unified Threat Management (UTM)	Vidhate Amarsinh, Amit Barve	ICICCT(201 9) Springer Lecture Notes in Networks and Systems	2019	7	0	Ramrao adik institute of technol ogy, Nerul (RAIT)
GWOTS: Grey Wolf Optimizati on based Task Scheduling at the Green Cloud Data Center	Neeraj Kumar Sharma	2018 14th Internatio nal Conference on Semantics, Knowledge and Grids (SKG)	2018	5	0	Ramrao adik institute of technol ogy, Nerul (RAIT)
Hybrid Model For Text Class ification	Priyanka Ingole, Smita Bhoir, Dr. Vidhate Amarsinh	IEEE Second Int ernational Conference on Electro nics, Comm unication and Aerospace Technology (ICECA) 2018	2018	7	1	Ramrao adik institute of technol ogy, Nerul (RAIT)
Efficient Privacy Preserving and Dynamic Public Auditing for Storage Cloud	Sangita Chaudhari	Internatio nal Conference on Nascent Technologi es in Engi neering	2019	7	0	Ramrao adik institute of technol ogy, Nerul (RAIT)
A Survey of various Cryptograp hic Techni ques: from Traditiona 1 Cryptogr aphy to Fully Homo morphic Encryption	Rashmi Salavi	LNNS Springer	2018	3	0	Ramrao adik institute of technol ogy, Nerul (RAIT)
Detection of Contrast E nhancement Forgery in	Vanita Mane	IEEE 5th I nternation al Conference for Conver	2019	7	0	Ramrao adik institute of technol ogy, Nerul

Previously and Post Compressed JPEG Images		gence in Technology 2019,India Pune				(RAIT)
Trust Comp utation Framework based on User Behavour and Recome ndation in Cloud Computing	Tabassum Maktum	IEEE 5th I nternation al Conference on Advanced Computing Communicat ion System	2019	2	0	Ramrao adik institute of technol ogy, Nerul (RAIT)
An Enhanced M oodleBased On Digital Content De velopment For Collaging Smart Learning System (Sls)To Analysis Of Students Success On Logs	Balwant Gorad	48th ISTE National Annual Faculty Convention 2019 on "Technical Education for Smart Society"	2019	1	0	Ramrao adik institute of technol ogy, Nerul (RAIT)
SIMPLYCS THE E THE ELEARNING Platform Made Teach ingLearnin g Much Easier in Indian Education	Balwant Gorad	48th ISTE National Annual Faculty Convention 2019 on "Technical Education for Smart Society"	2019	1	0	Ramrao adik institute of technol ogy, Nerul (RAIT)
"ECDSA Approach for Reliable Data Sharing and Document V erificatio n using Two Level QR Code",	Bharti Joshi	IEEE Explo rer,August 2018 ISMAC Tamilnadu	2018	3	0	Ramrao adik institute of technol ogy, Nerul (RAIT)
An Approach	Vimla Jethani	1st Intern ational	2018	6	0	Ramrao adik

to find Synonym and Bigram to improve Query Reco mmendation efficiency of Explora tory Search using Search Goal Shift Graphs		Conference on Intelli gent Computing (ICIC2018) held at Amrita School of Engineerin g				institute of technol ogy, Nerul (RAIT)
A novel he teromateri al gateund erlap elec trically doped TFET for improving DC/RF and ambipolar behaviour	N. K. Sharma	Superlatti ces and Mi crostructu res, Elsevier	2018	5	7	Ramrao adik institute of technol ogy, Nerul (RAIT)
An Integrated CopyMove Forensic Method for Tamper Detection and Locali zation of Duplicated Regions	Vanita Mane	The Intern ational Journal of Forensic Computer Science	2018	7	0	Ramrao adik institute of technol ogy, Nerul (RAIT)
A Scalable Framework for Big Data Summa rization using modified Kmeans clustering on Map reduce framework Approach	Shilpa Kolte	IOSR Journal of Engineerin g	2018	2	0	Ramrao adik institute of technol ogy, Nerul (RAIT)
Interactio n of copper (II) complexes with bovine	Singh Namrata	Journal of Biomolecul ar Structure and Dynamics	2018	14	20	Ramrao adik institute of technol ogy, Nerul (RAIT)

serum albumin: s pectroscop ic and cal orimetric insights						
Design of Microheate r on 3DSnO2 Gas Sensor	Sandip Dhobale	Springer Nature Singapore Pvt Ltd.	2019	4	0	Ramrao adik institute of technol ogy, Nerul (RAIT)
The Magic Transform: An Introdu ction	Narendraku mar R. Dasre	Internatio nal Journal of Mathematic al Sciences and Engine ering Appl ications	2019	3	0	Ramrao adik institute of technol ogy, Nerul (RAIT)
ANALYTICAL STUDY OF THERMAL STRESSES WITH RESPECT TO INTERNAL MOVING POINT HEAT SOURCE IN A PLATE OF RECTANGULA R SHAPE	Vijay B. Patil	84th Annual Conference of Indian Mathematic al Society (IMS)	2018	2	0	Ramrao adik institute of technol ogy, Nerul (RAIT)

 ${\it 3.3.7-Faculty\ participation\ in\ Seminars/Conferences\ and\ Symposia\ during\ the\ year:}$ 

Number of Faculty	International	National	State	Local	
Attended/Semina rs/Workshops	0	54	78	112	
Presented papers	118	8	18	27	
Resource persons	7	15	20	124	
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# 3.4 – Extension Activities

3.4.1 – Number of extension and outreach programmes conducted in collaboration with industry, community and Non- Government Organisations through NSS/NCC/Red cross/Youth Red Cross (YRC) etc., during the year

Title of the activities	Organising unit/agency/ collaborating agency	Number of teachers participated in such activities	Number of students participated in such activities
Tree plantation	Shantivan Ashram,	12	139

drive	panvel				
Sahajayoga Session	Social wing , RAIT	56	256		
Joyfest2018	Social wing , RAIT	15	56		
Diwali celebration	Nerul Quarry, Nerul	20	49		
christmas Celebration	Girija Balgruha, Kharghar	14	27		
Udaan fund raising Marathon	Social wing , RAIT	220	800		
Holi celebration	Smiths old Age Home, Bhiwandi	18	53		
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3.4.2 – Awards and recognition received for extension activities from Government and other recognized bodies during the year

Name of the activity	Name of the activity Award/Recognition		Number of students Benefited			
Nil Nil		Nil	0			
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3.4.3 – Students participating in extension activities with Government Organisations, Non-Government Organisations and programmes such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the year

Name of the scheme	Organising unit/Agen cy/collaborating agency	Name of the activity	Number of teachers participated in such activites	Number of students participated in such activites		
Unnat Bharat Abhiyan	Government of India	Vichumbe village survey	8	15		
Unnat Bharat Abhiyan	Government of India	Koproli village survey	7	16		
Unnat Bharat Abhiyan	Government of India	Bambvi village survey	6	14		
Social Wing RAIT	Shantivan Ashram	Tree plantation drive	12	139		
Social Wing RAIT	Social Wing RAIT	Street play	2	34		
Social Wing RAIT	SMIT oldage home and care foundation	Holi celebrations at old age home	18	53		
Social Wing RAIT	Girija welfare association	Christmas celebrations at orphanage	14	27		
Social Wing RAIT	Udaan fund raising Marathon	Social wing , RAIT	220	800		
NMMC Green plantation drive	NMMC, Navi Mumbai	Tree Plantation	13	55		
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#### 3.5 - Collaborations

# 3.5.1 - Number of Collaborative activities for research, faculty exchange, student exchange during the year

Nature of activity	Participant	Source of financial support	Duration			
Collabrative Research, Resource and Data Sharing	35	NIL	365			
Constrained Model Predictive Control for Linear Fractionalorder Systems with Rational Approximation	Mandar M Joshi , Vishwesh A. Vyawahare	NIL	365			
System Identification with Fractionalorder Models: A Comparative Study with Different Model Structures	Pritesh Shah, Sudhir Agashe, Vishwesh A. Vyawahare	NIL	365			
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3.5.2 – Linkages with institutions/industries for internship, on-the- job training, project work, sharing of research facilities etc. during the year

Nature of linkage	Title of the linkage	Name of the partnering institution/ industry /research lab with contact details	Duration From	Duration To	Participant
Training	APTITUDE	T.I.M.E	14/06/2018	05/08/2018	Students
Training	SOFT SKILLS	ROY EDDINGTO NCHARLES ASSOCIATES	14/06/2018	05/08/2018	Students
Training	JAVA PLACMENT TRAINING	ATS INFOTECH	14/06/2018	05/08/2018	Students
Consultancy Project	Development of Augmented Reality for development of Engineering Students knowledge	Eduvance	01/01/2018	31/07/2019	Students
Onjob Training	Onjob Training	Bharat Petroleum Corporation Limited	01/01/2018	31/07/2018	Students
Onjob Training	Onjob Training	Rastriya Chemical Fertilizers Limited	05/04/2019	04/07/2019	Students

