



# **SELF STUDY REPORT**

**FOR**

**1<sup>st</sup> CYCLE OF ACCREDITATION**

**RAJALAKSHMI INSTITUTE OF TECHNOLOGY**

**CHENNAI- BANGLORE HIGHWAY KUTHAMBAKKAM POST  
600124**

**[www.ritchennai.org](http://www.ritchennai.org)**

**Submitted To**

**NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL**

**BANGALORE**

**January 2021**

# 1. EXECUTIVE SUMMARY

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## 1.1 INTRODUCTION

Rajalakshmi Institute of Technology is being established under the Aegis of SABARI FOUNDATION in the year 2008 and it is new entrant to the Rajalakshmi Group of Institutions being run since 1997. In a country where education is held in very high esteem and the teacher is equated to God, we at RIT have dedicated ourselves to impart education and develop the student to be a responsible engineer and individual.

The Institute is affiliated to Anna University, Chennai and is approved by the All India Council for Technical Education (AICTE), New Delhi and has NBA accredited programs. The college offers five UG Program B.E. Computer & Communication Engineering, B.E. Computer Science & Engineering B.E. Electronics & Communication Engineering, B.E. Mechanical Engineering and B.Tech. Artificial Intelligence & Data Science

Students of RIT are groomed carefully and the virtues of hard work, discipline and ethical practices in profession are imbibed in them constantly during their campus life.

Campus life here stresses the importance of extra academic activities apart from academic learning, leading them to many new avenues. All these go a long way in making our student a thoroughbred professional, eminently suited to contribute in his chosen career with an ever open mind for new thoughts and ideas in industrial and technological advancements. We are hence confident that our students equipped with such capabilities will emerge as valuable contributory assets to the development of the organizations they serve as well as to the nation.

### **Vision**

- To set a bench mark for the education providers in the field of Engineering and Technology
- To provide quality technical education that fosters the spirit of learning and research.
- To spawn creative, globally competent, highly employable and disciplined professionals through an innovative synergistic model of education that promotes academic excellence, scientific pursuit, and professionalism.

### **Mission**

- To impart education that caters to the growing challenges of the Industry and social needs of our nation.
- To constantly upgrade the standards of teaching and learning in the field of engineering and technology.
- To build a good rapport between the academia and Industry
- To bridge the gap between the academia and industry.
- To promote and encourage the spirit of research in engineering and technology.
- To empower the youth not only technically but also to serve the society selflessly.

## 1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

### Institutional Strength

- Very good Infrastructure and the institution is surrounded by lush green environment and lake.
- Qualified and dedicated faculty members with good team work.
- Progressive and Committed Management.
- Clear Vision, Mission, Goals and Objectives.
- Two UG Programs ( CSE,ME) are accredited by NBA.
- Strong Industry Institute Interaction through Group of Institutions.
- MOUs with Industry and reputed Institutes for curriculum enrichment, FDPS and Students Training Program
- Separate hostels for boys and girls.
- Transport facility to nearby towns and villages.
- Proactive Internal Quality Assurance Cell (IQAC) to ensure quality in Teaching learning process.
- Residential training camps and excellent placement opportunities for students as the number of companies recruiting are increasing year by year.
- Inhouse GATE coaching round the year.
- Constituted various clubs and CSI,ISTE, IE,IEEE,IETE, chapters to facilitate co curricular and extension/outreach activities
- In house newsletters and magazines are published regularly
- Facilities available for various indoor and outdoor games and sports
- Financial support to participate in national and international level events.
- Centre of Excellence
- Green Initiatives, Awards and Waste management system
- Extension and service to society through NSS,YRC,CII-YUVA.
- Constant Endeavor to upgrade quality.

### Institutional Weakness

- Lack of interest among students towards higher studies/research
- Departments yet to get recognition as research centres
- The primary allegation levelled against higher education in India is that the quality of students have drastically reduced
- Lack of Diversity in Students and Faculty.

### Institutional Opportunity

- Recognition of 2(f),12(B) and to become an Autonomous Institution.
- Scope for more consultancy and research projects.
- Tie-up with research laboratories to promote knowledge
- Industrial Centre of Excellences
- Strong Alumni Association – a chance for industry offered courses in Curriculum enhancement
- Setting up Multi-Disciplinary research Centres.
- Increased focus on higher education:- Govt. on India focusing more on higher education to provide quality education for UG and PG courses

- Digitization:- Digitisation will present a huge opportunity for educational institutions in terms of saving costs as well as reaching out to more students.
- E-learning platform:- Investment in e-learning and starting of Massive Online Open Course (MOOC's) is an opportunity waiting to be harnessed for quality education and to generate resources particularly through distance education mode
- Getting NBA Accreditation for non accredited program
- Programs in recent emerging specialization.

### **Institutional Challenge**

- To enhance Faculty/ Student exchange programs with reputed National/ International Organizations.
- To offer placement for each and every student.
- To improve the interaction with reputed corporate sectors.
- To attract more research funding from DST/ DIT/ UGC/ AICTE/ DRDO/ ISRO etc.
- Declining interest in Technical education amongst school students.
- Non attractive remuneration for fresh graduates

## **1.3 CRITERIA WISE SUMMARY**

### **Curricular Aspects**

Rajalakshmi Institute of Technology (RIT) strongly believes that providing the right learning opportunity for the students will make them industry ready engineeris.

- The Institute follows the curriculum prescribed by the Anna University. The curriculum is implemented through preparation as well as critical thought by the teachers concerned.
- CBCS and Elective System introduced in all UG programs from the academic year 2017-18.
- The institution encourages the faculty to keep themselves update their knowledge by offering refresher courses, faculty development programmes and workshops.
- The Academic calendar of the institute, reflects University's academic calendar and includes curricular, co-curricular, extracurricular activities. Academic-Calendar and Teaching-plans are strictly followed and are audited regularly.
- Well defined mechanism for planning, execution and monitoring of curriculum and value added courses to enhance the skills of students towards industry expectations and competitive examinations. Institution is sensitive to gender, environment issues, human values and professional ethics and conducts different programs.
- Allotment of subjects includimng open electives is done by the HOD based on the faculty expertise and preference obtained as per preference given by faculty.
- Faculty Preparation Program (FPP) which consist of a detailed lesson plan is prepared by focusing on Outcome Based Education.
- For each course Question Bank, Manual, is prepared which is scrutinized by department level and then approved by IQAC.
- University has introduced courses on professional ethics and Environmental science.
- Departmental activities are scheduled which include Industrial visits, In plant training, Guest Lectures, Project Competition, Seminars, Conference, Placement and Training and Association activities.
- MOOC Certification Courses. NPTEL Active chapter award.

- Compulsory Internship, Field projects
- The IQAC monitors and assists the faculty members for effective curriculum delivery.
- The feedback received from the students and stakeholders are carefully analyzed, discussed and appropriate actions are initiated
- Curricular gaps are identified and communicated to University.

### **Teaching-learning and Evaluation**

- Admission process for different programs through Tamil Nadu Engineering Admission (TNEA) Councelling by the State Government of Tamil Nadu. The admission process ensures inclusion of students from all categories through social reservations defined by State Government of TN.
- By the entry level Induction /Bridge courses programs for the newly joined students.
- The institute has a Learning Management System and a good reservoir of e-learning materials.
- The excellent mentor-mentee system of the institute takes care of academic and stress related issues.
- NPTEL Active Chapter. The utilization of NPTEL and other innovative methods by the faculty and students year by year.
- (PINNACLE) Additional support for advanced learner's students and student centric learning environment that promotes in independent, interactive and collaborative learning.
- Encouragement and support for all co-curricular and extracurricular activities to nurture critical thinking, creativity and scientific temper.
- Well qualified, committed faculty with 44 PhD holders.
- Institution has brought several reforms in the examination system which comprises
- Continuous Formative Assessment and Summative Examinations conducted at the end of the semester. The system is fool-proof and transparent. The examination section is automated.
- Students are also educated on POs,PSOs,PEOs(also displayed in website).The institution systematically checks for attainment of outcomes and reviews the Teaching- Learning-strategies.
- On an average, more than 80% of students are graduated every year
- Alumni association with active contribution of alumni in enhancing teaching learning process.
- Two UG Programs (CSE,ME) are accredited by NBA

### **Research, Innovations and Extension**

- Institution has a dedicated team of researchers. A senior faculty member in each department has been nominated as research coordinator.
- Faculty members and undergraduate students are provided with adequate resources to pursue research in their respective field of interest.
- Students are encouraged to take up research project under the supervision of the faculty members.
- Sponsored Workshops/ seminars on Research, IPR, Recent trends
- The faculty members pursuing research are encouraged by providing them the required equipment, books, leaves for research work, financial assistance for conferences/journals, e-resources, computer facilities, Wi-Fi etc.
- The college provides incentives to the faculty for their research contribution.
- Research meeting is conveyed to discuss proposals to funding agencies.
- The faculty members who do not possess Ph.D degree are advised to register for research work.
- research papers have been published in the SCOPUS Indexed, UGC recognized journals during last five years.

- 482 papers have been presented in national/international conferences.
- 397 books/Chapters and conference papers have been published by faculty members.
- Institution has active MOUs with Industries, Institute of national Importance for Industry Academia linkages.
- More than 200 industrial linkage program such as internship, field trip, on-job training have been organized.
- Faculty members and students are actively involved in Institutional Social Responsibility activities through structured forums like NSS, YRC, Red cross and Clubs and Societies and programs/ activity conducted by Govt. Organizations.
- Many recognition and awards are received for various extension activities from University, State level agencies and NGOs.
- Numerous of the activities have been organized in near past, such as tree plantations, adoption of the village, having a residential camp for building a rapport.

### **Infrastructure and Learning Resources**

The state-of-art infrastructure augments learning environment is the significant concern of the institution. The Management of Institutions is committed in enhancing the infrastructure as and when needed which promotes a good teaching learning environment. Campus area of 44029.80 sq.m. and built up area of 16297.69 sq.m. Sufficient number of class rooms and laboratories with all facilities as prescribed by AICTE/ affiliating university Classrooms and Seminar Halls are equipped with ICT facilities. College and Hostels are Wi-Fi enabled. High speed Internet connection with 155 Mbps Leased Line. The college has licensed and open source software in various departments. The Library has a collection of 19401 Volumes and 4896 Titles and 24 print Journals, 169 E-journals, 5288 E-Books. Digital Library is equipped with 30 Systems; users can access e-resources like IEEE and other e-resources. Faculty and students can access the facilities beyond the office working hours. Excellent power back up through generators. Wide and spacious playground exclusively for boys and girls. Excellent campus maintenance. Adequate financial allocations are made for internal maintenance work of all infrastructures and maintenance of greenery.

### **Student Support and Progression**

Institution puts in relentless efforts for the all round development of students. Student chapters of various professional societies like CSI, ISTE, IE, IETE, Students Clubs, , NSS, YRC Games and Sport Committees actively organize Technical & Cultural Fests, Social activities, cocurricular activities.

Adequate representation is given for students in all academic/administrative committees and students are involved in the decision making process.

More than 70% of the students avail scholarships & free ships from Government as well as the institution.

Guidance for competitive examination, soft skills training, Life skills, ICT/Computing Skills Yoga and meditation classes are initiatives for student all round development.

Add-on Certificate courses are offered to all the students to enhance their skills and capabilities. Grievance-Redressal-Committee and Anti-Ragging-Committee and Internal complaints committee help the students to address the issues, if there are any.

Institution has a good placement record and on an average 75% of the students are placed on campus. More than 20% of the students opt for higher education in prestigious institutions. Students who are appearing for the

competitive examinations are all qualified.

Department level clubs/ Associations to encourage students in cultural activities.

More than 30 sports/cultural activities/competitions are organized in the institution every year.

The Alumni association contributes actively to the growth of the institution through the alumni association.

Alumni association with active contribution of alumni in enhancing teaching learning process.

### **Governance, Leadership and Management**

The institution has an effective and transparent governing system in tune with the vision and mission of the Institution. The organization structure of the institution and decentralization is clearly defined in the campus. The Governing Body conducts periodical meetings where analysis the progress of the institution and recommends the improvements. The Management has constant touch with the Principal, Vice Principal and Administrative Officer to maintain cordial rapport to discuss the infrastructural needs, development, administration and appointments.

The Principal is the Academic and Administrative head of the college and responsible for the implementation the Vision and Mission of the college.

Institution/ departments have a clear perspective/ strategic plan and it is deployed effectively. Each functional body is clearly defined with service rules and procedures.

Institution has well defined procedures for recruitment and promotion.

Institution has implemented e-governance in the all the areas of administration.

Various bodies/ cells/ committees are working effectively and regular meetings are called for the discussion and minutes are recorded.

HODs organize Career Guidance Programmes, Workshops, Value added course, symposium, social relevance activities, Seminars and Conferences to enrich the knowledge and showcase the talents of students.

More than 50% of teachers benefited with financial support for attend conferences/ workshops and towards membership fee of professional bodies during the last 5 years.

More than 50 professional development/ administrative training programs organized in the campus for benefits of teaching and non-teaching staff during the last 5 years.

More than 70% of teachers benefited from attending professional development programs. Institution has implemented various welfare measures for teaching and non-teaching staff to keep them comfortable. The Institution follows rigorous Quality Assurance processes that pave the way for ensuring academic excellence.

The IQAC is responsible for the effective implementation of the Quality processes.

IQAC is conducting quarterly meeting and organized collaborative quality initiatives.

IQAC conducts the Academic and Administrative Audit and based on the observation of the report, quality recommendation are given.

### **Institutional Values and Best Practices**

RIT is committed to maintain a culture of innovation, creativity, hard work, perseverance and excellence. The motto of our institution is 'molding true citizens', who can contribute immensely for the progress and

development of our nation. The main focus is on a holistic development of the students in an eco-friendly campus. The institute takes pride in being located in a verdant green locale close to the Lake. The motto being, 'Live green, Love Green and Be Green' the institute maintains a spic and span campus and it is far removed from the rough and tumbles of the city. The college has taken some significant measures in energy conservation, waste management, and rain water harvesting and tapping unconventional energy sources. Clean campus, green grounds, social commitment, leadership development are given prime priority.

Steps are taken to ensure gender equity and sensitization in curricular and co-curricular activities. It celebrates national and international commemorative days, and organizes events and festivals. Safety and security norms are strictly followed and the campus is well protected with round the clock security and CCTV surveillance. Sensor-based energy conservation is done to avoid unwanted usage of electricity and steps are initiated by the institution for the management of degradable and non-degradable wastes and water conservation. One Academic block is certified as Green Building. Various schemes like, elevation of the underprivileged sections of the society, scholarships to the deserving students, financial aid to the poor students without any discrimination of caste, creed or gender, women empowerment programs, counseling for students and social awareness programs in collaboration with various governmental agencies are being implemented. The best practices are oriented towards the quest for excellence and with concrete efforts this can bring a change in the life of the whole institution as well as the stake holders. The efforts to evolve new ideas and strategies in line with the Vision and Mission of the institute made the institute distinctive in the region. . The popular inspirational quote of Swami Vivekananda is a continuous driving force behind all the stakeholders.

**“Arise! Awake! And stop not till the Goal is reached”**

**--Swami Vivekananda**



## 2. PROFILE

### 2.1 BASIC INFORMATION

Name and Address of the College	
Name	RAJALAKSHMI INSTITUTE OF TECHNOLOGY
Address	Chennai- Bangalore Highway Kuthambakkam Post
City	Chennai
State	Tamil Nadu
Pin	600124
Website	<a href="http://www.ritchennai.org">www.ritchennai.org</a>

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	M Velan	044-67181600	9789815744	044-67181603	mail@ritchennai.edu.in
IQAC / CIQA coordinator	Nagarajan P K	044-671816001	9710234579	044-67181602	viceprincipal@ritchennai.edu.in

Status of the Institution	
Institution Status	Private and Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular

Recognized Minority institution	
If it is a recognized minority institution	No

Establishment Details	
Date of establishment of the college	01-01-2008

**University to which the college is affiliated/ or which governs the college (if it is a constituent college)**

State	University name	Document
Tamil Nadu	Anna University	<a href="#">View Document</a>

**Details of UGC recognition**

Under Section	Date	View Document
2f of UGC		
12B of UGC		

**Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)**

Statutory Regulatory Authority	Recognition/Approval details Institution/Department programme	Day,Month and year(dd-mm-yyyy)	Validity in months	Remarks
AICTE	<a href="#">View Document</a>	15-06-2020	12	Approved

**Details of autonomy**

Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?	No
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**Recognitions**

Is the College recognized by UGC as a College with Potential for Excellence(CPE)?	No
Is the College recognized for its performance by any other governmental agency?	No

<b>Location and Area of Campus</b>				
<b>Campus Type</b>	<b>Address</b>	<b>Location*</b>	<b>Campus Area in Acres</b>	<b>Built up Area in sq.mts.</b>
Main campus area	Chennai- Bangalore Highway Kuthambakkam Post	Urban	10.8	44029.8

## 2.2 ACADEMIC INFORMATION

<b>Details of Programmes Offered by the College (Give Data for Current Academic year)</b>						
<b>Programme Level</b>	<b>Name of Programme/Course</b>	<b>Duration in Months</b>	<b>Entry Qualification</b>	<b>Medium of Instruction</b>	<b>Sanctioned Strength</b>	<b>No.of Students Admitted</b>
UG	BE,Computer Science And Engineering	48	Intermediate and Diploma	English	180	170
UG	BTech,Computer Science And Engineering	48	Intermediate and Diploma	English	60	44
UG	BE,Electronics And Communication Engineering	48	Intermediate and Diploma	English	180	85
UG	BE,Electronics And Communication Engineering	48	Intermediate and Diploma	English	60	53
UG	BE,Mechanical Engineering	48	Intermediate and Diploma	English	120	0

### Position Details of Faculty & Staff in the College

<b>Teaching Faculty</b>												
	<b>Professor</b>				<b>Associate Professor</b>				<b>Assistant Professor</b>			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	0				0				0			
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit	0				0				0			
Sanctioned by the Management/Society or Other Authorized Bodies	20				21				84			
Recruited	13	7	0	20	15	6	0	21	39	45	0	84
Yet to Recruit	0				0				0			

<b>Non-Teaching Staff</b>				
	<b>Male</b>	<b>Female</b>	<b>Others</b>	<b>Total</b>
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				20
Recruited	12	8	0	20
Yet to Recruit				0

<b>Technical Staff</b>				
	<b>Male</b>	<b>Female</b>	<b>Others</b>	<b>Total</b>
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				13
Recruited	7	6	0	13
Yet to Recruit				0

**Qualification Details of the Teaching Staff**

<b>Permanent Teachers</b>										
<b>Highest Qualification</b>	<b>Professor</b>			<b>Associate Professor</b>			<b>Assistant Professor</b>			<b>Total</b>
	<b>Male</b>	<b>Female</b>	<b>Others</b>	<b>Male</b>	<b>Female</b>	<b>Others</b>	<b>Male</b>	<b>Female</b>	<b>Others</b>	
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	12	7	0	10	4	0	4	7	0	44
M.Phil.	0	0	0	0	0	0	6	7	0	13
PG	1	0	0	5	2	0	29	31	0	68

Temporary Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0

Part Time Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0

Details of Visting/Guest Faculties					
Number of Visiting/Guest Faculty engaged with the college?	Male		Female		Total
	0	0	0	0	0

**Provide the Following Details of Students Enrolled in the College During the Current Academic Year**

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
		UG	Male	242	6	0
	Female	104	0	0	0	104
	Others	0	0	0	0	0

**Provide the Following Details of Students admitted to the College During the last four Academic Years**

Programme		Year 1	Year 2	Year 3	Year 4
SC	Male	11	5	10	33
	Female	7	1	1	17
	Others	0	0	0	0
ST	Male	0	0	0	1
	Female	0	159	204	0
	Others	0	64	88	0
OBC	Male	206	33	54	233
	Female	78	22	25	124
	Others	0	0	0	0
General	Male	31	0	0	57
	Female	19	0	0	29
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
Total		352	284	382	494

## Extended Profile

### 1 Program

#### 1.1

Number of courses offered by the Institution across all programs during the last five years

2019-20	2018-19	2017-18	2016-17	2015-16
250	216	178	147	144
File Description		Document		
Institutional data in prescribed format		<a href="#">View Document</a>		

#### 1.2

Number of programs offered year-wise for last five years

2019-20	2018-19	2017-18	2016-17	2015-16
5	5	5	5	5

### 2 Students

#### 2.1

Number of students year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
1696	1958	2099	2029	1935
File Description		Document		
Institutional data in prescribed format		<a href="#">View Document</a>		

#### 2.2

Number of seats earmarked for reserved category as per GOI/State Govt rule year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
414	414	414	414	414



File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>

### 2.3

#### Number of outgoing / final year students year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
521	542	523	429	432

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>

## 3 Teachers

### 3.1

#### Number of full time teachers year-wise during the last five years

2019-20	2018-19	2017-18	2016-17	2015-16
122	138	153	153	142

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>

### 3.2

#### Number of sanctioned posts year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
120	120	160	160	160

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>

## 4 Institution

### 4.1

#### Total number of classrooms and seminar halls

**Response: 40**

**4.2**

**Total Expenditure excluding salary year-wise during last five years ( INR in Lakhs)**

2019-20	2018-19	2017-18	2016-17	2015-16
1431.29	1331.15	1001.64	856.36	779.07

**4.3**

**Number of Computers**

**Response: 653**

**4.4**

**Total number of computers in the campus for academic purpose**

**Response: 603**

## 4. Quality Indicator Framework(QIF)

### Criterion 1 - Curricular Aspects

#### 1.1 Curricular Planning and Implementation

##### 1.1.1 The Institution ensures effective curriculum delivery through a well planned and documented process

##### Response:

Rajalakshmi Institute of Technology is affiliated to Anna University, Chennai and has insignificant role in curriculum designing and development. The university formulates and revises the curriculum once in four years. In view of implementing the curriculum RIT has effective mechanism as described under. Also, the implementation will be well documented to have effective monitoring of the curriculum delivery at various levels. Broadly the implementation process is categorized as follows.

##### 1. Curriculum Analysis, Delivery Plan and Implementation.

1. **Curriculum Analysis:** The AU curriculum is a blend of Humanities, Basic Science, Basic engg, Core Courses, Elective courses, Projects and Seminars. Etc. The Institute also follows the AICTE model curriculum and the courses prescribed by AICTE not covered by AU are offered as Value added courses or addressed through topic beyond curriculum or Gaps in curriculum to meet the industrial needs and also inculcate the ethical and moral values to the students.
2. **Curriculum Delivery Plan and Implementation :** The curriculum delivery plan meets the OBE components like POs, PSOs, and COs as defined by regulatory bodies and departmental committees. The measures are

a) Upon release of university academic calendar the IQAC discuss, decide, and plan the college calendar of events. It includes number of working days, schedule for conducting internal assessment tests, submission of assignments in each unit by the students, conducting Class Committee meetings, Course committee meetings and collecting on-line feedback. Post these respective department heads in consultation with department faculty members will prepare the department calendar of events.

1. The Time table coordinator of each department circulates the skill matrix and collect the subject preferences from all the faculty members. Based on these, subjects are allocated by the HoD before the beginning of every semester.
2. The Faculty Preparatory Programme is prepared before the beginning of every semester. It contains the Lesson Plan, Notes of lesson, assignment topics, and question bank and sample university question papers. They are verified by IQAC team and HoD.
3. Every month, the log books are verified and the status of portion completion is periodically monitored by the HoD.
4. The important topics in each subject are recorded as video sessions by the faculties and they are uploaded in college YouTube Channel. This helps the students to revise the topics and helps the absentees to understand the concepts. This also helps other teachers to understand and review the concepts.
5. Online feedback is collected thrice in a semester from students for every semester.

##### 6. Process of Monitoring

- The senior members handling a subject are nominated as course coordinators for that subject to monitor the status of course delivery.
- IQAC periodically verifies the quality of delivery process through regular audits of Question paper audits, Answer script audits, Course file audit and will continuously monitor the attendance and syllabus coverage for every fortnight, and corrective measures are taken for any deviation observed.

### **Supporting activities for effective delivery of curriculum**

- FDP programmes
- Industrial visits, Internships
- Project-based experiential learning,
- Remedial classes,
- MOOC, Add-on Courses for Knowledge, Skill, Behaviour

### **1.1.2 The institution adheres to the academic calendar including for the conduct of CIE**

#### **Response:**

Before the commencement of each semester, the university publishes an academic calendar. The University calendar of events typically depicts important timelines like commencement of Classes, Last working day, Commencement of Practical Examinations, Commencement of End semester examinations. Apart from the academic calendar AU circulates the dates for project evaluation. Considering the start and end of the semester, as per the university calendar, RIT plans all its activities including the conduction of Continuous Internal Evaluation (CIE).

To ensure the institute strictly complies with the university academic calendar accommodating all planned activities, a separate calendar for the institute as a whole and subsequently at every department is prepared and followed. While the institute calendar includes details like a total number of working days & holidays, CIE dates, slots for activities, etc the department calendar comprises about guest lectures, conferences, workshops, industrial visits, and other co-curricular & extra-curricular activities planned by respective departments.

The above academic calendars help faculty members to plan their respective course delivery and undertake academic and other activities. Department heads closely supervise and monitor completion of the syllabus as per the lesson plan prepared by faculty members. Portions for each CIE are decided well in advance and faculty members are required to stick to it.

#### **Internal Assessment Exams:**

The schedule for the two internal assessment tests, model exam, class tests are well-planned in advance before the beginning of the semester and they are given in the academic calendar. The internal assessments are planned by providing sufficient time to complete one and a half units in each subject. Generally, one class test is conducted before one internal assessment test. After the completion of one internal assessment exam, coaching class and retest is conducted after working hours for the failures and absentees in the internal assessment tests.

Even for the laboratory work continuous assessments are done. Submission of laboratory observations, records, conduction of labs & viva forms major components of laboratory evaluation. As per the laboratory rubrics, the internal test is conducted at the semester end. Continuous Internal Evaluation is spread across the entire semester ensuring the final CIE marks are ready much before the due date. As the entire activities including CIE during the semester are pre-planned, the semester progresses smoothly as per the academic calendar. Due to systematic semester planning, both students and faculty members take-up academic & other loads effectively. At the Department level HOD, Course Committee, Class Committee monitors the adherence and takes necessary steps for compensatory classes if any required.

At Institute level the Principal, Vice Principal and IQAC frequently reviews the semester progress and on need makes required interventions to adhere to the academic calendar. In case the university revises, the institute will immediately make suitable changes and the same would be followed by all concerned in the college.

### 1.1.3 Teachers of the Institution participate in following activities related to curriculum development and assessment of the affiliating University and/are represented on the following academic bodies during the last five years

1. Academic council/BoS of Affiliating university
2. Setting of question papers for UG/PG programs
3. Design and Development of Curriculum for Add on/ certificate/ Diploma Courses
4. Assessment /evaluation process of the affiliating University

**Response:** D. Any 1 of the above

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>
Details of participation of teachers in various bodies/activities provided as a response to the metric	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

## 1.2 Academic Flexibility

### 1.2.1 Percentage of Programmes in which Choice Based Credit System (CBCS)/ elective course system has been implemented

**Response:** 80

#### 1.2.1.1 Number of Programmes in which CBCS/ Elective course system implemented.

**Response:** 4

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

### 1.2.2 Number of Add on /Certificate programs offered during the last five years

Response: 70

#### 1.2.2.1 How many Add on /Certificate programs are offered within the last 5 years.

2019-20	2018-19	2017-18	2016-17	2015-16
25	22	15	6	2

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>
Brochure or any other document relating to Add on /Certificate programs	<a href="#">View Document</a>

### 1.2.3 Average percentage of students enrolled in Certificate/ Add-on programs as against the total number of students during the last five years

Response: 55.17

#### 1.2.3.1 Number of students enrolled in subject related Certificate or Add-on programs year wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
1188	1234	1078	967	847

File Description	Document
Details of the students enrolled in Subjects related to certificate/Add-on programs	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

## 1.3 Curriculum Enrichment

### 1.3.1 Institution integrates crosscutting issues relevant to Professional Ethics ,Gender, Human Values ,Environment and Sustainability into the Curriculum

#### Response:

Being AU, Chennai affiliated institute, the curriculum prescribed by the university is followed. Crosscutting issues relevant to ethics, environment and sustainability etc., are integrated into the AU curriculum across all UG programs. The Gender, Human Values. The Crosscutting issues like Gender equality, Environment and Sustainability, Human Values and Professional Ethics are well integrated into the Curriculum prescribed by AU, and listed below:

Program Name	Core Course Name	Integration to
EEE	Environmental Science Engineering	Environment
EEE	Human Rights	Human Values and Gender
EEE	Total Quality Management	Professional Ethics
EEE	Principles of Management	Professional Ethics
ECE	Professional Ethics in Engineering	Professional Ethics
CSE	Intellectual Property Rights	Human Values
MECH	Power Planning and Cost Estimation	Sustainability

#### 1. Professional Ethics and Human values

- In view of promoting the professional ethics among the engineering graduates the AU has introduced professional ethics as an elective course.
- Even though it is in academic curriculum the college takes efforts for integration of ethical and human values through extracurricular activities such as personality development, yoga, meditation etc.
- The institute is organizing various programmes under NSS and YRC to inculcate human values among students.
- Different activities like guest lecture, seminar and workshops relating to the professional ethics and human values have been organized for students.
- Apart from this, industrial visits are arranged for the students to know about the work culture and practices in the industries. Every year, in summer and winter vacation, the students are encouraged to undergo internship and training in leading organizations. This facilitates the students to get an exposure to a professional environment by solving problems and designing solutions professionally.