Project Work	Project Work	Mica Lab	07/01/2019	07/02/2019	Students
Project Work	Project Work	Mica Lab	07/01/2019	19/01/2019	Students
Internship	Summer Internship Program on Machine Learning	ATS Learning Solutions	18/06/2018	14/07/2018	Students
Internship	Summer Internship Program on IOT	ATS Learning Solutions	18/06/2018	14/07/2018	Students
Internship	Summer Internship Program on Cryptography and Its Real World Applications	RAIT,Nerul	18/06/2018	14/07/2018	Students
Training	Training	Yokogawa	28/03/2019	30/03/2019	Students
Training	Training	Siemenns	09/10/2018	12/10/2018	Students
Project Work	Sharing of research facilities	Sai Tronics, 123,Shop No.12, Krishna Naka, Karad, Dist Satara 9029975757	16/08/2018	31/03/2019	Faculty and Students
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3.5.3 - MoUs signed with institutions of national, international importance, other universities, industries, corporate houses etc. during the year

Organisation	Date of MoU signed	Purpose/Activities	Number of students/teachers participated under MoUs
MOU with SIEMENS LTD (SITRAININDIA)	09/07/2018	To educate students about the control systems like PLC, Process instrumentation, Networking	49
MoU with Yokogawa India Ltd	16/07/2018	Providing training on 1) Distributed Control System 2) Process Instrumentation with DCS 3) DCS Industrial Communication Protocols	75
MoU with Eduvance Vanmat Technology Pvt. Ltd.	10/07/2018	1) Setup labs 2) To conduct short term long term value added program 3) To	225

		provide internship	
MoU with Ceryle Innovative Technologies	01/08/2018	Detailed training to be provided on basic LabVIEW Core I Core II, Intermediate Level Course in LabVIEW, Advanced course in LabVIEW and other technical assistance from RAIT for the said work.	3
MoU with Tata Consultancy Services(TCS)	06/07/2018	TCS shall support the students and teachers communities through workshop, faculty development program and student internships	460
MoU with Global Talent Track Pvt. Ltd.	23/07/2018	Train the students under the Barclays Youth Employability Initiative program, (hereinafter referred to as the Training Program) to be conducted at the college premises. The training program is a Barclays funded program for the social cause.	195
MoU with Cypress Semiconductor	12/07/2018	MoU with Cypress Semiconductor	118

# **CRITERION IV – INFRASTRUCTURE AND LEARNING RESOURCES**

# 4.1 - Physical Facilities

4.1.1 – Budget allocation, excluding salary for infrastructure augmentation during the year

Budget allocated for infrastructure augmentation	Budget utilized for infrastructure development
15000000	13491040

# 4.1.2 - Details of augmentation in infrastructure facilities during the year

Facilities	Existing or Newly Added
Campus Area	Existing
Class rooms	Existing
Laboratories	Existing
Seminar Halls	Existing

Classrooms with LCD facilities	Existing
Seminar halls with ICT facilities	Existing
Video Centre	Newly Added
Value of the equipment purchased during the year (rs. in lakhs)	Newly Added
Number of important equipments purchased (Greater than 1-0 lakh) during the current year	Newly Added
Classrooms with Wi-Fi OR LAN	Existing
Others	Newly Added

# 4.2 - Library as a Learning Resource

4.2.1 – Library is automated {Integrated Library Management System (ILMS)}

Name of the ILMS software	Nature of automation (fully or patially)	Version	Year of automation
SLIM21	Partially	3.6.0	2018

#### 4.2.2 - Library Services

Library Service Type	Existing		Newly Added		Total		
Text Books	43702	16787063	829	360410	44531	17147473	
Reference Books	2635	1991169	79	304150	2714	2295319	
e-Books	10523	2894907	0	0	10523	2894907	
Journals	83	244185	3	20618	86	264803	
e-Journals	0	0	1579	3014587	1579	3014587	
Library Automation	1	185550	0	0	1	185550	
Others(spe cify)	10	490023	10	568949	20	1058972	
Digital Database	10523	2894907	1579	3014587	12102	5909494	
CD & Video	2428	0	24	0	2452	0	
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# 4.2.3 – E-content developed by teachers such as: e-PG- Pathshala, CEC (under e-PG- Pathshala CEC (Under Graduate) SWAYAM other MOOCs platform NPTEL/NMEICT/any other Government initiatives & institutional (Learning Management System (LMS) etc

Name of the Teacher	Name of the Module	Platformon which module is developed	Date of launching e- content
Ms. Vanita Manikrao Mane	Analysis of Algorithms	Moodle	07/01/2019
Ms. Rajashree A. Shedge	Machine Learning	Moodle	07/01/2019
Mrs. Bhawana Garg	Analog Electronics	Moodle	09/07/2019
Mr. Sangram Jadhav	Control System Components	Moodle	09/07/2019

Ms.Anita R. Patil	Digital Forensics	Moodle	07/01/2019
Mr.Swapnil Shinde	Computer Simulation and Modelling	Moodle	07/01/2019
Ms. Priyanka Jadhav	Computer Communication Networks	Moodle	07/01/2019
Ms. Sneha Solanki	Antenna Radio Wave Propagation	Moodle	07/01/2019
Ms. Clara M. Arackel	Power ElectronicsII	Moodle	09/07/2018
Mr. Sanket Soalnki	Digital Circuit Design	Moodle	09/07/2018
	Viev	v File	

#### 4.3 - IT Infrastructure

#### 4.3.1 – Technology Upgradation (overall)

Туре	Total Co mputers	Computer Lab	Internet	Browsing centers	Computer Centers	Office	Departme nts	Available Bandwidt h (MGBPS)	Others
Existin g	1246	21	1	6	6	12	1124	1069	120
Added	70	10	0	0	0	10	50	0	0
Total	1316	31	1	6	6	22	1174	1069	120

4.3.2 – Bandwidth available of internet connection in the Institution (Leased line)

1069 MBPS/ GBPS

#### 4.3.3 - Facility for e-content

Name of the e-content development facility	Provide the link of the videos and media centre and recording facility	
MYDY IT center and OBS open source tool	http://mydy.dypatil.edu/	

#### 4.4 - Maintenance of Campus Infrastructure

4.4.1 – Expenditure incurred on maintenance of physical facilities and academic support facilities, excluding salary component, during the year

Assigned Budget on academic facilities	Expenditure incurred on maintenance of academic facilities	Assigned budget on physical facilities	Expenditure incurredon maintenance of physical facilites
55000000	52870895	82500000	82269702

4.4.2 – Procedures and policies for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc. (maximum 500 words) (information to be available in institutional Website, provide link)

Institute has a streamlined procedure, skilled manpower and equally supported budgetary provision to maintain academic, physical and support facilities. The physical facilities including Laboratories, Classrooms and Computers etc. are made available for the students. The students seeking admission to desired courses are charged at the time of the admission as suggested by the statutory body State Admission Cell (FRA). Separate funds are allotted to all HoDs for maintenance of the laboratories and the classrooms which a part of the

teachinglearning processes. The classrooms boards and furniture facilities are utilised regularly by the students. On request basis infrastructure is also made available for the other governmental and the nongovernmental organizations for conducting the exams like JEE, MHCET, MPSC, UPSC, GATE etc. The maintenance and the cleaning of the classrooms and the laboratories are done with the efforts of regular staffs of the institute. The college has adequate number of the computers with internet and WiFi connections and the utility software are distributed in different departments like office, laboratories, library, etc. All the stakeholders have equal opportunity to use these facilities as per the rules and policies of the institution. The central computer laboratory connected in LAN is open for the students. In other administrative sections (like office, students section, establishment, exam section, stores) the computers with LAN connectivity are loaded with utility software making work easier and systematic. The library is also provided with desktops and laptops with library management software and LAN/internet facility. The departments and the staff can use the computer system with internet at their seating places. In addition, majority of the staff has been allotted laptops with internet facility. All these computers and related facilities are under covered under AMC. The ICT Smart Class Rooms and the related systems are maintained under AMC with the corresponding service provider. Electrical and the plumbing related maintenance is undertaken with the help of institute appointed skilled persons and the expenditure is borne from the yearly approved allotted budget. The academic support facilities like library, the sports and other platforms supporting overall development of the students like SUC, NSS or competitive examination cell etc. are open to all college students. These facilities are available 24X7 for all students. The activities like fumigation and keeping library clean is carried out regularly by the library staff. The college garden is maintained by the gardener appointed by the institute. The sports department of the college has bagged many awards and some credit definitely goes to the adequate infrastructure of this department consisting of volleyball court, badminton court which can be used by student/staff. The running track and the outdoor facilities are free for usage for all the stakeholders.

http://www.rait.ac.in/infrastructure-and-facilities/

# CRITERION V – STUDENT SUPPORT AND PROGRESSION

#### 5.1 - Student Support

#### 5.1.1 - Scholarships and Financial Support

	Name/Title of the scheme	Number of students	Amount in Rupees		
Financial Support from institution	RAIT Meritirous students scholarship	65	1850000		
Financial Support from Other Sources					
a) National	Government Scholarship Schemes	1909	93279829		
b)International	Alumni	1	116000		
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# 5.1.2 – Number of capability enhancement and development schemes such as Soft skill development, Remedial coaching, Language lab, Bridge courses, Yoga, Meditation, Personal Counselling and Mentoring etc.,

Name of the capability enhancement scheme	Date of implemetation	Number of students enrolled	Agencies involved
Personal Counselling and	08/07/2018	3975	Department Faculty Members