#### 2. Gender

The institute understands the importance of Gender equality and thus maintains a 40:60 ratio of women to men work force in both teaching and non-teaching. Also, as per the admission analysis, the girl to boy student ratio is 40:60.

- RIT has provided separate hostels for boys and girls with state-of-the-art infrastructure.
- Institute's woman empowerment cell has been working consistently for women safety on the college campus.
- Numbers of programmes are specially conducted for promoting gender equality.
- Institute has organized various workshops and invited talks on Woman Empowerment, Laws for Woman, Role of Woman in Nature Conservation, The Sexual Harassment of Woman at workplace.

etc.

### 3. Environment and Sustainability

One block in the campus is the Green building which has got LEED India for New Construction Gold certificate by Indian Green Building Council(IGBC). Digitizing the regular activities is encouraged. The usage of plastics is avoided inside the campus. A Mini marathon was conducted to insist the public to avoid plastics. Students are motivated to do more projects related to environment issues and finding solution to that. Clean and Green environment is made inside the college campus. . Through the NSS and Rotaract clubs, health and hygiene camps are organized to create awareness to the public in rural areas. Students are motivated to develop projects which can help to reduce air pollution and sustain a pollution free environment. The institute contributed in project WOW and got appreciated by ITC limited.

#### 1.3.2 Average percentage of courses that include experiential learning through project work/field work/internship during last five years

**Response:** 70.77

##### 1.3.2.1 Number of courses that include experiential learning through project work/field work/internship year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
113	109	100	103	99

File Description	Document
Programme / Curriculum/ Syllabus of the courses	<a href="#">View Document</a>
Institutional data in prescribed format	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

#### 1.3.3 Percentage of students undertaking project work/field work/ internships (Data for the latest completed academic year

**Response:** 89.68

##### 1.3.3.1 Number of students undertaking project work/field work / internships

Response: 1521



File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

## 1.4 Feedback System

**1.4.1 Institution obtains feedback on the syllabus and its transaction at the institution from the following stakeholders 1) Students 2) Teachers 3) Employers 4) Alumni**

**Response:** E. None of the above

File Description	Document
Any additional information (Upload)	<a href="#">View Document</a>
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management (Upload)	<a href="#">View Document</a>
URL for stakeholder feedback report	<a href="#">View Document</a>

**1.4.2 Feedback process of the Institution may be classified as follows: Options:**

1. Feedback collected, analysed and action taken and feedback available on website
2. Feedback collected, analysed and action has been taken
3. Feedback collected and analysed
4. Feedback collected
5. Feedback not collected

**Response:** C. Feedback collected and analysed

File Description	Document
Upload any additional information	<a href="#">View Document</a>
URL for feedback report	<a href="#">View Document</a>

## Criterion 2 - Teaching-learning and Evaluation

### 2.1 Student Enrollment and Profile

#### 2.1.1 Average Enrolment percentage (Average of last five years)

**Response:** 74.9

##### 2.1.1.1 Number of students admitted year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
292	386	503	526	540

##### 2.1.1.2 Number of sanctioned seats year wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
600	600	600	600	600

#### File Description

#### Document

Institutional data in prescribed format

[View Document](#)

Any additional information

[View Document](#)

#### 2.1.2 Average percentage of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy ) during the last five years ( exclusive of supernumerary seats)

**Response:** 76.96

##### 2.1.2.1 Number of actual students admitted from the reserved categories year wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
232	307	352	348	354

#### File Description

#### Document

Institutional data in prescribed format

[View Document](#)

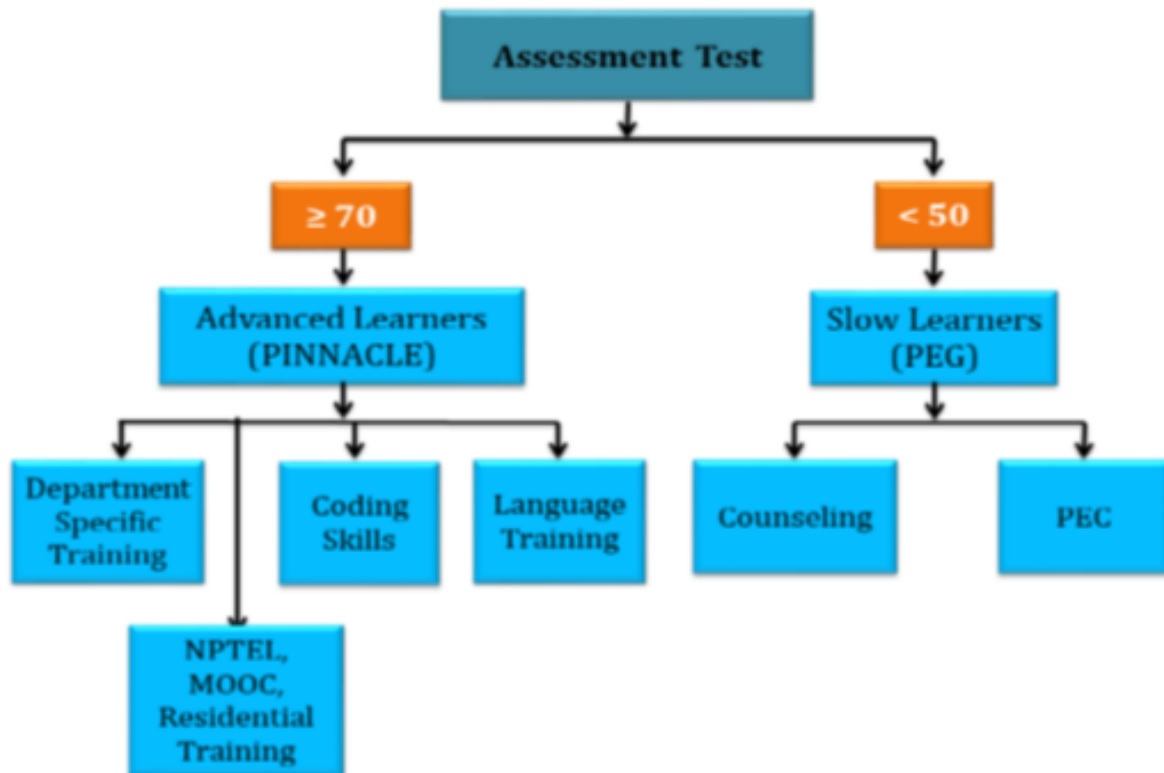
Any additional information

[View Document](#)

## 2.2 Catering to Student Diversity

### 2.2.1 The institution assesses the learning levels of the students and organises special Programmes for advanced learners and slow learners

Response:



The Secretary, Tamilnadu Engineering Admissions (TNEA), admits first year B.E./B.Tech. Students through a single window system based on their Higher Secondary Examination (HSC) marks. The induction program organized for the first year students aims at enhancing the language skills, motivation, personality development and preparing them to align with Ethos and Anna University curriculum. The students are prepared the best use of the time during the induction programme to fine tune their language use, harness their study skills and empower the core competency. Their learning experience would tone up their academic performance of the major core papers as well as regular Basic Science and General Engineering programme. Apart from the induction programme, the students also learnt about the tradition, curricular and co-curricular activities from various club coordinators and alumni of the college. For the lateral entry students, admitted directly to the second year with good practical knowledge may find difficult in analytical subjects, hence to bridge the gap special evening Mathematics classes are conducted. Fundamentals of computer are taught to students especially from Biology group during their higher secondary education to help them to learn the programming and software related courses in forthcoming higher semester. Our faculty of English has been supporting our students to make the transition from vernacular to English, as the medium of instruction English. This first initiative of the college is made well-received and appreciated by students and parents.

During first semester, students are categorized into advanced and slow learners based on their academic performance in internal assessment examinations, model exam and university examination.

**Strategies facilitating Advanced Learners:**

- Based on assessment test students undergo pinnacle training under department specific, coding and language.
- Enrolled to participate in National and International events/competition within/outside college such as ARM design contest, Texas instruments - IICDC, Smart India Hackathon and much more where students can explore their ideas and innovation.
- Enrolled to participate in club events(Technical & Non Technical).
- Motivate to enroll in professional bodies such as IEEE, IE, IETE, CSI, SAE in order to expose students in recent research activities and help in conducting various events.
- Guide them to involve in doing projects in research labs such as Centre for Internet of Things, Centre for Advanced Manufacturing, Centre for AI and Data Science.
- Involved in “problem box” initiated in RIT, where students as a team solve real case industrial problems in association with internal faculty as team leader, mentor and one external industry person as SPOC.
- Apart from regular training and placement initiatives, special training and placement drive such as dream and super dream offers, PEGA training, Virtusa training, BOSCH training, WIPRO talent next JAVA training, WIPRO- UTLP Training's, TCS codevita, TCS -RPA workshop etc are provided.

**Strategies facilitating Slow Learners:**

- Performance Enhancement Group (PEG) schedules special classes for failures and absentees in Internal Assessment Test, further from second year after university result the committee arrange classes for arrear students on all Mondays to facilitate them to clear their backlogs.

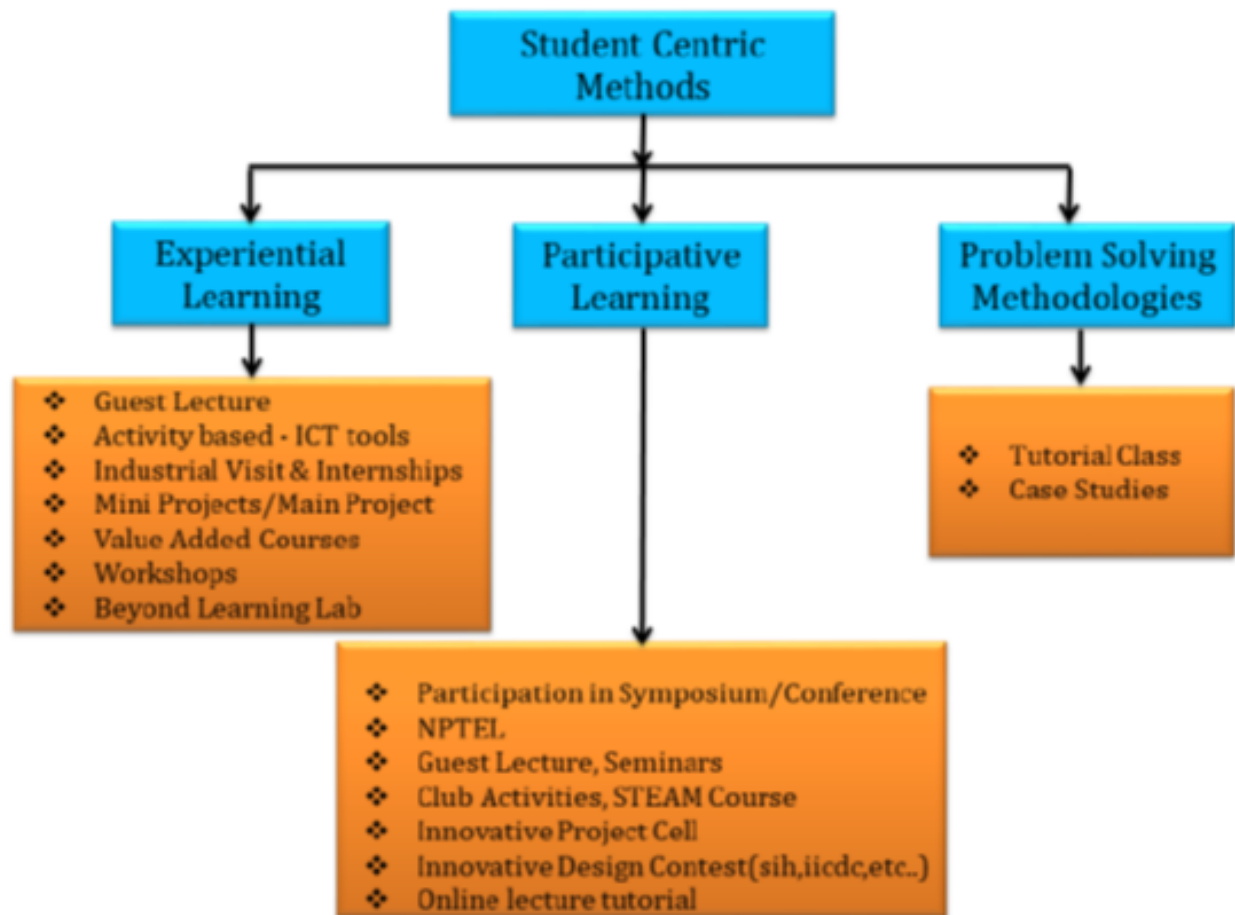
**2.2.2 Student- Full time teacher ratio (Data for the latest completed academic year)****Response:** 14:1

File Description	Document
Any additional information	<a href="#">View Document</a>

**2.3 Teaching- Learning Process**

**2.3.1 Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences**

**Response:**



### Experiential Learning:

- Every student is made to have an experiential learning path through each curriculum imparted in theory and practical subjects based on blooms taxonomy levels.
- Every semester, students are exposed to periodical Industrial Visits and Internship in companies to gain exposure to industrial practices.
- Students are encouraged to participate in internal/external college workshop, National Conference, International Conference, Competitions etc.
- Students are made to carry out mini-projects to have more experiential learning.
- Value added courses and workshops are organized to gain hands on experience in latest technologies.

### Participative Learning:

- Students use LMS (learning management system) platform for accessing STEAM courses, online lecture tutorials, NPTEL and training department activity.
- Students are encouraged to participate in national and international level competition, conference, seminar and workshop within and outside the college.
- Enrolled to participate in ARM design contest, Texas instruments - IICDC, Smart India hackathon, Professional Society Events where students can explore their ideas and innovation towards awards and achievements.
- Seminars, Industrial visit and Guest Lectures influences them to understand the concepts and the subsequent process implementation in appropriate way
- Innovative Project Cell (IPC) and club activities helps the students towards ideation and

implementation.

### **Problem Solving Methodologies:**

- Tutorial classes form a part of the course delivery to inculcate problem solving skills among the students to supplement regular teaching learning process.
- The problem solving ability is further emphasized by incorporating questions on case studies (Part C) in the internal assessment tests and model exams and involving them to solve the problem posted by industry in “ Problem Box” post.
- Value added programs are arranged for second- and third-year students enhancing their problem-solving skills through general aptitude, logical reasoning and personality development classes.
- Hackathons are arranged to help them to test their coding skills and make them solve interesting business problems and real-world challenges

### **2.3.2 Teachers use ICT enabled tools for effective teaching-learning process.**

#### **Response:**

Education around the world is experiencing major paradigm shifts in educational practices of teaching and learning under the umbrella of ICT enabled learning environment. Whereas learning through facts, drill and practices, rules and procedures was more adaptive in earlier days, learning through projects and problems, inquiry and design, discovery and invention, creativity and diversity, action and reflection is perhaps more fitting for the present times. The major hallmark of this learning transition is from teacher centered to learner focus paradigm. During the last three decades, the changes in educational environment have been phenomenal. The model, focus, role of the learner and technology has been changed drastically from traditional instruction to virtual learning environment by integrating ICT

#### **Initiative**

RIT emphasis on ICT infusion in pedagogy to improve learning, motivate and engage learners, promote collaboration, foster enquiry and exploration, and create a new learner centered learning culture. It permits the move from reproductive model of teaching and learning to an independent, autonomous learning model that promotes initiation, creativity and critical thinking with independent research. Learners are expected to collect, select, analyze, organize, extend, transform and present knowledge using ICT in authentic and active learning paradigm. Teachers are expected to create a new flexible and open learning environment with interactive, experiential and multimedia based delivery system. Our institute encourages all faculty members to participate/register in NPTEL, STEAM Club, MOODLES, Google classroom, Hacker rank, online lecture tutorials and insist usage of ICT tools in class rooms for effective teaching learning process. Faculties utilize three types of ICT tools such as

1. **Generic tools for learning** : Starting from productivity tools to simulation & modeling to access, extend, transform and share information e.g. Licensed and open source software for lab and Projects.
2. **Content-based resources** : To access a vast source of educational resources that effectively can be integrated with the curriculum objectives e.g MHRD-NMEICT, NPTEL-SWAYAM, Blogs, NDL,
3. **Interactive instructional courseware** : Self-paced learning materials e.g Google Class Room,

MOODLE/Blackboard/Canvas LMS, Video Lecture, Course material in website etc

### Implementation

- Through online RIT LMS - google classroom platform students and faculty can login and make use of the resources as a knowledge sharing platform.
- Open source platforms such as You Tube are harnessed by STEAM Club in conducting technical and non-technical debates, events, animation and many such activities, that can be accessed through youtube STEAM Club link. Both staff and students collaborate to make these videos sometimes with an external participant.
- Usage of ICT facilities in class room.
- Our library has its own digital library where numerous e- books ,e - journals, NPTEL, RIT MOODLE videos can be accessed.
- Teachers are encouraged to act as mentor for NPTEL students' group, as that would help the students to raise their level of learning in par with higher level technical institutions.

Please see the additional information for more details

File Description	Document
Upload any additional information	<a href="#">View Document</a>

### 2.3.3 Ratio of students to mentor for academic and other related issues (Data for the latest completed academic year )

**Response:** 15:1

#### 2.3.3.1 Number of mentors

Response: 116

File Description	Document
Upload year wise, number of students enrolled and full time teachers on roll.	<a href="#">View Document</a>
Mentor/mentee ratio	<a href="#">View Document</a>
Circulars pertaining to assigning mentors to mentees	<a href="#">View Document</a>

## 2.4 Teacher Profile and Quality

### 2.4.1 Average percentage of full time teachers against sanctioned posts during the last five years

**Response:** 99.33



File Description	Document
List of the faculty members authenticated by the Head of HEI	<a href="#">View Document</a>
Institutional data in prescribed format	<a href="#">View Document</a>

#### 2.4.2 Average percentage of full time teachers with Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. during the last five years (consider only highest degree for count)

**Response:** 19.19

##### 2.4.2.1 Number of full time teachers with Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. year wise during the last five years

2019-20	2018-19	2017-18	2016-17	2015-16
31	31	27	25	20

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

#### 2.4.3 Average teaching experience of full time teachers in the same institution (Data for the latest completed academic year in number of years)

**Response:** 5.77

##### 2.4.3.1 Total experience of full-time teachers

Response: 703.76

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

## 2.5 Evaluation Process and Reforms

### 2.5.1 Mechanism of internal assessment is transparent and robust in terms of frequency and mode

**Response:**

The institution strictly follows the evaluation process approved by the Anna University. The evaluation



weightage is 20% for continuous internal assessment tests and 80% for the end-semester Examination by university. The Institute has taken following processes for the effective execution of evaluation reforms introduced by the University.

- The academic calendar for each semester is prepared by the Dean with the University schedule of events, which provides the information on scheduled timetable for class test, internal assessment, retest, model examination and the tentative schedule of university examinations. The staff members and students plan the course of action.
- The Institute has Exam Controller and faculty coordinator from each department for smooth conduct of the examination. Internal monitoring team involving senior faculty members is assigned by the institution head to ensure effective conduct of exams.
- The students can review their evaluated answer script and discuss the same with concerned faculty.
- Internal mark is based on class test, internal assessment and assignment.
- Model practical examination is conducted for laboratory courses for awarding internal marks based on VIVA and model lab exam.
- At Institute level, effective implementation of improving the result by conducting retest..
- The regulations, curriculum and syllabi of all the programmes offered by the university are available in the Institute and university website.
- The regulations contain the details of the evaluation process. The Examination controller of the Institute has prepared an Instruction Manual as per the guidelines from Controller of Examination, Anna University to conduct of examinations and copies are available in all departments.
- During the Induction program the newly admitted students are updated about the attendance requirements as well as the pass mark requirements and the grading systems for the internal assessments. Whenever the students are having grievances, they resolve through mentor, HOD, Exam controller.
- The question paper pattern for the internal examinations have been standardized by the institution which are in line with the university question paper pattern.
- The faculty enter attendance and marks of the students periodically in the anna university web portal.
- Internal Assessment I(IAT-1) covers Unit I and first part of Unit II, Internal assessment II covers second part of Unit II and III and model examination covers the entire syllabus of a particular course.
- For the internal assessment test, faculty members are informed to prepare question bank and submit to the exam cell. Exam controller prepares the final question paper.
- Student's marks are intimated to the students immediately after the completion of assessment and the same is communicated to their parents through SMS.
- Retest is conducted for students who fail to secure minimum percentage of marks with a special

timetable. The academic performance of the student and attendance of the student are maintained and recorded in each department and periodically uploaded in university web portal.

### **2.5.2 Mechanism to deal with internal examination related grievances is transparent, time- bound and efficient**

#### **Response:**

- The class teachers carefully monitor the regularity of attendance and the performance of the students in internal evaluation tests and end semester examinations. The performance of the students is informed to the students immediately after the completion of assessment tests.
- The students who have any grievance in the evaluation process can approach the faculty member who had evaluated the answer sheets for any discrepancies in the mark.
- Answers script audit is conducted by the IQAC for measuring the quality of evaluation in terms of uniformity in evaluation without any bias.
- A sample set (3 levels - low, medium, high ) in marks are collected for answer script audit with the support of answer key.
- Attendance is entered periodically in the Anna University web portal. During Parent-teachers meeting, parents are made aware of marks awarded to the students from Anna university web portal.
- On the Induction Day, the first year students are made aware of the evaluation processes. The university allots 80% marks for the end semester exams and 20% internal marks.
- The assessment marks in the internal tests are uploaded in Anna University web portal.
- Other type of grievances such as data missing in the question papers, question asked from outside the syllabus, question paper being tough etc., are communicated to the respective HOD by the concerned faculty for necessary action.
- A candidate can apply for photocopy of his/her semester examination answer paper in a theory course. The answer script is to be valued and justified by a faculty member, who handled the subject and recommend for revaluation with breakup of marks for each question. Based on the recommendation, the candidate can register for the revaluation through proper application to the Controller of Examinations.
- Revaluation is not permitted for practical courses and for project work.
- A candidate can apply for revaluation of answer scripts for not exceeding 5 subjects at a time.
- Candidates not satisfied with Revaluation can apply for Review of his/ her examination answer paper in a theory course. Candidates applying for Revaluation only are eligible to apply for Review.

## **2.6 Student Performance and Learning Outcomes**

### **2.6.1 Teachers and students are aware of the stated Programme and course outcomes of the Programmes offered by the institution.**

#### **Response:**

All POs have been adequately addressed through the core courses and their COs. These measurements

provide by the university on the basis for continuous improvement in the quality of learning, have been properly assessed and do the almost to attain it through various learning means.

Program outcomes, program specific outcomes and course outcomes for all programs offered by the Institution are stated and displayed on website and communicated to alumina and students.

Program Outcomes (POs) , Program Specific Outcomes (PSOs) and Course Outcomes are made aware through the following procedures.

- POs and PSOs are approved by the Department Advisory Board POs and PSOs are available in the Institute website.
- POs and PSOs are posted in corridors, classrooms Department office, Laboratories and Department library of the campus for staff, students and public view.
- During the department review meeting the attainment of Cos, POs and PSOs are reviewed among the faculty members.
- At the first course committee meeting the corresponding faculty members discuss the assessing methods of each course outcomes and prepare the mapping with the POs and PSOs
- In the remaining 2 course committee meetings the co attainment level are checked and coaching portions would be decided.
- The Pos and PSOs relevant feedback has been collected from the parents during Parents-Teachers Meeting.
- The outcomes are elaborately discussed and derived by the course committee members. Even though the COs is given by the Anna University along with the syllabus, if necessary, the COs are modified and reframed by the course committee members. Program advisory Committee analyze the course outcomes and their mapping with program outcomes and program specific outcomes done for each courses by the course handlers along with one subject area expert. Course Outcomes (COs) are finalized at Department Advisory Board meeting (DAB).
- COs are communicated to the students during the introduction class itself. COs along with lesson plan are printed and issued to the students during the first class and also posted in MOODLES. During the class committee meetings the Cos attainment levels are discussed and the measures outcomes of the course are also focused. During the commencement of each unit and after the completion of the unit, the course outcomes evaluating methods are reviewed.

### **2.6.2 Attainment of programme outcomes and course outcomes are evaluated by the institution.**

#### **Response:**

- The program outcomes and Program Specific outcomes are assessed with the help of course outcomes of the relevant courses through direct and indirect methods.
- Direct methods are provided through direct examinations or observations of student knowledge or skills against measurable course outcomes.
- The knowledge and skills described by the course outcomes are estimated through University Examination, internal exams and home assignment it has been recorded on the performance of each student on each course outcome.

### **CO – POs CORRELATION LEVEL MATRIX**

CO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO
	1	2	3	4	5	6	7	8	9	10	11	12
CE410.1	2	2	2	2	2	2	2	1	1	1	1	1
CE410.2	2	2	2	2	2	1	1	1	1	1	1	1
CE410.3	2	2	2	2	2	1	1	1	1	1	1	1
CE410.4	2	2	1	1	-	2	2	1	1	1	1	1
CE410.5	2	2	1	1	-	2	2	1	1	1	1	1
Average	1.8	2	1.6	1.6	1.16	1.5	1.5	1	1.5	1.5	1	1

The CO attainment using internal exam and assignment activities are given in as below:

$$CO1 = \frac{X1+X2+X3+X4}{N}$$

$$CO2 = \frac{X1+X2+X3+X4}{N}$$

$$CO3 = \frac{X1+X2+X3+x4}{N}$$

$$CO4 = \frac{X1+X2+X3}{N}$$

$$CO5 = \frac{X1+X2}{N}$$

Where

X1 – Assignment 1

X2 – Internal Assessment Test 1

X3 – Internal Assessment Test 2

X4 – Model Exam

N - Number of assessment tools

The overall CO attainment 'C' is computed for each student and class average of CO attainment is calculated. Three attainment levels are framed as per the following rules.

- Attainment Level 1: 50% - 65% of students scoring more than Class Average
- Attainment Level 2: 66% - 75% of students scoring more than Class Average in test
- Attainment Level 3: >75% of students scoring more than Class Average in the test

For the University exam results also the class average is calculated and the same above three rules are applied to get the attainment levels.

**Average attainment (direct method) = University Examination (80%) + Internal assessment (20%)**

Indirect assessment strategies are implemented by embedding them in Student Exit Survey, Employer Survey and Alumni Survey. Few of the POs are assessed based on relevant developed rubrics.

**Average attainment (Indirect method) = Average (Alumni survey + Employer survey + Exit survey)**

This scoring function is used to calculate the average attainment of each PO.