Mentoring (Vidyarthi Unnati Yojana)					
Remedial coaching	16/04/2019	198	Department Faculty Members		
Soft Skill Development	05/07/2018	700	ROY EDDINGTONCHARLES ASSOCIATES		
Aptitude Training	05/07/2018	700	T.I.M.E.		
Sahaja Yoga Meditation	19/10/2018	256	Sahaj Yoga organisa tion,Belapur		
Aptitude (Quantitative , English,Logical Ability, Verbal Reasoning)	16/12/2018	520	Campus Credentials		
Softskills (Profile updation, Practice on Aptitude test 50, Resume Building)	16/12/2018	520	Campus Credentials, GTT, Barclays		
Group Discussion	16/12/2018	520	Campus Credentials, GTT, Barclays		
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5.1.3 – Students benefited by guidance for competitive examinations and career counselling offered by the institution during the year

Year	Name of the scheme	Number of benefited students for competitive examination	Number of benefited students by career counseling activities	Number of students who have passedin the comp. exam	Number of studentsp placed	
2018	APTITUDE SOFT SKILLS	0	700	0	655	
2019	Techniques for GATE Preparation	286	0	11	0	
2019	Carrier Guidance for GRE Preparation	67	0	59	0	
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5.1.4 – Institutional mechanism for transparency, timely redressal of student grievances, Prevention of sexual harassment and ragging cases during the year

Total grievances received	Number of grievances redressed	Avg. number of days for grievance redressal
0	0	0

# 5.2 - Student Progression

5.2.1 - Details of campus placement during the year

On campus				Off campus	
Nameof organizations visited	Number of students participated	Number of stduents placed	Nameof organizations visited	Number of students participated	Number of stduents placed
65	700	636	12	20	19
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# 5.2.2 – Student progression to higher education in percentage during the year

Year	Number of students enrolling into higher education	Programme graduated from	Depratment graduated from	Name of institution joined	Name of programme admitted to
2019	1	B.E.	Computer Engineering	California State University Eastbay	MS IN BUSINESS ANALYTICS
2019	1	B.E.	Computer Engineering	University Of Texas,san Antonio	MS in Computer Science
2019	1	B.E.	Computer Engineering	University of Utah, Salt Lake City, Utah, USA	Masters in E ntertainment , Arts and Engineering
2019	1	B.E.	Computer Engineering	University of Central Florida	Masters in computer Science
2019	1	B.E.	Computer Engineering	BITS Pilani K. K. Birla Goa Campus	Master of Engineering
2019	1	B.E.	Computer Engineering	University of Southern California	MS in Computer Science
2019	1	B.E.	Computer Engineering	University of Maryland,USA	Master's in Marketing Analytics
2019	1	B.E.	Computer Engineering	PACE Univers ity, New York	MS in Computer Science
2019	1	B.E.	Computer Engineering	Technical University of Munich	MS in Computer Science
2019	1	B.E.	Computer Engineering	INTERNATIONA CENTER FOR SPORTS STUDIES, SWITZERLAND	Sports Management
2018	1	B.E.	Information technology	Symbiosis Institute of Business Management,	Master of Business Adm inistration

				Pune	
2018	1	B.E.	Information technology	University of Texas	The Information Technology and Management graduate program
2018	1	B.E.	Information technology	University of Georgia	Master of Science in Computer Science
2018	1	B.E.	Information technology	University of California	Master of Computer Science
2018	1	B.E.	Information technology	Boston University	Master of Science in Computer Science
2018	1	B.E.	Information technology	Rutgers University	MS in Security
2018	1	B.E.	Information technology	Northeastern University	Master of Professional Studies in Analytics with a Conce ntration in Statistical Modeling
2018	1	B.E.	Information technology	Stevens Institute of Technology	Master of Science
2018	1	B.E.	Information technology	University of Georgia	Master of Information Science
2018	1	B.E.	Information technology	Texas A & M University	MS in Management information system
2018	1	B.E.	Information technology	Northeastern University	Master of Science in Computer Science
2018	1	B.E.	Information technology	Northeastern University	Master of Science in Information Systems
2019	1	B.E.	Information technology	Northeastern University	Master of Science program in Computer Science

2019	1	B.E.	Information technology	University of Texas	Master of Science in Computer Science
2019	1	B.E.	Information technology	University of MaryLand	M.I.M. program in Information Management (INFM)
2019	1	B.E.	Information technology	Northeastern University	Master of Computer Science
2019	1	B.E.	Information technology	Northeastern University	Master of Data Science
2019	1	B.E.	Information technology	Syracuse University	Master of Science Cybe rsecurity
2019	1	B.E.	Information technology	Northeastern University	Master of Science in Information Systems
2019	1	B.E.	Information technology	Stevens Institute of Technology	Engineering Management Program
2019	1	B.E.	Electronics and Telecomm unication	Rochester Institute of Technology	Computer Science(MS)
2019	1	B.E.	Electronics and Telecomm unication	Khoury College of Computer Sciences at Northeastern University	Master of Science program
2019	1	B.E.	Electronics and Telecomm unication	Lakehead University	MS Course
2019	1	B.E.	Electronics and Telecomm unication	University at Buffalo (UB), State University of New York	Masters of Science in Computer Science and Engineering.
2019	1	B.E.	Electronics and Telecomm unication	University of Windsor	MEng- Electrical Computer Engg (Master's Candidate (M2))
2019	1	B.E.	Electronics and Telecomm unication	Case Western Reserve University	Master of Engineering and Management Program

2019	1	B.E.	Electronics and Telecomm unication	Rutgers Business School	Masters of Information Technology and Analytics program
2019	1	B.E.	Electronics and Telecomm unication	North Eastern University	Master and Management and science
2019	1	B.E.	Electronics and Telecomm unication	North Eastern Univ ersity(BOSTO N)	Master of Science program
2019	1	B.E.	Electronics and Telecomm unication	Stevens Institute of Technology.	Systems Engineering program
2019	2	B.E.	Instrumentat ion	College of Professional Studies Northeastern University	Master of Science in Project Management with a conce ntration in Leading and Managing Technical Projects
2019	1	B.E.	Instrumentat ion	Graduate School of En gineeringat Northeastern University	Master of Science program
2019	1	B.E.	Instrumentat ion	Audencia Business School	M.Sc. In supply chain and Purchasing Management
2019	1	B.E.	Instrumentat ion	Great Lake institute of management	Post Graduate Diploma in Business Management
2019	1	B.E.	Instrumentat ion	UCD Michael Smurfit Business School	MS in strategin management and Planning
2019	1	B.E.	Electronics	New Jersey Institute of Technology	Computer Sci enceComputer Science
2019	2	B.E.	Electronics	UNSW Sydney	Electrical Engineering
2019	1	В.Е.	Electronics	Syracuse University	Information Management

2019	1	B.E.	Electronics	Colorado State University	Electrical Engineering
2019	1	B.E.	Electronics	University of Cincinnati	Computer Science
2019	1	в.Е.	Electronics	Arizona State University	Electrical Engineering
2019	1	B.E.	Electronics	Binghmton University	Electrical and Computer Engineering
2019	1	B.E.	Electronics	ILLINOIS Institute of Technology	Electrical and Computer Engineering
2019	1	B.E.	Electronics	University of California	Electrical and computer engineering
2019	1	B.E.	Electronics	Portland state University	Electrical and Computer Engineering
2019	1	B.E.	Electronics	The University of Queensland	Master of Business Adm inistration
2019	1	B.E.	Electronics	University of Colorado Boulder	Electrical, computer and energy engineering
2019	1	B.E.	Electronics	University of Texas, Arlington	Computer Science
2019	1	B.E.	Electronics	San Jose State University	Electrical and Computer Engineering
2019	1	B.E.	Electronics	University Of Waterloo, Canada	Computer Science
2019	1	B.E.	Electronics	Royal Melbourne Institute of Technology	Electrical and computer engineering
2019	1	B.E.	Electronics	University of South Florida	Business Analytics and Information System
2019	1	B.E.	Electronics	Carnegie Mellon University, Pittsburgh Pennsylvania	Electrical and computer engineering

2019	1	B.E.	Electronics	Symbiosis Institute of Operations Management.	Master of Business Adm inistration
2019	1	B.E.	Electronics	D.Y.Patil school of management	Master of Business Adm inistration
2019	1	B.E.	Electronics	University of Texas, San Antonio	Electrical Engineering
2019	1	B.E.	Electronics	CDAC at Bengaluru	PG diploma in Advanced computing
2019	1	B.E.	Information technology	Northeastern University	Master of Science in Information Systems
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5.2.3 – Students qualifying in state/ national/ international level examinations during the year (eg:NET/SET/SLET/GATE/GMAT/CAT/GRE/TOFEL/Civil Services/State Government Services)

Items	Number of students selected/ qualifying	
GATE	11	
GMAT	2	
CAT	6	
GRE	67	
TOFEL	9	
Civil Services	3	
Any Other	9	
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# 5.2.4 – Sports and cultural activities / competitions organised at the institution level during the year

Activity	Level	Number of Participants
Alankar	Intercollegiate	122
Nrutyavishakar	State	24
Abhinay	State	47
Mahaksh	National	350
Iconoclast	National	104
Abhivyakti	Zonal	28
Kalamahotsav	Inter Campus	62
Dynamo	Intercollegiate	750
Olympia	University	120
Stamina	Intercollegiate	320
CPL (College premier League)	Intercollegiate	130
EPL (Engineering Premier	Intercollegiate	180

League)		
UDAAN	Intercollegiate	800
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#### 5.3 - Student Participation and Activities

5.3.1 – Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one)

Year	Name of the award/medal	National/ Internaional	Number of awards for Sports	Number of awards for Cultural	Student ID number	Name of the student
2019	Gold Medal	National	1	0	16ET2008	Sumeet Jaiswal
2019	GOLD Medal	National	1	0	16EE1026	Chirag Lanjekar
2019	Gold Medal	National	1	0	16IT2001	Atharva Achawal
2019	THIRD Position	National	1	0	15CE2011	Saieesh Mayya
2019	3rd Prize	National	0	1	15ET1090	Pratiek Patil
	<u>View File</u>					

5.3.2 – Activity of Student Council & representation of students on academic & administrative bodies/committees of the institution (maximum 500 words)

Institute believes in all round development of student and encourages leadership. At institute level a student council named as SUCRAIT is set and each department has an active Technical Society Student Chapter consisting of student members. Leaders of all the students' council and technical committees are elected through democratic process. The selection process at RAIT follows a unique leadership development model for all its student based associations. The process that will build leaders based on their aptitude, involvement, and activities of the association, and opinion of peer groups and professional and academic performance, has been put in place. The details and process of selection of office bearers are as follows: o The students during their entry into college opt for one or more student associations based on their interest and based on orientation provided by various student associations. o Students need to be member of at least one professional association and can opt for one or more cocurricular associations. o The leadership positions are at three levels viz ? Final Year involving top level of leadership roles such as Chairman, Secretary and Jt. Secretary etc. ? Second layer of leadership positions from 3rd year students ? Third layer from second year students. ? Volunteers from first year students. Moreover, in all decisionmaking bodies the student representatives hold a good position and also participate in any decision making with their opinion. In IQAC cell the student's members also plays a pivotal role. In Grievance committee, Antiragging Committee all decisions are decided in a congenital environment. The Institute holds state level events where participation of students is praiseworthy. List of committees in which student representatives are there is given below. Student Union Council, AntiRagging Committee, College Development Committee, Woman Grievance Redresaal Cell (WGRC), RAIT Alumni Association (RAA), CSI - RAIT, IEEE - RAIT, ISA - RAIT, ITSA -RAIT, IETE -RAIT, ISTERAIT, MOTIF, Kalaraag, RAIT Social Wing, NSS, RAIT Sports etc. Student Union Council) It is a student representative body comprising of committee headed by the General Secretary (GS). The committee is the bridge between the Institute authorities and the

student community. Over the years SUC has created an atmosphere of goodwill and camaraderie in the Institute. Students look forward to all the events organised by the SUC like Teachers Day, Tie Day, Traditional Day, Rose Day etc. Festivals like Ganesh Chaturthi and Gokulashtami are celebrated with gusto. SUC also organises Freshers Day to bring the freshers into the mainstream of RAIT life. SUC also organises HORIZON which is a top cultural festival in the city. A faculty coordinators leads the Council with a final year student being the general secretary. The departmental level student section is monitored by HOD of respective Department, who is responsible for the smooth conduct of the technical events. Students are encouraged to be a part of the decisionmaking process supporting democratic form of governance.

#### 5.4 – Alumni Engagement

5.4.1 – Whether the institution has registered Alumni Association?

Yes

A registered alumni association named as RAA is in function since last decades. Alumni activities are regularly arranged and annual alumni meet are organised to discuss and enhance wholesome education and development of institute. This year the meet was held on 21st December, 2018. Alumni members help the institution in every possible extend. They are regularly invited to interact with the students. They come and share their expertise from various fields like government, academia, corporate world, startups etc. Workshop are conducted by alumni on current trend/technology. Alumni of the institute working in different reputed government /private /MNCs / academia are regularly invited to address the students and boost their selfconfidence. On 21st December 2018, RAIT organized the Mumbai Alumni Meet - The Homecoming 2018, at the RAIT with over 500 alumni members attending the event. The event witnessed the launch of the Alumni EMagazine - wall@raa, created as a medium to bridge the gap between the institution and its proud graduates spanning across the world. The college took this opportunity to felicitate some remarkable projects undertaken by current RAIT students and a total sum of Rs.15 lakhs were awarded as assistance for the completion of their dream projects by the RAIT Alumni Association. Also several alumni were awarded during the prize distribution ceremony for their noted work in entrepreneurial ventures, community services and academic research. The award ceremony was then followed up with the customary cakecutting ceremony and the extravaganza was then finally concluded with a cultural program and a DJ night, where the students, alumni members and professors danced their hearts off and had a blast. The Homecoming 2018 ended with a promise to meet again and everyone bid an emotional farewell to each other.

5.4.2 - No. of enrolled Alumni:

12500

5.4.3 – Alumni contribution during the year (in Rupees) :

116000

5.4.4 - Meetings/activities organized by Alumni Association:

2 Talks and 1 Alumni meet

#### CRITERION VI – GOVERNANCE, LEADERSHIP AND MANAGEMENT

#### 6.1 – Institutional Vision and Leadership

6.1.1 – Mention two practices of decentralization and participative management during the last year (maximum 500 words)

RAIT strongly believes in decentralization and participative management and its

levels the college grooms the leadership. The Governing body, College Academic Council, Principal, VicePrincipal, Deans, HODs, Registrar, IQAC Members, teaching staff, nonteaching staff, supporting staff, student's union council, student representatives, stakeholders, alumni and various committees jointly empowered to propose, design, formulate and execute their plans within the framework of college. The academic, administrative, IQAC, DQA and students committees all are working together for the smooth running and overall functioning of the college. 1. Principal Level: The Governing body delegates all the academic and operational decisions based on policy to the College Academic Committee (CAC) headed by the Principal in order to fulfil the vision and mission of the institute. CAC formulates common working procedures and entrusts the implementation with the faculty members. 2. Department Level and Faculty Level: At department level there are various committees headed by HODs and senior Professors. Faculty are members of various committees/cells and are allowed to conduct various programs to showcase their abilities. They are encouraged to develop leadership skills by being in charge of various academic, cocurricular, and extracurricular activities. They are given authority to conduct industrial tours and to have tie up with industry experts and appointed as coordinator and convener for organising seminars/workshops/conferences/FDPs. For effective implementation and improvement of the institute, following committees are formed. Other units of the institute like sports, library, store etc. have operational autonomy under the guidance of the various committees/cells. 3. Student Level: Students committees at institute and department level are empowered to play an active role as a coordinator of cocurricular and extra curricular activities, social service group coordinator. Participative Management: The institute promotes a culture of participative management by involving the staff and students in various activities. All decisions of the institution are governed by board of management. Both students and faculties are allowed to give any suggestions to improve the excellence in any aspect of the Institute. Strategic Level CAC is centralized (Institute level) committee responsible for drafting, regulating and implementing different academic policies. It is meant for smooth uniform conduction of academics throughout the institute. Committee Hierarchy: CAC is headed by Chairman who is the Principal of the institute. Other members of the committee are Deans, HODs, Registrar, Training and Placement Officer, Senior Faculty members, class teachers and exam incharge. The Principal, Deans, HoDs, senior Professors and staff members are involved in defining the policies and procedures, framing guidelines and rules regulations pertaining to admission, placement, discipline, grievance, counseling, training placement, library services etc., and effectively implementing the same to ensure smooth and systematic functioning of the institute. For the various programs to be conducted by the institute all the staff members will meet, discuss, share their opinion and plan for the event and form various committees involving students and coordinate with each other.

significant impact on planning and execution of institute policy. At various

#### 6.1.2 – Does the institution have a Management Information System (MIS)?

Yes

#### 6.2 - Strategy Development and Deployment

6.2.1 – Quality improvement strategies adopted by the institution for each of the following (with in 100 words each):

Strategy Type	Details
Curriculum Development	The disciplinewise Board of studies (BOS) at University level is constituted with members from industry and academia. The meetings of the BOS are conducted at regular intervals. The

ideas obtained from the various bodies are thoroughly discussed by the experts and forwarded to Academic Council and Management Council of University of Mumbai. The feedback collected from the students and alumni for curriculum and suggestions are placed in BOS meetings. Analysis of all collected feedback done on the employability and valuebased education. Teaching and Learning Institute has adopted reforms to maintain the quality of teaching and learning process and improving academic standards. The college conducts regular orientation and awareness programmes for the benefit of the students. The following are some of the innovative processes adopted by the institution towards TLP (Teaching and Learning Programme) • Learning Management System and recording and distribution of class room lectures via ICT enabled class rooms. • Creation of departmental advisory board for advising academic materials. • Collaborative laboratory with industry. • Live lecture programmes. • Internships. • Rubrics to assess the level of student projects. • Animation/Power point/Smart Classroom facilities. To motivate and help students to do minor educational projects in related area/topics. • Conduct External and internal academic audits on a regular basis. • Workshop by alumni on current trend/technology. Project based learning (selfstudy). Progression of students is continuously monitored. • Inter departmental student projects. • Funding for multidisciplinary projects • Awards for best student projects. • Financial support to students for participating in competitions and model preparation. Examination and Evaluation The institution continues to adopt improved examination process. • Examination reform - As affiliated institute, by proper appointment by university. The Course instructor /Coordinator along with faculty members from other institute prepares the question paper in the respective courses. Further evaluation of scripts with respect to those courses is also done by respective course instructor along with moderation by external examiners. The students are provided with an opportunity to access their

answer script of each course. A student aggrieved by the marks awarded to him/her can appeal for reevaluation. All the copies (internal) are shown to the students signed by them. • For each department 2 midterm internal examination and one end semester university examination are conducted. • 2 midterm examinations are conducted at institute level and question papers are set by internal teachers. • Assignments and seminars are part of internal examination conducted by institute's examination cell. • Regular tutorial and remedial classes are conducted. • Continuous evaluation is carried out through regular tests, assignments, projects.