PO /PSO Attainment (%) = (weightage: 80%) x (Average attainment in direct method)

+ (weightage: 20%) x (Average attainment in indirect method)

The tools used for the assessment of POs/PSOs and modes are given below:

Assessment Mode	Assessment Tool	Data Collection Frequency
Direct (80%)	End Semester University Examination	End of each semester
	Internal Assessment Test	Thrice per semester
	Assignment	End of each module
	Mini Project/Project Review	3 reviews per semester
In-Direct (20%)	Course End Survey	At the end of every semester for each subject
	Graduate Exit Survey	At the end of Program
	Alumni Survey	Once in a year
	Employer Survey	Once in a year

**2.6.3 Average pass percentage of Students during last five years****Response:** 92**2.6.3.1 Total number of final year students who passed the university examination year-wise during the last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
487	487	491	383	404

**2.6.3.2 Total number of final year students who appeared for the university examination year-wise during the last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
521	542	523	429	432

**File Description****Document**

Upload any additional information

[View Document](#)

Institutional data in prescribed format

[View Document](#)**2.7 Student Satisfaction Survey****2.7.1 Online student satisfaction survey regarding teaching learning process****Response:** 3.89**File Description****Document**Upload database of all currently enrolled students  
(Data Template)[View Document](#)

## Criterion 3 - Research, Innovations and Extension

### 3.1 Resource Mobilization for Research

#### 3.1.1 Grants received from Government and non-governmental agencies for research projects / endowments in the institution during the last five years (INR in Lakhs)

Response: 51.47

##### 3.1.1.1 Total Grants from Government and non-governmental agencies for research projects / endowments in the institution during the last five years (INR in Lakhs)

2019-20	2018-19	2017-18	2016-17	2015-16
34	10.01	3.34	4.12	0

#### File Description

#### Document

Institutional data in prescribed format

[View Document](#)

e-copies of the grant award letters for sponsored research projects / endowments

[View Document](#)

#### 3.1.2 Percentage of departments having Research projects funded by government and non government agencies during the last five years

Response: 30

##### 3.1.2.1 Number of departments having Research projects funded by government and non-government agencies during the last five years

2019-20	2018-19	2017-18	2016-17	2015-16
2	2	1	1	0

##### 3.1.2.2 Number of departments offering academic programmes

2019-20	2018-19	2017-18	2016-17	2015-16
4	4	4	4	4

File Description	Document
Supporting document from Funding Agency	<a href="#">View Document</a>
Institutional data in prescribed format	<a href="#">View Document</a>

### 3.1.3 Number of Seminars/conferences/workshops conducted by the institution during the last five years

**Response:** 40

#### 3.1.3.1 Total number of Seminars/conferences/workshops conducted by the institution year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
6	11	8	8	7

File Description	Document
Report of the event	<a href="#">View Document</a>
Institutional data in prescribed format	<a href="#">View Document</a>

## 3.2 Research Publications and Awards

### 3.2.1 Number of papers published per teacher in the Journals notified on UGC website during the last five years

**Response:** 2.9

#### 3.2.1.1 Number of research papers in the Journals notified on UGC website during the last five years.

2019-20	2018-19	2017-18	2016-17	2015-16
310	32	34	23	12

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>



**3.2.2 Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five years****Response:** 2.1**3.2.2.1 Total number of books and chapters in edited volumes/books published and papers in national/ international conference proceedings year-wise during last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
98	45	56	54	45

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

**3.3 Extension Activities****3.3.1 Extension activities are carried out in the neighborhood community, sensitizing students to social issues, for their holistic development, and impact thereof during the last five years.****Response:**

Rajalakshmi Institute of Technology (RIT) is actively involved in extension activities in the villages and schools around the campus through various clubs.

**Rotaract Club**

Rotract Club and Youth Red Cross(YRC) of RIT have been organising Blood Donation Camps for the past two years at RIT Campus.

**National Service Scheme**

Our NSS Unit regularly conducts awareness programmes at the adopted villages and schools on Cleanliness, Road safety, rain water harvesting, solid waste management, avoidance of plastic usage, toilet usage, tree plantation, etc. Campus cleaning, library maintenance and plantation of tree saplings are done inside the campus. Camps are organized for NSS Student volunteers of RIT at Kuthambakkam and various extension activities are done.

**CII Yi YUVA Club** was launched with an MoU between CII Yi and RIT on 3rd June 2019 to involve the students in skill building, community service and nation building. On Mahatma Gandhi's 150th birth anniversary, the club joined hands with CII Yi YUVA Chennai Chapter for "THE CLEAN - UP DRIVE" at Parry's Corner, Chennai. In Nov 2019, Yuva club actively participated in the celebration of 'Masoom week Cyber safety' and 'Child-sex abuse awareness walk' organized by Yi Chennai.

**Unnat Bharat Abhiyan cell of RIT** aims to develop linkages with selective rural clusters and expedite the developmental efforts. RIT organized Gram sabha meeting around five nearby villages and educated people about the various welfare measures and governmental schemes.

Some of the activities carried out in the recent years are listed below:

- As part of World Environment day celebration, 250 plants were brought and planted.
  - In 2018, around 750 students participated in a mini-marathon on the theme ‘Avoid Plastics’, at Besant Nagar Beach Avenue. Mr.M.Subramanian, MLA was the chief guest.
  - A similar mini-marathon was organized in July 2019 to promote digital learning in schools. Computers were donated to the nearby schools as part of the event. Dr.Sylendrababu, IPS was the chief guest.
  - A cycle rally to create awareness about cancer started from the Marina Beach and ended in Besant Nagar Beach in association with the District Rotaract club.
  - Rotaract club of RIT, cleaned and painted the Government school library. In Arignar Anna Higher Secondary School, Poonamalle,
  - RIT Rotaractors helped the blind students of New college, Royapettai to write their exams
  - Renovation of the temples in the nearby village was undertaken by the college through its volunteers.
  - **Swacch School** - RIT Rotaractors cleaned the government primary corporation school, Mugappair, along with the school alumni and painted the damaged walls. A restroom was constructed.
  - **As part of Swacch Bharat**, in Kattupakkam Government school, the garbage near the compound wall was removed and the wall was painted colorfully.
  - Rotaract club of Chennai with RIT conducted a cultural event Glitzz’ 17 for a fund rising project on sanitation.
  - Relief products were donated to the flood-affected people of Assam in July 2019
  - Yuva club organized the third edition of the Annual HRD Forum Conference in Dec 2019.
  - Yuva club organized ‘Road Safety Awareness – online contest’ in Feb 2020.

### 3.3.2 Number of awards and recognitions received for extension activities from government/ government recognised bodies during the last five years

**Response:** 0

#### 3.3.2.1 Total number of awards and recognition received for extension activities from Government/ Government recognised bodies year-wise during the last five years.

2019-20	2018-19	2017-18	2016-17	2015-16
0	0	0	0	0

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>

**3.3.3 Number of extension and outreach programs conducted by the institution through NSS/NCC/Red cross/YRC etc., during the last five years ( including Government initiated programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. and those organised in collaboration with industry, community and NGOs)**

**Response:** 72

**3.3.3.1 Number of extension and outreach Programs conducted in collaboration with industry, community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., year-wise during the last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
27	13	3	20	9

File Description	Document
Reports of the event organized	<a href="#">View Document</a>
Institutional data in prescribed format	<a href="#">View Document</a>

**3.3.4 Average percentage of students participating in extension activities at 3.3.3. above during last five years**

**Response:** 33.01

**3.3.4.1 Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., year-wise during last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
867	454	945	340	560

File Description	Document
Report of the event	<a href="#">View Document</a>
Institutional data in prescribed format	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

### 3.4 Collaboration

**3.4.1 The Institution has several collaborations/linkages for Faculty exchange, Student exchange, Internship, Field trip, On-job training, research etc during the last five years**

**Response:** 0

**3.4.1.1 Number of linkages for faculty exchange, student exchange, internship, field trip, on-job training, research etc year-wise during the last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
0	0	0	0	0

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>
e-copies of linkage related Document	<a href="#">View Document</a>

**3.4.2 Number of functional MoUs with national and international institutions, universities, industries, corporate houses etc. during the last five years**

**Response:** 20

**3.4.2.1 Number of functional MoUs with Institutions of national, international importance, other universities, industries, corporate houses etc. year-wise during the last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
11	1	7	1	0

File Description	Document
Institutional data in prescribed format(Data template)	<a href="#">View Document</a>
e-Copies of the MoUs with institution./ industry/ corporate houses	<a href="#">View Document</a>

## Criterion 4 - Infrastructure and Learning Resources

### 4.1 Physical Facilities

**4.1.1 The Institution has adequate infrastructure and physical facilities for teaching- learning. viz., classrooms, laboratories, computing equipment etc.**

**Response:**

Rajalakshmi Institute of Technology is stretched over an area of 10.88 acres in a green, clean, neat and spacious environment. It is a fully self-contained campus with requisite infrastructure based on AICTE norms and a facilitator for effective teaching- learning process. Green Building, Turing Block, Nikola Tesla Block, Elon Musk Block and Sir C.V.Raman Block forms the major academic wings with state of art class rooms, laboratories, seminar halls, meeting rooms and are adequate in numbers providing a good learning ambience to students through modern teaching aids and ultramodern facilities. To enhance learning and to provide high standard in technical education, the institute provides a wide array of sophisticated equipment in all the laboratories in various departments. To periodically organize and motivate cocurricular and extra- curricular activities for the students, the campus has seminar halls, conference halls and research laboratories like Centre for Advanced Manufacturing, Centre for AR/VR/Hologram, Centre for Data Science, Centre for Artificial Intelligence, Centre for Cyber security and cloud computing, Centre for Electric Vehicle and Energy, Centre for Internet of Things, Centre for Materials Science and Engineering. The college has a dedicated 155 Mbps leased line connectivity from Tata Teleservices for providing uninterrupted internet services to the systems. There is a separate server room which provides all administrative services, computing facilities to all the computer systems inside the campus. Entire campus is Wi-Fi enabled with secure log in mechanisms ensures the learning through ICT.

Apart from these, the institute also has a very good collection of books, magazines, journals in the central library. The institute patronizes a spirit of perpetual learning by rendering student's facilities like tutorial rooms, periodically providing counselling sessions, helping students to develop projects through innovative project cell. The institute nurtures the new ideas of the students by enabling the ideas to undergo various stages of development through entrepreneurship development cell of the institute.

Amenities and facilities are well maintained which include lawn, ramp, and garden.

CCTV surveillance at all strategic locations, generator back up, RO water purifier. Spacious and well-maintained canteen is available with delicious and hygiene food. The Housekeeping unit takes care of maintaining complete cleanliness in the institute. Infrastructural maintenance, electrical maintenance, and garden maintenance is done on a routine basis keeping in view the benefits of students. First aid facilities, Fire extinguishers are available in each department as a precautionary measure in case of emergency. Periodical monitoring is done to ensure the quality of these equipment. The feedback obtained from parents, students, alumni help in keeping and maintaining the conducive learning environment within the campus.

**4.1.2 The Institution has adequate facilities for cultural activities, sports, games (indoor, outdoor), gymnasium, yoga centre etc.**

**Response:**

RIT encourages holistic development of the students and staff by providing various sporting activities. Institute has created and maintained well number of sports facilities and infrastructure for holding cultural events and other co-curricular activities. The achievements of the students in multiple sports activities is an indication of the dedicated attention, which are mainly promoted through the Sports Club. The Club also plays supervisory role to initiate, execute, coordinate, and supervise physical education, sports activities and programmes that enhance general/specific interest in sports, which are conducted throughout the year. RIT has hosted Anna University sports activities every year . The following facilities are available

- Cricket Ground
- Football Ground
- Volleyball Court
- Badminton Court
- Table Tennis Court
- Fitness Centre

**SPORTS CLUB:** The College promotes both indoor and outdoor sports activities for the students to bring out the talents of the students in sports. The Physical Education Director identifies the specific talents and skills of the students and according provide training to them. The campus has the required facilities to play Throw ball, Chess, Carom, Table Tennis, and Badminton, Volleyball, Foot Ball, Cricket, Kho- Kho, and Kabaddi. The campus also provides facilities such as Gymnasium and cross fitness training for students and faculties. All dimensions of these play areas are maintained as per national and international standards.

The College periodically organize inter-Departmental sports tournaments to build up the sports talent and sportive spirit among the young minds. Students are trained and encouraged to participate in the Inter collegiate tournaments, zonal and inter-zonal sports events. RIT students have brought many laurels to RIT in various sports events. The college also organize Marathons to raise awareness on socio economic issues. Every year, sports day is celebrated where winners of the sports activity were felicitated.

**CULTURAL CLUB:** The cultural club –**Artist League RIT** has a vision for promoting a vibrant, memorable and rich campus experience for the students through various arts and cultural activities. The mission of the club is to achieve excellence in various art forms, to explore talents globally to help students to build positive team spirit and other relationships. The club has been conducting workshops, dance events, vocal and instrumental music events for the following activities to the interested students. Every year, the college annual day and Alumni day is celebrated with cultural programmes through this club. .

#### **Other Clubs:**

To extend the services of RIT to the society there are Service Oriented Clubs like National Service Scheme (NSS), Rotoract club, YRC and Yi-Yuva. The students volunteer their services to the society. Notable services like Blood donation camp, Planting tree saplings, raising funds and materials during emergency situations like flood, cyclone, earthquake etc. Through the Unnath Bharath Abiyan scheme of Government of India, services are being provided to people in nearby villages around Kuthambakkam. The Language club of RIT periodically organize debates, essay competitions to commemorate the festival days. The Maths club organize workshops, seminar and faculty development programme to explore the innovations, applications in Mathematics.

**4.1.3 Percentage of classrooms and seminar halls with ICT- enabled facilities such as smart class, LMS, etc. (Data for the latest completed academic year)****Response:** 100**4.1.3.1 Number of classrooms and seminar halls with ICT facilities**

Response: 40

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Institutional data in prescribed format(Data template)	<a href="#">View Document</a>

**4.1.4 Average percentage of expenditure, excluding salary for infrastructure augmentation during last five years(INR in Lakhs)****Response:** 37.89**4.1.4.1 Expenditure for infrastructure augmentation, excluding salary year-wise during last five years (INR in lakhs)**

2019-20	2018-19	2017-18	2016-17	2015-16
110.78	234.43	881.31	602.77	44.74

File Description	Document
Upload audited utilization statements	<a href="#">View Document</a>
Institutional data in prescribed format(Data template)	<a href="#">View Document</a>

**4.2 Library as a Learning Resource****4.2.1 Library is automated using Integrated Library Management System (ILMS)****Response:**

The institute has well equipped, spacious library of carpet area 607 square meters with the rich collection of engineering books including national, international journals, periodicals, and magazines. The library is fully automated with Library Management System. The reading room facility is available for students. The reading room is 380 sq.m with a seating capacity of 150 students. It has about 4896 titles, 19401 volume, 24 printed journals, 169 e journals, 5288 e books. and 6 magazines along with newspapers. All the books are bar-coded and bar-code laser scanners are used in circulation counter for book transaction.