#### Research and Development

The Institute has a research committee to facilitate, monitor and encourage the research activities. It meets regularly to discuss various plans to promote research and motivate the faculty for academic advancement. • • The committee keeps track of different government schemes and schemes other agencies like CSIR, DST, DBT, DRDO and CSIR. • Creation of inter and multidisciplinary research teams. • Organization of conferences/seminars/workshops/training programmes. • Sponsoring faculty members for attending different

conferences /seminars/workshops. • Establishment of research forum. • Encouraging faculty towards getting projects. • Establishment of department research committees. • Faculties are rewarded for publication in reputed journals and book publication. • Sabbatical leave is provided to faculties for pursuing higher studies. • College provides registration fees and travel cost for attending reputed National/International conferences. • Subscription to both printed and online journals. • Seed money provided to projects. • Appointment of Research Assistant. • Many research papers are

published by students. • Dedicated cubicles in laboratories for research works. • Inviting distinguished visiting fellows from national international levels. ? Providing seed money for research activities. ? Providing Incentives for publishing research papers in referred journals with impact factor. ? Cluster concept.

? Extension Lectures. ? Recognizing inspiration thinking of the students by awarding best student project award in every year. Library, ICT and Physical Institute Central Library was Infrastructure / Instrumentation established with nearly 60 Thousand books and 1700 books were added during 20182019 period and 40 print journals having elearning resources with 100 eBooks and 350 ejournals were added. Each department is provided with computer and internet facilities. The institute has well established ICT enabled classrooms, seminar halls and fully equipped laboratories. Other amenities such as canteen, medical room, bank, hostels, recreation clubs, basketball court, indoor auditorium and common halls, are available. Each department of the College has well established laboratories with modern equipment. The institute has well build sports facilities for all the students in campus. Delegations of responsibility - some of Human Resource Management the key responsibility areas are identified and delegated at different levels - office function, Principal, HOD/Asst. HOD. ? Academic Council - All academic matter (including BOS functions) through academic council ? Internal Quality Assessment Cell (IQAC) ? Participatory Management -Subcommittee for different functional activities comprises representatives of teachers, nonteaching staff and students. It includes the involvement of the staffs for organizing different programmes of the college. Staff Orientation Programmes are organized by the college on regular basis. Performance appraisal system is practised. Promotion policy - College follows the promotion policies of the Higher Education Department. In addition, College also has introduced seniority based and performance based promotions. Policy for compensation -College extends the following benefits to the staff members. Such as: ? Provident fund - Each member of the staff shall subscribe to duly constituted College Provident Fund in accordance with statutory rule. ? Gratuity - College pays Gratuity to the staff members. Performance Recognition ? The College gives performance

	recognition by way of monetary incentives, like, sponsoring registration fees for the faculty members whose paper has been accepted at Seminars and Conferences (including International Conferences).
Industry Interaction / Collaboration	Institute has active interaction and collaboration with reputed research organizations, industries and institutions in India and abroad. • It has more than 10 MOUs and also has several interdisciplinary and multidisciplinary projects in collaboration with other reputed organizations. The students and faculty members are sent in regular industry visits. • Many faculty members are involved with different consultancy programs. This increases the institute industry interaction. • Alumni of the institute working in different reputed government/private/MNCs/academia are regularly invited to address the students.
Admission of Students	The institute is approved by DTE, Maharashtra and follows CAP rounds, has a well organized and transparent admission system. All the admissions are based on merit in accordance with the rank obtained in the MHCET or rank obtained in all India level entrance

# 6.2.2 – Implementation of e-governance in areas of operations:

E-governace area	Details
Planning and Development	• ICT in all classrooms • Each department is provided with computers having internet facility. • The institute Central Library has adequate no. of books, journal, computer with internet facility and provision for digital library. • 24X7 library facilities provided by the institute for the students and faculties.
Administration	Internet access to all machines and 132 GBPS leased line. • WiFi facility throughout the institute. • • Administrative information is digitalized and all the departments of the institute are provided with computer data cable network facility. • CCTV surveillance system for central library and all the existing facilities. On line student registration and payment, issue of transfer certificate and issue of

examinations JEE (Main).

	Ebonafide student certificates and online railway concession. Epayment of regular and exam fees. The kiosks that handle this activity are now deployed at many places to enhance Student comfort. Digital Course File to maintain records and digital Feedback System
Finance and Accounts	Computerised and cash less system of transactions and Tally software System for maintaining the accounts in accounts department.
Student Admission and Support	Well equipped admin office and dedicated staff to conduct DTE CAP rounds and institute level admission.  Internet facility is provided in admin office. LMS and other ELearning resources, eJournals and ebooks are available for students. Admission and examination procedure are computerized.
Examination	Institute has exam cell and dedicated manpower for planning and conduction of internal and university examination.  Modern infrastructure foe online paper assessment and also offline assessment are in place.

# 6.3 - Faculty Empowerment Strategies

6.3.1 – Teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the year

Year	Name of Teacher	Name of conference/ workshop attended for which financial support provided	Name of the professional body for which membership fee is provided	Amount of support
2018	Ms. Sakshi More	One week STTP on Open source Technologies for communication Engineering	NA	3000
2018	Ms. Nilam Patil	One week STTP on Open source Technologies for communication Engineering	NA	3000
2018	Mr. Pratik kadam	Four day National level workshop in Artificial Intelligence using Deep Learning	NA	2200
2018	Mr. Akshay Jadhav	Four day National level	NA	2200

		workshop in Artificial Intelligence using Deep Learning		
2018	Mr. Vishwesh Vyawahare	COMSOL Conference	NA	16019
2018	Ms. Trupti Agarker	Symposium on Advanced Satellite Communications and IRNSS/ GAGAN	NA	500
2018	Mr. Anup Patil	Symposium on Advanced Satellite Communications and IRNSS/ GAGAN	NA	500
2018	Ms. Shweta Patil (M.E. Student)	Symposium on Advanced Satellite Communications and IRNSS/ GAGAN	NA	200
2018	Mr. Pratik kadam	SEMC Competition, Lucknow	NA	10600
2018	Dr. Prasiddh K Trivedi	Sliding mode control in infinite Dimensional Setting: Theory Extension and Applications	NA	6000
2018	Ms. Priya Khot	Python Programming and its application	NA	500
2018	Mr. Sameer Chikane	Python Programming and its application	NA	500
2018	Mr. Sangeeth Sadanand	Python Programming and its application	NA	500
2018	Mr. Akshay Jadhav	ISTE apprpved  Machine  Learining  Essentials	NA	2000
2018	Ms. Pooja Patil	ISTE apprpved Machine Learining Essentials	NA	2000
2018	Dr. Prasiddh K	Patent Filing	NA	500

	Trivedi	IPR		
2018	Ms. Nivedita E	International conference on E nergy,communica tion,data Analytics and soft computing.	NA	4000
2018	Ms. Nivedita E	ISTE Approved STTP on ML Essentials	NA	2000
2018	Ms. Roshni	Seminar	NA	620
2018	Ms. Preet C	International conference on E nergy,communica tion,data Analytics and soft computing.	NA	4000
2018	Dr. Mukesh D Patil	ICAST2018	NA	2500
2018	Dr. Pragnan Chakraborty	ICAST2018	NA	3000
2018	Dr. Manoj Dongre	ICIECE2018	NA	3000
2018	Mr. Jaswantsing Rajput	ICCET2019	NA	4000
2018	Dr. Ayush Saxena	ICCET2019	NA	2500
2018	Ms. Amruta Kulkarni	conference on Technologies for future cities	NA	2500
2018	Ms. Priyanka Deore	conference on Technologies for future cities	NA	1500
2018	Dr. Siuli Das	Machine learning and its applications with Handson using Python, Xavier Institute of Engineering	NA	3000
2018	Mr. Ramakant Patil	Machine learning and its applications with Handson using Python Xavier Institute of	NA	3000

I		Engineering		
2018	Dr.Sharad P. Jadhav	NA	ISA membership fee	4257
2018	Mrs. Supriya Bhuran	Annual Faculty Convention, A. P. Shah Institute of Technology	NA	800
2018	Dr. Ashish Jadhav	NA	IEEE Memebship subscription for IoT and Network based projects	20029
2018	Mr. Nilesh Marathe	IoT Jaipur	NA	4000
2018	Ms. Nikita Kulkarni	IoT Jaipur	NA	4000
2018	Ms. Jyoti Joshi	IoT Jaipur	NA	4000
2018	Sumedha Bhagwat	IoT Jaipur	NA	4000
2018	Ravita Mishra	Data Science Jaipur	NA	6050
2018	Jyoti Kundale	STTP ML SPIT	NA	2500
2018	Puja Vakhare	STTP ML SPIT	NA	2000
2018	Jyoti Deone	STTP ML	NA	2200
2018	Deepali Patil	STTP ML	NA	2200
2018	Swapnil Shinde	ICCUBEA 2018 , Pune	NA	4000
2018	Anita Patil	ISDA2018 , Vellore	NA	5000
2018	Soumi Banerjee	ISDA2018 , Vellore	NA	5000
2018	Dr. Leena Ragha	NA	CSI membership fee	7080
2018	Namita Pulagam	STTP on Insight of Machine Lerning and Deep Learning	NA	3000
2018	Rajashree Shedge	STTP on Insight of Machine Lerning and Deep Learning	NA	3000
2018	Vanita Mane	STTP on Insight of Machine Lerning and Deep Learning	NA	3000
2018	Tushar Ghorpade	STTP on Insight of Machine Lerning and Deep Learning	NA	3000

2018	Rashmi Dhumal	STTP on IOT	NA	2000
		Raspberrypi and Python Programming		2000
2018	Tabassum Maktum	STTP on IOT Raspberrypi and Python Programming	NA	2000
2018	Harsha Saxena	FDP on ANN and Deep Learning	NA	2390
2018	Ruby Mandal	STTP on Insight of Machine Lerning and Deep Learning	NA	2000
2018	Prathamesh Gunjur	FDP on AI and	NA	5197
2018	Smita Bharne	STTP on IOT Raspberrypi and Python Programming	NA	2000
2018	Trupti Patil	STTP on IOT Raspberrypi and Python Programming	NA	2000
2018	Apurva Shinde	ISTE Approved STTP on ML Essentials	NA	2000
2018	Dr. Amit Barve	Visit to IITM	NA	21922
2018	Dr. Amit Barve	Visit to IITM, Project Meeting	NA	2930
2018	Rashmi Dhumal	FDP on Research Methodology	NA	500
2018	Sumithra T V	Workshop on Creative Effective Educational Videos	NA	250
2018	Balwant Gorad	ISTE Faculty Conventional Conference	NA	2000
2018	Snehal Mumbaikar	FDP on AI and Machine Learning, MNIT JAIPUR	NA	4905
2018	Siddhi Kadu	FDP on AI and Machine Learning, MNIT JAIPUR	NA	4905
2018	Dr. Amit Barve	Founders day Program	NA	1550

2018	Dr. Gargi Phadke	Annual Faculty Convention,A. P. Shah Institute of Technology	NA	800
2018	Dr. Jayanand P. Gawande	IEEE Winter school on Advances in Machine Learning and Visual Analytics,MIT Pune	AN	3000
2018	Ms. Shital N Patil	IEEE Winter school on Advances in Machine Learning and Visual Analytics, MIT Pune	NA	3000
2018	Ms. Shital N Patil	Medical Image Computing Machine learning methods and Advanced MRI applications, IIT Bombay	NA	5900
2018	Ms. Bhawana Garg	STTP on Linear Algebra, Statistics, Mathematical Modelling: Hands On, K.J.Somaiya	NA	3600
2018	Mr. Vivek Khalane	IEEE conference on Industrial and Information system, IIT, Ropar	NA	5000
2018	Ms. Shamal S Salunkhe	MEMS and NEMS: Fundamentals, Design and Fabrication,IIT Hyderabad	NA	3000
2018	Ms. Sarika Oundhkar	Approved One Week Short Term Training Program on Biology for Eng ineers.Vivekana nd Education Societys Institute of	NA	3000

		Technology, Chembur		
2018	Mr. Mandar Ghodekar	STTP on Linear Algebra, Statistics, Mathematical Mo delling:K.J.Som aiya Hands On	NA	3600
2018	Mr. Vivek S. Kadam	Introduction to AI and IOT, IIT Kanpur	NA	5000
2018	Mr. Bhavesh Digey	IEEE Winter school on Advances in Machine Learning and Visual Analytics,MIT Pune	NA	3000
2018	Ms. Supriya Bhuran	2nd Industrial IOT Conference, ISA , Pune	NA	4590
2018	Mr Pratik Kadam, Mr. Gaurav Datkhile, Mr. S. M. Labde, DR. V. A. Vyawahare	International Conference on advanced trends in engineering, ICATE, DMCE, Mumbai	NA	1500
2018	Ms Clara Arackel, Dr. V.A. Vyawahare	International Conference on advanced trends in engineering, ICATE, DMCE, Mumbai	NA	1500
2018	Mr. Balu Bhusari, Dr. V. A. Vyawahare	International Conference on advanced trends in Science and Technology, ICAST2018, KJSE, Sion Mumbai	NA	2500
2018	Dr. Dhiraj Magare, Ms. Priyanka Gutte Mr. S. M. Labde, Dr. Vishwesh Vyawahare	Conference on Technologies for Future Cities 2019 (CTFC 2019), Pillai College of Engineering, New Panvel	NA	2500
2018	Ms. Sujata Mendgudlee	International conference on computing in	NA	5000

		engineering Technologies 2019, Aurangabad (ICCET 2019)		
2018	Ms. Sushma Kodagali	One week STTP on Advaned Design and Application with handson in Cadence toolset	NA	3000
2018	Ms. Shwetha Shetty	One week STTP on Advaned Design and Application with handson in Cadence toolset	NA	3000
2018	Ms. Archna Khodse	One week STTP on Advaned Design and Application with handson in Cadence toolset	NA	3000
2018	Ms. Shweta Ashtekar	One week STTP on Machine learning and Smart Devices	NA	2200
2018	Mrs.Anupama Shenoy	Spoken English Workshop, RAIT	NA	1000
2018	Ms.Mansi Jawale	Spoken English Workshop, RAIT	NA	1000
2018	Mrs.Nisha Narwani	Spoken English Workshop, RAIT	NA	2000
2018	Dr. Narendrakumar R. Dasre	Maths Workshop registration, RAIT	NA	2000
2018	Dr. Vijay B. Patil	84th Annual Conference of Indian Mathematical Society (IMS), Jammu	NA	5000
2018	Mrs. Shilpa Bhangale	84th Annual Conference of Indian Mathematical Society (IMS), Jammu	NA	5000
2018	Dr. Vijay B. Patil	Maths Workshop registration, RAIT	NA	2000
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6.3.2 – Number of professional development / administrative training programmes organized by the College for teaching and non teaching staff during the year

Year	Title of the professional development programme organised for teaching staff	Title of the administrative training programme organised for non-teaching staff	From date	To Date	Number of participants (Teaching staff)	Number of participants (non-teaching staff)
2019	NA	Training on MS Office	03/05/2019	04/05/2019	0	32
2018	Role of Ma thematical Modelling in Research	NA	08/08/2018	08/08/2018	48	0
2019	FDP on Agile Meth odology	NA	22/01/2018	22/01/2019	21	0
2018	Expert talk on Research M ethodology	NA	13/08/2018	13/08/2018	50	0
2018	Expert talk on Overview of AI	NA	10/10/2018	10/10/2018	25	0
2018	3 day Workshop on Introdu ction to GPU Computing with Cuda	NA	03/10/2018	05/10/2018	20	0
2019	Hands on Workshop on Advanced MATLAB Pro gramming (with focus on Control System)	NA	11/01/2019	13/01/2019	4	0
2019	IOT and its Applic ations	NA	09/01/2019	11/01/2019	15	0
2018	One day Workshop on Underwater Signal and Image	NA	06/08/2018	06/08/2018	40	0

	processing using expe rimental setup.					
2019	Hands on training on Machine learning and Deep learning using python	NA	14/03/2019	15/03/2019	24	0
2019	Familiaris ation with dSPACE MircoLab Box	NA	15/02/2019	15/02/2019	25	0
2018	Workshop on System design and Verificati on using Xilinx Vivado Design Suit	NA	15/02/2019	15/02/2019	25	0
2018	Exper talk on Possible research problems with Dspace setup	NA	27/12/2018	27/12/2018	11	0
2018	Introducti on to IOT	NA	20/07/2018	20/07/2018	55	0

6.3.3 – No. of teachers attending professional development programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes during the year

Title of the professional development programme	Number of teachers who attended	From Date	To date	Duration
ISTE apprpved Machine Learining Essentials	2	31/12/2018	05/01/2019	6
Patent Filing IPR	2	04/01/2019	05/01/2019	2
Orientation on Wireless Networks	2	10/01/2019	10/01/2019	1

Orientation on Cloud Computing Services and Lab	3	11/01/2019	11/01/2019	1
Orientation on Advanced Database Management Technology	1	02/07/2018	02/07/2018	1
Orientation on Internet Programming	3	04/07/2018	04/07/2018	1
Orientation on Advanced Data Structure and Analysis of Algorithms	1	11/07/2018	11/07/2018	1
Orientation on IOT	4	05/07/2018	05/07/2018	1
Orientation on Compute Networks	2	05/01/2019	05/01/2019	1
Orientation on Software Engineering and project Management and Lab	3	09/01/2019	09/01/2019	1
Orientation of ARWP	2	12/01/2019	12/01/2019	1
Creating Effective Educational Videos	1	16/02/2019	16/02/2019	1
Intellectual Property Rights	1	04/01/2019	05/01/2019	2
Data Science with Python	1	12/07/2018	14/07/2018	3
IoT, Raspberry Pi, Python	5	02/07/2018	07/07/2018	6
Insight of Machine Learning Deep Learning	5	02/07/2018	07/07/2018	6
FDP on ANN and Deep Learning`	1	11/06/2018	15/06/2018	5
FDP on AI ML	1	04/06/2018	08/06/2018	5
STTP on ML Essentials	2	31/12/2018	05/01/2019	6
FDP on AI ML, MNIT Jaipur	2	04/06/2018	08/06/2018	5