When a student approaches the counter for issuing a book; the book is searched by title or author. Students can also access physically in the stack area. The entry is made in Library Management System software through student login and book is registered and issued. As per the Regulation of statutory and affiliating authorities the text books and reference books are made available in the library. The college central library has various institutional memberships for e-resources and e-Journals. The Institute has membership for National Digital Library, NPTEL Active local chapter and browsing centre with 155Mbps leased line connected computers in the library. Direct Accesses to online journals are made available for staff and students such as IEEE to learn the latest research and developed techniques in engineering. Library facility is open to all students and faculty members and is continuously updated with latest books and journals. The institute always strives to provide latest and best collection of books, journals, online sources to the students

Total area of the library (in Sq. Mts.)	607	
Total seating capacity	150	
Working hours (on working days, on holidays, before examination days, during examination days, during vacation)	Academic working days	8 AM to 5 PM
	Academic weekend	10 AM to 2 PM

Average number of walk-ins	426 per day
Average number of books issued/returned	200 per day
Ratio of library books to students enrolled	1:10
Average number of books added during last three years	1600/ year
Average number of login to opac (OPAC)	32 per day
Average number of login to e-resources	30-40 per day
Average number of e-resources downloaded/printed	48
Number of information literacy trainings organized	Library Orientation Program Yearly once
Details of “weeding out” of books and other materials	No

#### 4.2.2 The institution has subscription for the following e-resources



- 1.e-journals
- 2.e-ShodhSindhu
- 3.Shodhganga Membership
- 4.e-books
- 5.Databases
- 6.Remote access to e-resources

**Response:** A. Any 4 or more of the above

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Institutional data in prescribed format(Data template)	<a href="#">View Document</a>

#### 4.2.3 Average annual expenditure for purchase of books/e-books and subscription to journals/e-journals during the last five years (INR in Lakhs)

**Response:** 13.46

##### 4.2.3.1 Annual expenditure of purchase of books/e-books and subscription to journals/e-journals year wise during last five years (INR in Lakhs)

2019-20	2018-19	2017-18	2016-17	2015-16
10.20	6.15	6.16	28.97	15.84

File Description	Document
Institutional data in prescribed format(Data template)	<a href="#">View Document</a>
Audited statements of accounts	<a href="#">View Document</a>

#### 4.2.4 Percentage per day usage of library by teachers and students ( foot falls and login data for online access) during the last completed academic year

**Response:** 6.6

##### 4.2.4.1 Number of teachers and students using library per day over last one year

Response: 120

File Description	Document
Details of library usage by teachers and students	<a href="#">View Document</a>

### 4.3 IT Infrastructure

#### 4.3.1 Institution frequently updates its IT facilities including Wi-Fi

##### Response:

Institute has always eagerly taken an initiative to upgrade itself in providing IT facilities to students and faculty. The institute now has 603 computers of high configuration. The latest configuration of computer available in the institute is Accer i5 with 8 GB RAM, 1 TB HDD, i5 processor. Each department has its own computing facility. All 603 computers are LAN connected.

##### List of Licensed software

Sl. No	TYPE	DEPT	SOFTWARE	PRODUCTS DETAILS	Amount
1	System Software	Total Campus	Windows 10 Ubuntu CentOS Microsoft WinSL8.1 Academic Microsoft WinSL10 Academic		
2	Microsoft Products		Microsoft open value Subscription Microsoft Desktop education Microsoft SQL Server Standard Edition Microsoft SQLCAL Microsoft Visual studioPro Microsoft Office	Renewed on 29-12-2020	236000
3	Application	Communication Lab Software	Clarity & Snet Language Software - 30 users	Perpetual	124800
4		CSE	Oracle Academy (unlimited)	College Membership	
5		CSE	IBM Rational SEED program - 30 users	Perpetual	18000
6		MECH	Ansys Academic Licence 50 users	Perpetual	350000
7		MECH	Solid Works - 60 users	Perpetual	225250
8		MECH	Cadian 2008 - 20	Perpetual	110000

		users		
9	ECE	Lan Protocol Simulator and Analyzer Software	Perpetual	101250
10	ECE	Network Simulation & Learning Resource Software	Perpetual	47999
11	ECE	Orcad Software 5-users	Perpetual	237000
12	ECE	Tanner EDA Licence	Perpetual	742857
13	ECE	Matlab Licence	Perpetual	591675
28	EEE	Matlab Licence	Perpetual	362168
14	ECE	XiLINUX	Perpetual	67500
22	Accounts	Tally ERP 9	Multiuser	10800
15	Total Campus	JAVA	Open Source	Open Source
16	Total Campus	GCC	Open Source	Open Source
17	Total Campus	TURBO C++	Open Source	Open Source
18	CSE	Netbeans	Open Source	Open Source
19	CSE	Eclipse	Open Source	Open Source
20	CSE	Xampp	Open Source	Open Source
21	CSE	Apache tomcat	Open Source	Open Source
23	CSE	SUN JDK (freeware)	Open Source	Open Source
24	CSE	JDK Software for Windows	Open Source	Open Source
25	CSE	Tomcat Server for windows	Open Source	Open Source
26	CSE	MYSQL Server	Open Source	Open Source
27	CSE	NS2	Open Source	Open Source
29	ECE	SkyLab	Open Source	Open Source
30	MECH	Kicad	Open Source	Open Source

The institute also has open source application software for keeping students updated

### Wi-Fi & Internet

RIT is having Tata Tele Services with 155 Mbps, being updated once in 3 months and Airtel as a backup with 55 Mbps, being updated once in 3 months, locally networked and connected through Wi-Fi. All the Laboratories of different department are having Internet facility connected through intelligent switches. The entire college campus covered with Wi-Fi Access points to access Internet and Intranet educational resources. The Wi-Fi facility has been extended to all the hostels. JIO net is also available where all stakeholder can access 1GB data per day inside the campus.

### 4.3.2 Student - Computer ratio (Data for the latest completed academic year)

**Response:** 3:1

<b>File Description</b>	<b>Document</b>
Upload any additional information	<a href="#">View Document</a>

#### 4.3.3 Bandwidth of internet connection in the Institution

**Response:** A. 750 MBPS

<b>File Description</b>	<b>Document</b>
Upload any additional Information	<a href="#">View Document</a>

### 4.4 Maintenance of Campus Infrastructure

**4.4.1 Average percentage of expenditure incurred on maintenance of infrastructure (physical and academic support facilities) excluding salary component during the last five years(INR in Lakhs)**

**Response:** 8.04

**4.4.1.1 Expenditure incurred on maintenance of infrastructure (physical facilities and academic support facilities) excluding salary component year-wise during the last five years (INR in lakhs)**

2019-20	2018-19	2017-18	2016-17	2015-16
126.63	87.66	91.85	71.03	56.78

<b>File Description</b>	<b>Document</b>
Upload any additional information	<a href="#">View Document</a>
Institutional data in prescribed format(Data template)	<a href="#">View Document</a>

**4.4.2 There are established systems and procedures for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc.**

**Response:**

The college provides optimal allocation and utilization of the available financial resources for maintenance and upkeep of different facilities by holding regular meetings of budget committee constituted for this purpose as per their requirements needed to maintain the college.

**Department level Policy:** Each department Head along with the faculty members meet to prepare their requirements for every year's budget which include the maintenance and up keeping the infrastructure, submit it to the management and principal. Management and Principal analyze various departments budget submitted by the HOD's and allocate as per their requirements. The department level policy also includes

the classrooms and the laboratories maintenance.

**Infrastructure/Class room maintenance:** The college has a maintenance team for upkeep of physical Infrastructure. At the departmental level, HoDs submit their requirements to the Principal regarding classroom furniture and other. The college fund is utilized for maintenance and minor repair of furniture and other ICT facilities.

#### **Laboratory maintenance:**

Stock registers and Record of maintenance of stocks are regularized by lab technicians and supervised by HODs of the concerned departments regularly. Other measures to maintain laboratories are as follows:

- The calibration, repairing and maintenance of sophisticated lab equipment are done by the technicians of related owner enterprises.
- The proper account of visitors (students and staff) on daily basis is maintained. With the help of the two full time sweepers cleanliness of class rooms is maintained. They are well equipped with tools for cleaning.

#### **Central Library :**

The requirement and list of books available at present is taken from the concerned departments and respective HoDs are involved in the process. The finalized list of required books is duly approved by the Principal/Management. Every year in the beginning of session, students are motivated to register themselves in library to access Library. To ensure return of books before appearing in exam, a 'no dues' certificate from the library is mandatory.

**Sports and Common facilities:** Regular budget submitted by the physical education director every year, it will be sanctioned by the management / principal according to the requirements.

The common facilities like Seminar hall, Conference hall, Auditorium, and transport facilities are provided and maintained by the maintenance department. This can be accessed based on individual department's request. With the help of digital connect team our contents are published on social media platform and updated immediately after the events on a regular basis.

#### **The maintenance of academic support includes the following activities and their updates:**

- E-mail facility with Google Applications: Creation and maintenance of mail account for both individual and group mail id's.
- Design and maintenance of website: Development and maintenance of the college website is updated every 15days in a month.
- Accounts Management System: The financial support for all academic and non-academic activities is provided, receipts and reports are generated and maintained.
- Payroll Management: Generation of pay slips, provident fund statements, professional tax statements, salary statements
- LMS: A Private customizable website MOODLE with online courses for teachers and students to achieve learning goals.
- Exam Tool : It gives internal assessment support to the affiliated university by collecting examination fees, attendance entry, internal assessment entry and execution of examinations

according to the schedule.

- **Online feedback system :** A set of questionnaires is prepared by the IQAC; students give their feedback twice in a semester. Reports of feedback are submitted to the principal and the concerned department.
- **Intranet facility :** RIT has local server to access and maintain the records of academic and non-academic activities.
- **Bulk SMS:** Regular attendances of students, announcements are conveyed through this service.
- **Online feedback:** Online feedbacks from the students are collected twice in a semester. The Feedback given to the teachers will be considered during their appraisal. Program Access committee monitors, analyzes and take necessary actions on the feedback at regular Intervals in their individual departments.

**Online Complaints:** Service request facility has been provided to all faculty members, to post their complaints directly to the maintenance committee. Necessary response action will be taken by the maintenance committee.

**Suggestion box:** Suggestion box is placed at the admin block. All the students and faculty members use the suggestion box to post their suggestions.

These policies are submitted to the Management committee for up gradation and changes if any require periodically and that being carried out by the various departments for upliftment of RIT.

## Criterion 5 - Student Support and Progression

### 5.1 Student Support

#### 5.1.1 Average percentage of students benefited by scholarships and freeships provided by the Government during last five years

Response: 43.1

##### 5.1.1.1 Number of students benefited by scholarships and freeships provided by the Government year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
695	818	925	884	873

#### File Description

#### Document

upload self attested letter with the list of students sanctioned scholarship

[View Document](#)

Institutional data in prescribed format

[View Document](#)

#### 5.1.2 Average percentage of students benefitted by scholarships, freeships etc. provided by the institution / non- government agencies during the last five years

Response: 0

##### 5.1.2.1 Total number of students benefited by scholarships, freeships, etc provided by the institution / non- government agencies year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
0	0	0	0	0

#### File Description

#### Document

Upload any additional information

[View Document](#)

Institutional data in prescribed format

[View Document](#)

#### 5.1.3 Capacity building and skills enhancement initiatives taken by the institution include the following

##### 1. Soft skills

2. Language and communication skills
3. Life skills (Yoga, physical fitness, health and hygiene)
4. ICT/computing skills

**Response:** A. All of the above

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

#### 5.1.4 Average percentage of students benefitted by guidance for competitive examinations and career counselling offered by the Institution during the last five years

**Response:** 0

##### 5.1.4.1 Number of students benefitted by guidance for competitive examinations and career counselling offered by the institution year wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
0	0	0	0	0

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

#### 5.1.5 The Institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases

1. Implementation of guidelines of statutory/regulatory bodies
2. Organisation wide awareness and undertakings on policies with zero tolerance
3. Mechanisms for submission of online/offline students' grievances
4. Timely redressal of the grievances through appropriate committees

**Response:** A. All of the above

File Description	Document
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	<a href="#">View Document</a>



## 5.2 Student Progression

### 5.2.1 Average percentage of placement of outgoing students during the last five years

**Response:** 36.16

#### 5.2.1.1 Number of outgoing students placed year - wise during the last five years.

2019-20	2018-19	2017-18	2016-17	2015-16
145	276	157	165	145

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Institutional data in prescribed format	<a href="#">View Document</a>

### 5.2.2 Average percentage of students progressing to higher education during the last five years

**Response:** 26.87

#### 5.2.2.1 Number of outgoing student progressing to higher education.

Response: 140

File Description	Document
Upload supporting data for student/alumni	<a href="#">View Document</a>
Institutional data in prescribed format	<a href="#">View Document</a>

### 5.2.3 Average percentage of students qualifying in state/national/ international level examinations during the last five years (eg: JAM/CLAT/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations)

**Response:** 78.67

#### 5.2.3.1 Number of students qualifying in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations) year wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
15	11	8	3	8

**5.2.3.2 Number of students appearing in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT,GRE/ TOFEL/ Civil Services/ State government examinations) year-wise during last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
15	15	10	5	10

File Description	Document
Upload supporting data for the same	<a href="#">View Document</a>
Institutional data in prescribed format	<a href="#">View Document</a>

### 5.3 Student Participation and Activities

**5.3.1 Number of awards/medals won by students for outstanding performance in sports/cultural activities at inter-university/state/national / international level (award for a team event should be counted as one) during the last five years.**

**Response:** 12

**5.3.1.1 Number of awards/medals for outstanding performance in sports/cultural activities at university/state/national / international level (award for a team event should be counted as one) year-wise during the last five years.**

2019-20	2018-19	2017-18	2016-17	2015-16
0	01	04	03	04

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>
e-copies of award letters and certificates	<a href="#">View Document</a>

**5.3.2 Institution facilitates students' representation and engagement in various administrative, co-curricular and extracurricular activities (student council/ students representation on various bodies as per established processes and norms )**

**Response:**

The Institute creates a platform for the active participation of the students in the various academic and administrative bodies. It empowers the students to gain leadership qualities, understanding rules &

regulations, and developing execution skills. The institute has an active Student Clubs, Professional Students Chapters, Student Membership. They are providing support to college-related academic/administrative work with the help of other students. Students Clubs are encouraging students to participate in co-curricular and extra-curricular activities in inter-college, inter-university, and National level competitions.

### 1. Presence of Student Clubs

1. STEAM Club - Science, Technology, Engineering, Arts, Math: To develop and deliver a fun-based educational approach to learning that utilizes Science, Technology, Engineering, Art and Mathematics.
2. Techsparks Club: To build the best learning experience for the aspiring students inside and out, investing more time on strategies that can mold and enhance thinking skills, deliver programs that build connections for entire community and learn professional technology on the go.
3. Maths Club : To develop analytical, numeric and logical ability needed for all Science and engineering related fields.
4. Language Club: To build self-efficacy and confidence in the students. To help them overcome their inhibitions and stage fright by involving them in literary activities.
5. Yuva Club: Young Indians, a movement to converge, lead and influence student community playing a proactive role towards nation development
6. Rotaract Club: To be a club of Excellence both in professional and social services in the International Rotaract and to produce competent leaders and disciplined Engineers.
7. Youth Red Cross(YRC): To inculcate national integration in the Youth of our country and an awareness on the care of their own health and that of others.
8. National Service Scheme (NSS): To provide hands on experience to young students in delivering community service. The motto of NSS is "NOT ME BUT YOU". It underlines that the welfare of an individual is ultimately dependent on the welfare of the society as a whole.
9. Photography Club: To provide a supportive environment for the interested photography students in order to share their creativity, knowledge and passion for photography.
10. Cultural Club: To promote a vibrant, memorable and rich campus experience for the students through various arts and cultural activities.
11. Women Empowerment Club: To promote general well-being of female students, teaching and non-teaching women staff of the College and to provide and maintain a dignified, congenial working environment.

### 2. Representation on the academic committees:

**Class Representatives:** Every class has one class representative and one deputy class representative.

**Student Chapters:** Student Chapters are established for professional bodies such as IEEE,SAE,IE,IETE,CSI.They conduct activities in alignment with respective professional bodies.

### 3. Representation on the administrative committees:

Apart from all the above, Students are actively involved in the administrative as well as decision making committees like IQAC,Anti Ragging, Grievance Redressal and Class Committee meeting.

**5.3.3 Average number of sports and cultural events/competitions in which students of the Institution participated during last five years (organised by the institution/other institutions)****Response:** 12**5.3.3.1 Number of sports and cultural events/competitions in which students of the Institution participated year-wise during last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
03	15	12	15	15

File Description	Document
Report of the event	<a href="#">View Document</a>
Institutional data in prescribed format	<a href="#">View Document</a>

**5.4 Alumni Engagement****5.4.1 There is a registered Alumni Association that contributes significantly to the development of the institution through financial and/or other support services****Response:**

The RIT Alumni Association (RITAA) aims to link the alumni to the institution, develop synergistic plans to support the institution and achieve its vision, and to enable the institute to add value to all its stakeholders. The Institute established alumni cell in 2012 to maintain a good linkage between institute and alumni. The main objective is to enroll all alumni as members of the association and facilitating active participation of the alumnae in appropriate activities, events, and initiatives of the Institute. The alumni association helps in building a network of the alumni and helps in being in touch with the corporate world. Every year Alumni meet will be hosted by the Alumni association and supported by the Management where the alumni from different branches are invited to share their views and suggestions on the scope of their course and also to create awareness about the professional world. This paves an opportunity for the alumni to meet other alumni and cherish their past experiences and moments. The Alumni Association provides an avenue for sharing their intellectual, career and professional experience not only with the teachers but also with the present students.

**The Following are the activities carried out with the help of Alumni.**

**Curriculum Enrichment:** Alumni are involved for curricular gap identification and development of value added course module.

**Interactive Sessions:** The alumni association helps in holding interactive sessions to motivate current students about the employability and educational opportunities abroad. They share their opinions in social networks, blogs and forums.

**Industry connect:** Alumni helps in establishing MoUs with industries. The alumni those who are entrepreneurs arranges industrial visits to the students and provide inputs on how to start a new venture to turning them in to job providers. The Alumni extend their support for student internship.

**Research and consultancy:** To encourage the students of the college & members of the Association for research & consultancy works in various fields like Engineering, Computers, Industrialization, etc. Alumni helps the departments by directing the entrepreneurs to carry out consultancy works in various sectors of the engineering stream.

**Mentorship:** Alumni can play an active role in voluntary programs like mentoring students in their areas of expertise. To utilize the rich experiences of old students of the college for the benefit. To assist the students in securing suitable jobs.

**Placements/ References:** The alumni network of a college is one of the biggest sources of placement opportunities to the students. Alumni can help students in referring to companies and get placed at their respective organizations. The Alumni conduct mock personal interviews and job oriented training.

**Generosity:** The association also plays a significant role in contributing scholarships to deserving students. Another activity of the Alumni is they donate trees for making the institute environment green. **Major visible additional activity of the alumni is by providing donations to the college.**

**Administration:** Alumni are members in IQAC and provides inputs for imparting quality system adaptive to recent trends and requirements of industry.

#### 5.4.2 Alumni contribution during the last five years (INR in lakhs)

**Response:** E. <1 Lakhs

## Criterion 6 - Governance, Leadership and Management

### 6.1 Institutional Vision and Leadership

#### 6.1.1 The governance of the institution is reflective of and in tune with the vision and mission of the institution

**Response:**

##### (a) Vision Statement

- To set a benchmark for the education providers in the field of Engineering and Technology.
- To provide quality technical education that fosters the spirit of learning and research.
- To spawn creative, globally competent, highly employable and disciplined professionals through an innovative synergistic model of education that promotes academic excellence, scientific pursuits and professionalism.

##### (b) Mission Statement

- To impart education that caters to the growing challenges of the Industry and social needs of our nation.
- To set and constantly upgrade the standards of teaching and learning in the field of Engineering and Technology.
- To build a good rapport between the Academia and Industry.
- To promote and encourage the spirit of research in Engineering and Technology.
- To empower the youth not only technically but also to serve the society selflessly.

##### (c) Nature of Governance

The Governing Council (CGC) is an integral part which steers the institution towards academic excellence with a holistic approach. The governance of the Institution is reflective of an effective leadership in tune with the vision and mission statements. The established policies in the Institute ensure the integrity and effectiveness of the governance and administration. The Institute believes in shared leadership and participative decision-making approach. This reflects the decentralization of its operations and delegation of the necessary authorities and responsibilities. Such delegations follow a systematised organisational structure with clearly laid down job responsibilities. It monitors the performance of the institute and supports in decision making process such as

- Suggest dynamic plans based on the previous year's data.
- Identify key indicators for improving overall performance
- Mechanism for up-skilling of faculty members in line with recent trends.
- Review of placements activities and action plans to improve employability of students.

##### (d) Perspective Plans:

A 360 degree perspective plan is developed by a IQAC which considers important factors i.e. structure, mechanisms and stake holders within the system and their capacity to act, their creativity, the collaboration between them, their confidence, and the coherence of the action with other initiatives. The objective is to

ensure the quality and imbibe the culture of excellence and focus on the time-bound goals set for academic, administrative, research and development activities. The entire process is based on participative approach wherein the faculty members, and other stakeholders are involved in the development of plans and its efficient execution. The summary is as follows

Sr. No	Strategic Plan
1	Enhance engagement with Society
2	Diverse Student learning environment
3	Enhance engagement with Industry
4	Improve internal support systems
5	Enhance alumni engagement
6	Develop a cleaner and greener campus
7	Enhance Research Culture
8	Academic Autonomy and Industry Oriented Curriculum

## **PARTICIPATION OF THE TEACHERS IN THE DECISION MAKING BODIES**

Senior faculty are appointed as members of Institute decision making bodies like

- College Governing council,
- IQAC,
- Grievance Redressal cell,
- Women Empowerment cell,
- Internal Compliance Committee,
- Anti Ragging Committee,
- Committee for SC/ST,
- DAB/PAC.

### **6.1.2 The effective leadership is visible in various institutional practices such as decentralization and participative management**

#### **Response:**

RIT encourages participative management by involving faculty members in taking decisions. So, various verticals have been formulated for effective functioning of institute. Each verticals have independent heads taking decisions in line with institute policies and regulatory requirements in consultation with Principal/Management. The committees are as follows.

- College Governing council,
- Grievance Redressal cell,
- Internal Compliance Committee,
- Anti-Ragging Committee,
- IQAC,
- Exam cell,
- Counselling Cell,

- Programme Assessment Committee,
- Talent Enhancement Group,
- Performance Enhancement Group,
- Training and Placement Cell,
- Co-curricular and extra-curricular clubs,
- Innovative project cell,
- Budget Review Committee,
- R&D cell,
- Women Empowerment cell.

### **Case Study Showing Decentralization and Participative Management–UNNAT BHARAT ABHIYAAN**

Rajalakshmi Institute of Technology has got the approval from the Govt. of India for Unnat Bharat Abhiyaan. In this scheme the college adopted five nearby villages and doing the activities. Goals

- To build an understanding of the development agenda within institutes of Higher Education and an institutional capacity and training relevant to national needs, especially those of rural India.
- To re-emphasize the need for field work, stake-holder interactions and design for societal objectives as the basis of higher education.
- To stress on rigorous reporting and useful outputs as central to developing new professions.
- To provide rural India and regional agencies with access to the professional resources of the institutes of higher education, especially those that have acquired academic excellence in the field of science, engineering and technology, and management.
- To improve development outcomes as a consequence of this research. To develop new professions and new processes to sustain and absorb the outcomes of research.
- To foster a new dialogue within the larger community on science, society and the environment and to develop a sense of dignity and collective destiny.

#### **Adopted Villages**

<b>S.NO</b>	<b>Villages</b>
<b>1</b>	<b>Kuthambakkam, Chennai</b>
<b>2</b>	<b>Kilmanambedu. Chennai</b>
<b>3</b>	<b>Agaramel, Chennai</b>
<b>4</b>	<b>Meppur, Chennai</b>
<b>5</b>	<b>Nemam, Chennai</b>

All participating institutions will be facilitated and mentored in their activities by the respective mentoring institutions in their region. Sanctioned Allocated villages for RIT

#### **Milestones**

**Applied on 12th Jan 2019**

**Sanctioned on 02nd Feb 2019**



**Funding support**

1. Field visit- Rs 10000 per village
2. Customization of available technology - Rs 50000
3. Development of new technology - Rs 100000 UBA CELL

**Incharges**

1. Head of institution – Principal/RIT : [principal@ritchennai.edu.in](mailto:principal@ritchennai.edu.in)
2. UBA coordinator - Mr.G.Sai Krishnan/ MECH/AP : [saikrishna.g@ritchennai.edu.in](mailto:saikrishna.g@ritchennai.edu.in)
3. Head of UBA Coordination(institute level) - Mr.L.Franklin Telfer/ECE/AP : [franklintelfer.l@ritchennai.edu.in](mailto:franklintelfer.l@ritchennai.edu.in)

**Contribution to the villages**

S.No.	Date	Event
1	09-05-2019	Awareness Camp On “Protecting Environment” - NEMAM VILLAGE
2	07-06-2019	“AwarenessCamp On Cleanliness And Hygiene” - Meppur Village
3	15-06-2019	Awareness camp on “sanitary milking habits” - NEMAM VILLAGE
4	15-06-2019	Awareness camp on “School Education” - NEMAM VILLAGE
5	29-06-2019	“Awareness Camp on Water conservation & Importance of Blood Donation VILLAGE
6	10-07-2019	Awareness Camp on “sanitation & personal hygiene” - KUTHAMPAKKAM VILLAGE
7	02-10-2019	STUDENT SOLAR AMBASSADORS WORKSHOP 2019

**6.2 Strategy Development and Deployment****6.2.1 The institutional Strategic / Perspective plan is effectively deployed****Response:**

RIT is mainly focus to fosters the spirit of learning and research, so various perspective plans have been formulated and deployed for reinforcing the quality in education.

Sr. No	Strategic Plan	Sub Plans
1	Enhance engagement with Society	NSS, YRC, Various Clubs , Professional Societies Students Chapter
2	Diverse Student learning	ICT based TL, Value Added, Finishing School Courses, MOOC Ce

	environment		
3	Enhance engagement with Industry	Guest Lectures, Internship, MOUs, Industrial Projects, Industry Sp	
4	Improve internal support systems	MIS, LMS, effective Implementation,	
5	Enhance alumni engagement	Registered Alumni Association, Alumni Meet, Alumni Contribution	
6	Develop a cleaner and greener campus	Solar, LED, All type of Waste Management, Green Landscaping	
7	Enhance Research Culture	R&D Policy, Paper in UGC and other SCI, Scopus journals, In Advanced Centres for Research / Future tech Labs.	
8	Academic Autonomy and Industry Oriented Curriculum	NAAC A&A, NBA 50% Program more than 675 Score. Acade Curriculum with horizontal mobility, One module purely for re development/Applications. MOOC courses as credit based cou Industry/Society/Environment.	

Among various plans, 'Problem Box' has been explained as the case study.

### **One Activity Successfully Implemented Based On the Strategic Plan - Case Study – Problem Box - Industry Institute Interaction:**

#### **(a) Strategic Plan:**

We understand that we have to make the students industry ready engineers. Problem Box is one of our initiatives to enhance the skills set of our students and staff with respect to the industrial requirement. The Institute initiated the idea called problem box through which we can create a strong relationship between various companies and institute and make the people industry ready. This has shown promising results in both quality and quantity of participation of students and staff from all departments.

**(b) Objective:** To improve skill set and to produce industry ready engineers through Problem Box.

**(c) Problem Box:** A platform is created for easy communication between companies and industries. A team of faculties members and students from various department are formed they are made to enrolled in the platform along with the companies. The companies post their problems which will be taken up by the staff and solved.

#### **(d) Deployment:**

The students/faculty members take up this at any time they want either as a project for academic purpose or else based on their interest.

#### **(e) Outcome:**

- It enables them to improve the problem solving skills of the students.
- It helps the students to get idea about how to prepare for placements and ways to equip themselves to enable them to be employable.
- Practical aspects of the subjects studied are well illustrated by this regular practice of coding.
- It also helps in enhancing the programming skills of the non circuit department staffs, thereby they

became mentors for their respective student community.

- By sharing the score with the employers the students get to exhibit their skills to employers which help them to get job opportunities.

### **6.2.2 The functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment and service rules, procedures, etc.**

**Response:**

#### **ADMINISTRATIVE SETUP**

Administrative setup is having Administrative officer, Accounts officer, HR Manager, coordinators of various bodies and supporting department incharges.

##### **Administrative Officer:**

- Incharge for all administrative related activities.
- Submission of reports for AICTE/DOPE/Anna university.