			-	
Orientation of computer communication Network	2	11/01/2019	11/01/2019	1
Orientation of IPMV	3	10/01/2019	10/01/2019	1
One week STTP on Advaned Design and Application with handson in Cadence toolset	3	25/06/2018	30/06/2018	6
One week STTP on Machine learning and Smart Devices	1	02/07/2018	07/07/2018	6
One week STTP on Open source Technologies for communication Engineering	2	02/07/2018	06/07/2018	5
Four day National level workshop inArtificial Intelligence using Deep Learning	2	17/08/2018	25/08/2018	4
COMSOL Conference	1	09/08/2018	10/08/2018	2
IEEE IPR Workshop, IITB	1	23/08/2018	23/08/2018	1
Advanced Topics in Embedded Systems and Robotics, IITB	1	27/08/2018	31/08/2018	4
Symposium on Advanced Satellite Communications and IRNSS/ GAGAN	1	31/08/2018	31/08/2018	1
SEMC Competition, Lucknow	1	06/10/2018	07/10/2018	2
Sliding mode control in infinite Dimensional Setting: Theory Extension and Applications	1	07/11/2018	11/11/2018	5

Python Programming and its application	3	02/01/2019	08/01/2019	7
Orientation Programme on CSS SSL	2	15/01/2019	15/01/2019	1
Orientation Programme on MS	4	13/07/2018	13/07/2018	1
Orientation Programme on SPCC	4	01/09/2019	01/09/2019	1
Orientation Programme on ADBMS	1	16/01/2019	16/01/2019	1
Orientation Programme on Computer Network	2	12/06/2019	12/06/2019	1
Orientation Programme on ML	1	01/10/2019	01/10/2019	1
Advance Computer Network	1	15/01/2019	15/01/2019	1
Orientation Programme on TCS	4	13/07/2018	13/07/2018	1
Orientation Programme on WDL	2	13/07/2018	13/07/2018	1
Introduction to GPU Computing with CUDA	8	03/10/2018	05/10/2018	3
Agile Methodology	21	22/01/2019	22/01/2019	1
EdTech: IBM Redington and Micropoint Computers	3	04/05/2019	04/05/2019	1
Orientation on CNS and Security Lab	2	16/07/2018	16/07/2018	1
Orientation on Digital Forensics	2	05/01/2019	05/01/2019	1
STTP ML and Smart Devices	2	02/07/2018	07/07/2018	6
FDP on IOT Lab	1	05/07/2018	05/07/2018	1
FDP on IPR	1	04/01/2019	05/01/2019	2
FDP on Internet of Things	4	10/01/2019	15/01/2019	6

FDP on Digital	1	09/01/2018	20/10/2018	9
Image Processing				
FDP on Geoinformatics	1	10/01/2019	12/01/2019	3
FDP on Programming in Java	1	30/07/2018	20/10/2018	9
FDP on Big Data Computing	2	28/01/2019	24/04/2019	9
FDP on IOT (NPTEL)	1	30/07/2018	20/10/2018	9
TechGenx: Mictopoint Computer and Nvidia	2	31/10/2018	31/10/2018	1
FDP on Software Testing	1	30/07/2018	19/10/2018	9
FDP on Introduction to Parallel Programming and Open MP	1	13/08/2018	07/09/2018	3
FDP on Internet of Things	1	30/07/2018	19/10/2018	9
FDP on Introduction to Machine Learning	2	27/08/2018	19/10/2018	6
FDP on Cryptography and Network Security	1	28/01/2019	19/04/2019	9
Workshop on Advances in Computer Networks (CAN2018)	2	10/12/2018	14/12/2018	5
FDP on Intellectual Property Rights	1	04/01/2019	05/01/2019	2
STTP on Recent Trends in Wireless Networks	2	02/01/2019	07/01/2019	6
ISTESTTP on Green Internet of Things	2	02/01/2019	08/10/2019	7
Academica Industry	2	01/05/2019	01/05/2019	1

Collaboration: Issues, Challenges and Opportunities				
Patent filling and Intellectual Property Right	1	04/01/2019	05/01/2019	2
Orientation of Microprocessor and Application	3	17/01/2019	17/01/2019	1
Orientation of ElectroMagnatic	2	18/06/2019	18/06/2019	1
Orientation of data Compresion and excription	2	12/06/2019	12/06/2019	1
Orientation of Discree time signal processing	3	05/06/2019	05/06/2019	1
Orientation of TV	2	13/06/2018	13/06/2018	1
Orientation of Microcontroller and Application	3	11/07/2019	11/07/2019	1
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#### 6.3.4 – Faculty and Staff recruitment (no. for permanent recruitment):

Teac	hing	Non-te	aching
Permanent Full Time		Permanent Full Time	
256 256		99	99

#### 6.3.5 - Welfare schemes for

Teaching	Non-teaching	Students	
Group, Medical Insurance	Group, Medical Insurance	Group, Medical Insurance	

#### 6.4 - Financial Management and Resource Mobilization

#### 6.4.1 – Institution conducts internal and external financial audits regularly (with in 100 words each)

The accounting statements of the college are audited regularly as per the government rules. Institute has accounts department with well qualified team of staff. Fully computerized and cashless transaction systems are in place. The internal auditor regularly checks receipts including fee receipts and payments with vouchers and necessary support. He also ensures that all payments are duly authorized. The external auditor conducts statutory audit at the end of financial year. After the audit the report is sent to the management for review. The auditor is appointed by the sponsoring society. Last audit was done on 4th September 2018 and as on date there is no adverse remark on the accounts of the institution. The college files income tax return every year within the stipulated time.

6.4.2 – Funds / Grants received from management, non-government bodies, individuals, philanthropies during the year(not covered in Criterion III)

Name of the non government funding agencies /individuals	Funds/ Grnats received in Rs.	Purpose			
NIL	0	NA			
No file uploaded.					

#### 6.4.3 - Total corpus fund generated

215548597

#### 6.5 - Internal Quality Assurance System

#### 6.5.1 - Whether Academic and Administrative Audit (AAA) has been done?

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	Yes	Academicians from other Institutes	Yes	Institute Level Professors
Administrative	Yes	Academicians/Ad ministrator from other Institutes	Yes	Head of Departments

#### 6.5.2 - Activities and support from the Parent - Teacher Association (at least three)

Institute regularly conducts parent teacher meet and constitution of PTA is in process.

#### 6.5.3 – Development programmes for support staff (at least three)

Institute believes in skill up gradation and quality improvement. Every year, the institute conducts skill up gradation courses for the supporting staff and also encourages them to enrol for certification courses.

#### 6.5.4 – Post Accreditation initiative(s) (mention at least three)

The college works towards strengthening of institute industry collaboration as follows: 1. Provide solutions to problems faced by industry. 2. Address societal issues by developing prototype under the guidance for industry experts. 3. Efforts to procure funding from reputed industry and corporate houses related to research projects. 4. Boost R D culture and motivate the faculty and students to generate intellectual property (filing of patents, publication of research papers in reputed journals with good impact factor).

#### 6.5.5 - Internal Quality Assurance System Details

a) Submission of Data for AISHE portal	Yes
b)Participation in NIRF	Yes
c)ISO certification	No
d)NBA or any other quality audit	Yes

#### 6.5.6 - Number of Quality Initiatives undertaken during the year

Year	Name of quality initiative by IQAC	Date of conducting IQAC	Duration From	Duration To	Number of participants
2019	RAIT has been ranked 172th in the National Ins	15/05/2019	15/05/2019	15/05/2019	3675

	titutional Ranking Framework (NIRF) survey of 2019.				
2019	Academic audit has been conducted at Department level, institute level and by the team of external experts	15/03/2019	15/03/2019	16/03/2019	255
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#### **CRITERION VII - INSTITUTIONAL VALUES AND BEST PRACTICES**

#### 7.1 - Institutional Values and Social Responsibilities

7.1.1 – Gender Equity (Number of gender equity promotion programmes organized by the institution during the year)

Title of the programme	Period from	Period To	Number of Participants	
			Female Male	
Women Empowering Women	08/03/2019	08/03/2019	100	20

7.1.2 - Environmental Consciousness and Sustainability/Alternate Energy initiatives such as:

#### Percentage of power requirement of the University met by the renewable energy sources

In 2018\_19, the initiatives taken to create environmental consciousness are: ? Efficient maintenance of the installed solar panel system. ? Efficient maintenance of the installed biogas generation facility. ? Efficient maintenance of the classroom/laboratory/corridor lighting system. Around 5 percent of power requirement of the institute is met by the installed solar power system.

#### 7.1.3 - Differently abled (Divyangjan) friendliness

Item facilities	Yes/No	Number of beneficiaries
Physical facilities	Yes	1
Provision for lift	Yes	2
Ramp/Rails	Yes	2
Scribes for examination	Yes	5

#### 7.1.4 - Inclusion and Situatedness

	and disadva ntages	contribute to local community					
2019	2	2	26/12/201	12	Clean Navi	station and beach	158
			0		Mumbai	cleaning	

#### 7.1.5 - Human Values and Professional Ethics Code of conduct (handbooks) for various stakeholders

Title	Date of publication	Follow up(max 100 words)	
Prospectus cum Students Information Handbook	09/07/2018	As a affiliated institute it follows University of Mumbai code of conduct. Institute every academic year prepares its information brochure. It provide all the information regarding the changes in admission process and also highlight changes in rules and regulations of government authorities. This helps students to understand and cope with the institute expectations.	

#### 7.1.6 - Activities conducted for promotion of universal Values and Ethics

Activity	Duration From	Duration To	Number of participants
Business Communication Ethics	03/10/2018	05/10/2018	117
Soft Skill Development	05/08/2018	05/08/2018	700
Sahaj Yoga	19/09/2018	19/10/2018	121
Sahaj Yoga	15/03/2019	15/03/2019	135

#### 7.1.7 - Initiatives taken by the institution to make the campus eco-friendly (at least five)

Ecofriendly campus is a top priority of the institute. It has taken following initiatives towards the same: 1. Banning of plastic bags, bottles, teacups on campus. Creating the awareness in students and staff for this. 2. Encouraging students and faculty to participate in Swachchha Bharat Abhiyan, cleaning of beaches and other local places. 3. Digitalization of documents for paperless management. 4. Skits and nukkad nataks by students at prominent places for creating awareness on clealiness and hygiene. 5. Drive for donation of used clothes and footwear to underprivileged section of the society.

#### 7.2 - Best Practices

#### 7.2.1 – Describe at least two institutional best practices

Best Practice: 1 1) Title of the Practice: Introduction of In house Internship on Project Based Learning. RAIT believes in giving the best for students and accordingly adopt teaching learning process. Institute taken initiatives and conducted in house summer and winter internship on project based learning for students across the departments. 2) Objective of the Practice: Project Based

Learning is a teaching method in which students gain knowledge and skills by working for an extended period of time to investigate and respond to an authentic, engaging, and complex question, problem, or challenge. The main objective of this practice is to focus on developing critical thinking and problem solving skills in the students. Its inquiry based method of learning to solve the problems given as projects to the students is a style of active learning. Self evaluation gives students a sense of accomplishment and further instils responsibility for learning. Learners who can see the connection between a project based task and the real world will be more motivated to understand and solve the problem at hand. Students enjoy learning when learning makes sense. Institute takes initiatives and conducts in house summer and winter internship for students across the departments. Students should learn how the concepts taught in theory are implemented practically in industries so that they become employable. It is observed that during internship the subject knowledge shared by industry experts is much more beneficial to the students in long term. 3) The Context: These internship are conducted by eminent academicians and industry personnel in addition to regular teaching of the curriculum by faculty members. The challenge is to find suitable industry person and his/her time commitment as they are working on very tight project schedules. Usually these internships are arranged during summer and winter break. The constraint of this practice is that the financial remuneration expectations of industry experts are sometimes not affordable by the Institute. 4) The Practice: These internships are arranged for the Second year, Third year and Final year students across all the five branches. Duration of the internships varies between 3 weeks to 4 weeks depending on the requirement and availability of experts. Two weeks teaching and two weeks for project development. The resource persons who have experience in the respective domain are invited from industry and depending on their schedule these internships are delivered on summer and winter break which does not disturb the regular academics. It is expected that students learn the topics and design and develop project. It will be easier for students to find internships and industry sponsored projects during the Third year and Final year. This will be the first step towards finding job opportunity in industry after their graduation. After all, the aim is to provide best learning to the students, so as to equip them with the necessary skill sets and make them employable so that they can contribute to the society and the nation. 5) Evidence of Success: Due to the in house internships on project based learning delivered by the eminent academicians and industry experts, many students got interested in the industry sponsored projects and they were selected for internships/on job/field training while studying in final year. 6. Problems encountered and Resources required The challenges/problems encountered are: 1) Finding a suitable industry expert to come to the Institute and deliver the sessions. 2) Time commitment of industry personnel on Saturday/Sunday. 3) Remuneration needs to be at par with industry. 4) Latest hardware and software tools are required at the Institute. Best Practice2 1) Title of the Practice: Imparting employability training to the students of Third year to improve placement numbers 2) Objective of the Practice: Our objective is to give best and at least one placement offer to each and every student of RAIT. RAIT firmly believe that employability training is an essential skill set to get a placement offer into the reputed organisation. RAIT has taken right initiatives to train the students based on employability skills which industry expects. An employability skill set includes Aptitude and various soft skills like communication, GD, PI, ethics, dressing netiquettes and many skills. There are other verticals also which includes technology training and project implementation. 3) The Context: There are many well known organisations trainers who are involved in this training. E.g. T.I.M.E., GTT , Barclays, ATS infotech , Campus Credentials and many more. Usually to get a good trainer is really herculean task due their busy schedule, so we plan training in winter and summer vacation. The biggest challenge now

days are coding skills. Most of the IT ITeS companies expects that students should be good with coding. So for the same , we use coding platforms like HackerRank, HackerEarth, Codechef etc. The constraint of this practice is that the financial remuneration expectations of industry experts are sometimes not affordable by the Institute. 4) The Practice: These trainings are arranged for the Third year students across all the five branches. Duration of the trainings varies between 4 weeks to 5 weeks depending on the requirement and availability of experts. Two weeks teaching and two weeks for project development. The resource persons who have experience in the respective domain are invited from industry and depending on their schedule these training are delivered on summer and winter break which does not disturb the regular academics. The students across all the disciplines are taught computer fundamentals like programming techniques, data structures algorithms, analysis of algorithms along with java programming language. We also encourage students to practice on aptitude skills and technology skills as every student has to complete 50 online tests in the respective domain, where skills like time management, quick response are honed. After all, the aim is to provide best learning to the students, so as to equip them with the necessary skill sets and make them employable so that they can contribute to the society and the nation. Many MoUs are also executed in this regard to fetch many opportunities from industries and increase our students academic excellence. 5) Evidence of Success: The success of the employability training is evident since we have been imparting this training in 2012 and the number of employment is reaching towards 90. Also we could provide the best talent to the biggest industries like TCS, INFOSYS, WIPRO, COGNIZANT etc with higher packages. We could able to attract many dream recruiters with high CTC. Employment towards nonlinear hiring thru' various coding contests, various security contest, are increasing. Since a confident talent pool is available, even many industries are coming forward with internships and followed by that " Pre Placement Offer (PPO)" under nonlinear recruitment category. 6. Problems encountered and Resources required The challenges/problems encountered are: 1) Finding a suitable industry expert to come to the Institute and deliver the sessions. 2) Remuneration needs to be at par with industry. 3) Mini projects and internships coming from the industries will be less in numbers. 4) To make Industry academia connects successful, many industry dont come forward. The overall employment scenario should be improved across the domains, as core manufacturing sectors are not employing in good numbers

Upload details of two best practices successfully implemented by the institution as per NAAC format in your institution website, provide the link

#### 7.3 – Institutional Distinctiveness

7.3.1 – Provide the details of the performance of the institution in one area distinctive to its vision, priority and thrust in not more than 500 words

Institute 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. RAIT is committed to provide all facilities in terms of technology and platforms for all round development. Provide technological learning for not only the professional growth but also for the personal growth of the students by providing transformational teaching and value based education with international standards. The institution has a motto to achieve academic excellence, promoting quality education with incomparable innovations in teaching and learning by empowering the manpower through innovative research

and development. The RAIT with a passion to scatter the fragrance of education entered the educational arena to meet the needs of education, established a number of educational institutions from 1983 to 2018, over a period of 35 years. Students are even encouraged to take up projects concerned with the future of the country with a motto to promote global citizenship and ethical conduct. In order to provide excellent placement opportunities to all the students, institution has been conducting placement or recruitment training with the help of eminent industry personal, who have great expertise in the area, to train the students for all the levels of the campus recruitment process. Since the beginning of the 1st Semester, students undergo the training along with the prescribed curriculum. Students are encouraged to participate in aptitude and soft skills related training, group discussions, mock interviews, debates, presentations and role plays etc. Online learning is a rapidly growing aspect in technical education. To train the students for the future needs, a digital library is designed with an excellent collection of ematerial, in addition to the central library with more than 18,350 volumes and departmental libraries. Digital class rooms, grand infrastructure, well-equipped laboratories, spacious seminar halls and conference halls and reading halls, student counsellors to keep in touch with parents, corporate placements, technical events like implementation of innovative teaching techniques and trends along with the conventional teaching methods, provide a vibrant backdrop to the academic achievements.

#### Provide the weblink of the institution

#### 8. Future Plans of Actions for Next Academic Year

The institute has set the following goals for the next academic year: 1. To become a center of excellence in advanced technological areas like IoT, HPC, AI ML, Blockchains. 2. To set up an active research collaboration with reputed institutes across the country and the world. 3. To generate substantial quality intellectual property thereby contributing towards the Make in India drive. 4. To foster tieup with the industry by contributing towards the solution of technological problems faced by the industry. 5. To improve the ranking of the institute in MHRD NIRF ranking 2020. 6. To become an Autonomous institute or inclusion of institute under the ambit of D Y Patil Deemed to be University.