##### **Accounts Officer:**

- Accounts Officer is to maintain the institutional accounts,
- Fees collection, payments, maintains vouchers, records, Scholarship
- Revenue, capital budgeting and monitoring
- Regular auditing and tax details

##### **Human Resource Officer:**

- Teaching and non teaching attendance monitoring
- Recruitment, Salary calculations, CL, Vacation and OD maintenance
- Performance Appraisal

### **(c) FUNCTIONS OF VARIOUS BODIES**

#### **IQAC:**

- Planning of academic activities,
- Monitors the academic activities,
- Assessment audit and analysis
- Implementing and analysis of activities,
- Ensuring quality in all the institutional process, etc.
- **Outcome : Ensuring the quality in Institutional Activities**

#### **Examination Cell:**

- Conducting internal assessment exams and university exams,

- Analyzing Student's performance,
- Measures suggested to enhance students performance
- **Outcome: Ensuring the quality in assessment and enhancing the Anna University result**

#### **Grievances Redressal Committee**

- Monitors the upkeep and resolves grievances of teaching, non-teaching and students.
- **Outcome: Periodically satisfy the grievances in all the levels.**

#### **Anti-ragging Cell:**

- It eliminates ragging inside the campus.
- It maintains discipline inside the campus.
- **Outcome: Ensuring ragging free campus.**

#### **Technical Clubs**

- Various technical clubs are Tech Spark Club, Language Club and Maths Club which are focusing on enhancing thinking skills, delivering programs that build connections for the entire community and learn professional technology.
- **Outcome: Updation with the latest technologies and bridging industrial gaps**

#### **Community Service Clubs**

- Various community service clubs are NSS, YRC, Rotaract and Yuva clubs which are giving opportunity for young student group to showcase their talents and assist them in their personal development.
- **Outcome: Enhancing the social consciousness among the students.**

#### **Research lab**

- IoT centre is established to impart working knowledge in Internet of Things to all students to train them to become technocrats, as well as entrepreneurs in IoT technology.
- Centre for Advanced manufacturing centre is mainly focus on learning 3D printing technologies.
- Data science center is focus on the machine learning, AI
- **Outcome: Exploring the new ideas to the society.**

#### **WOMEN EMPOWERMENT CELL**

- Women Empowerment Cell is established with the motto of "Helping women to discover their wings".
- **Outcome: Empowering women.**

#### **ALUMNI CELL**

- The Alumni cell has been formed to strengthen the bridge between RIT alumni and the institute, which includes reinforcing the active network of RIT alumni across countries.

## SERVICE RULES

- The institution strictly follows the service rules according to the AICTE and Anna University norms.
- Teaching and non-teaching faculty has the benefits of PF, Casual Leaves, Medical Leaves, Winter and Summer Vacations,
- Facilitates Salary Advances, Maternity leaves, etc.
- Recruitment has been done in line with the norms of the Anna University,
- Management Representative, Principal, Dean, HOD and Subject experts decides the quality of the faculty member by his/her performance in the interview according to the parameters that they are looking for.

File Description	Document
Upload any additional information	<a href="#">View Document</a>

### 6.2.3 Implementation of e-governance in areas of operation

1. Administration
2. Finance and Accounts
3. Student Admission and Support
4. Examination

**Response:** B. 3 of the above

File Description	Document
Screen shots of user interfaces	<a href="#">View Document</a>
Institutional data in prescribed format(Data template)	<a href="#">View Document</a>

## 6.3 Faculty Empowerment Strategies

### 6.3.1 The institution has effective welfare measures for teaching and non-teaching staff

**Response:**

#### Effective Welfare Measures for Teaching and Non-Teaching Staff

The teaching and non-teaching staff plays a vital role in the growth of the institute and therefore, the Institute is recognizing their productiveness and acknowledges their needs and requirements regularly. As a result, the institution is implementing various effective welfare schemes. These welfare measures enrich the physical and mental health of the employees and thus promote a dynamic and encouraging work atmosphere. This stimulates the employee productivity and commitment towards the institute. The following list shows the various welfare structures:

### **Financial Benefits**

- Every year, two departments are selected as a winner and runner based on the performance of faculty member and students in academics, placements and other activities and encouraged with cash prize of Rs.1000 per faculty from best department and Rs.750 for each faculty from runner up department.
- Post appraisal incentives provided for best performing staffs.
- Best Non teaching staff and driver awards are given with cash prize.
- PhD allowance of Rs.5000 is given to the Doctoral Faculty members.
- A Gift voucher worth of Rs.1000/- is given to all Teaching and Nonteaching faculties every year during AyudhaPooja celebration.
- Marriage gift for staff members.
- Providing financial support to attend FDP, workshop, training programs and National & International Conferences.
- Providing Sabbatical leave and financial support for the faculty members interacting with industries.
- Two sets of free Uniform are provided for Non-Teaching Staff.
- Maternity leave for the woman Teaching & Non-teaching Staff members as per norms.
- Special leave for religious festivals.
- Celebrations of the festivals in the campus.
- Monthly one day Casual Leave and two one hour permission will be allowed to avail.
- Yearly 37 days of Vacation leave have been given to faculty members.
- For non teaching faculty, Yearly 7 days of Vacation leave have been given.
- During college day, awards are provided to the faculty members provided with excellent results.

### **Non Financial Benefits**

- Free Transport facilities to and from their home to Institute.
- Subsidized canteen facility for breakfast - Teaching and Non teaching members
- Free breakfast for supporting staffs
- Free Lunch to all the staffs
- Car facilities and allowance for senior staff members.
- On any medical need, medical room available in campus.
- Free accommodation in hostel for out station employees.
- ATM inside the campus.
- Free wifi inside the campus.
- Providing On duty for attending FDP, workshop, training programs and National & International Conferences.
- All non-doctoral faculties are encouraged to get enrolled for Ph.D. program in various Universities.
- Providing professional body membership fees.

**6.3.2 Average percentage of teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the last five years.****Response:** 38.91**6.3.2.1 Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies year wise during the last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
47	45	61	75	49

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Institutional data in prescribed format(Data template)	<a href="#">View Document</a>

**6.3.3 Average number of professional development /administrative training programs organized by the institution for teaching and non teaching staff during the last five years****Response:** 7.6**6.3.3.1 Total number of professional development /administrative training Programmes organized by the institution for teaching and non teaching staff year-wise during the last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
11	8	6	6	7

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Institutional data in prescribed format(Data template)	<a href="#">View Document</a>

**6.3.4 Average percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP)during the last five years (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course ).****Response:** 46.51**6.3.4.1 Total number of teachers attending professional development Programmes viz., Orientation /**

**Induction Programme, Refresher Course, Short Term Course year-wise during the last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
65	78	65	56	62

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Institutional data in prescribed format(Data template)	<a href="#">View Document</a>

**6.3.5 Institutions Performance Appraisal System for teaching and non-teaching staff****Response:**

Performance Appraisal is a process which is used to evaluate the employees and germinate their competence, improve their performance, and assign rewards. The institute follows an Appraisal system in order to evaluate the performance of teaching as well as non-teaching faculty. The Appraisal system consists of three different stages.

The first stage is Self-Appraisal for both teaching and non-teaching faculties based on academic activities. KPI for teaching faculty are as follows,

- University result pass percentage,
- Final year project guidance,
- Innovative technology used for course delivery,
- Online NPTEL course,
- Initiatory and participation in various activities like conferences, seminar, workshop and FDP,
- Progress made in Ph.D.,
- Post PhD progress,
- Papers presented in reputed conference and published in indexed journals,
- Number of patents applied and granted,
- Books or chapters published,
- Mentoring students to clear blockages or getting university rank,
- Punctuality to college,
- Usage of library facilities,
- Contribution to the department/Institute,
- Number of proposal and consultancy submitted and grants received
- Number of academic guardian duties attended during the academic year.
- Hands on training practices given to the students, teaching aid developed in the laboratory,

All the factors having 1000 points and based on the points scored by the faculty, incentives and allowances will be provided. For the score above 800, awards will be provided. For the score of 700 to 800, appreciations will be given. For the score between 500 to 600, counseling will be provided by the principal



and suitable induction programme will be arranged. For the score less than 500, suitable action will be taken. For Non-teaching staff members the performance is evaluated based on the component such as

- Acquiring additional qualification,
- Attending certification programs,
- Attending Workshops,
- Skill upgradation,
- Work discipline,
- Participation in training program conducted in industries and
- Active participation and team work.

In the second stage, Principal and HOD's will make entry upon the on-line feedback marks awarded by the overall students based on punctuality, preparation, management of discipline and control, approach-ability, subject knowledge and presentation skills. Principal reviews and assesses the overall performance of the faculty members based on academic performance, quality of para-academic work and ability to work as a team.

At the third stage, Principal and HOD along with management will grade the faculty members based on the performance in that academic year and also reviews all the process involved in the performance appraisal system by having the one to one interaction with the staff and decisions will be taken accordingly.

## 6.4 Financial Management and Resource Mobilization

### 6.4.1 Institution conducts internal and external financial audits regularly

#### Response:

#### Procedure for Internal Audit

Internal Audit is being conducted on a continuous basis by the Finance Team members allocated for audit and reports are submitted to the management on a monthly basis. The procedure as follows:

1. Expenses
  - a. Vouchers and supporting bills and invoices are verified for its correctness
  - b. Approvals and authorization are verified with the Instructions
  - c. Accountings of expenses according to the nature of the Expenses are verified for correct reporting.
  - d. Actual expenses is compared with the Budget approved earlier to evaluate the variances and corresponding Approvals
  - e. Statutory deductions such as TDS are verified
2. All the fees pay-in –slips are vouched with the Bank statements

3. Surprise cash verifications are conducted to verify the petty cash transactions
4. BRS Statements are verified on a weekly basis
5. Statements of Sundry Creditors ageing are verified
6. Payroll statements along with the attendance registers are verified on monthly basis
7. Fees receivable statements are verified with the books of account.

#### **Procedure for External Audit**

External Audit is regularly conducted on an annual basis by the statutory auditors of the Trust. The Procedure as follows:

1. All the Expenses Vouchers and their supporting documents are verified to assess the authenticity and correctness.
2. BRS Statements of complete financial year is verified to ensure the outstanding payables and receivables
3. Original Fixed Assets purchase invoices are verified and physical verification of assets also conducted.
4. Salary statements and payments are verified with the payroll reports provided by the HR Department
5. Analytical procedures are followed to assess the overall correctness of the books of accounts
6. Financial statements are audited accordingly.

#### **6.4.2 Funds / Grants received from non-government bodies, individuals, philanthropers during the last five years (not covered in Criterion III)**

**Response:** 0

##### **6.4.2.1 Total Grants received from non-government bodies, individuals, Philanthropers year-wise during the last five years (INR in Lakhs)**

2019-20	2018-19	2017-18	2016-17	2015-16
0	0	0	0	0

File Description	Document
Institutional data in prescribed format(Data template)	<a href="#">View Document</a>

### 6.4.3 Institutional strategies for mobilisation of funds and the optimal utilisation of resources

#### Response:

RIT management is having a plan for proper utilisation of financial resources at the beginning of every financial year.

#### Finance team:

- The management representative, principal, finance manager and budget committee monitors the utilization of resources.

#### Funds for the Institute :

- Funds have been received from the student fees, Anna University, government and Non-Government agencies.
- Sabari Foundation Trust also supports the institute to develop the infra-structure and to purchase the equipment.
- Interest on corpus fund

#### Budget Planning :

- Every year heads of the department have to submit the budget requirements to the management through proper channels.
- Budget committee analyzes the submitted documents and reports the optimal summary to the management for approval.
- The management approves the funds based on the need.
- The allocated funds are utilized to purchase equipment, chemicals, consumables, non-consumables, machineries, etc.
- Also some of the funds are allotted to organize seminars, workshops and conferences etc.
- RIT management also allots the funds for the faculty development and welfare. (Rs. 5000 per faculty per year for enhancing their skills)

#### Utilization :

- The administration and finance committee review the use of resources, placing of the quotations and the purchase orders.
- It monitors and audits the budgets, utilization, expenses, accounts etc.
- They make recommendations for better handling of resources and effective mobilization of available funds.
- It ensures that the fund utilization is within the limit or allotted margin.
- Based on the recommendation from the principal and based on the need, funds also allotted beyond

the budgeted, because the management primarily focused on the betterment of students, teaching and non – teaching staff.

- Certain amount of fund allocated for the salaries.

### **Optimal utilization**

- The management categorize certain percentage of income for utilizing under different categories, such as purchase of books, equipment, sports, salary, incentives and up-gradation of staff, miscellaneous expenses and for certain emergency situations, various programs like FDP, seminars, Guest lectures, etc., student training programs and the placement related activities, on water, electricity, Wi-Fi, etc., overhead expense, garden and clean campus, developing society by providing computers to schools, study material to schools, etc., maintenance activities..

### **Secondary Resources for Funds**

- Additional funding have been sanctioned from various research agencies such as IEI, AICTE, DRDO, ICMR etc., for approved project proposals submitted by various departments.
- Also funds have been received from the industries for doing the consultancy services.
- These funding enables the purchase of sophisticated equipment, upgrades the labs, establish new research facilities and carry out innovative projects.
- After the completion of the proposed project utilization certificates are prepared and submitted to the respective funding agencies.

### **Closing Remarks**

- The Finance team finally audited all the documents for the financial year and handed over the same to the management.
- The audits have been carried out by the external auditor.

## **6.5 Internal Quality Assurance System**

### **6.5.1 Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes**

#### **Response:**

To impart quality education to students and to maintain an effective teaching learning process, quality assurance cell has been formed.

#### **Quality Assurance Strategies**

- To establish a systematic process in academics and administration
- To impart quality education to students that fosters employability, research and development
- To satisfy the stakeholders by meeting their requirements
- To nurture the skills and talents of the budding engineers through training and development activities

- To produce engineers of high quality and ethics to the society to meet the industrial needs and standards

### **Quality Assurance Processes – Case study 1 - Establish systematic process in academics and administration**

- At the beginning of every year, an academic calendar has been prepared and circulated to all stake holders.
- Meeting with stake holders are mentioned and conducted as per the schedule.
- Class and course committee meetings have been scheduled and conducted. The grievances and the comments given in the meeting have been addressed by IQAC.
- College day and Sports day are conducted as per the calendar plan.
- Holidays and special working days also mentioned.
- Counselling schedule have also been scheduled and the comments given in the reports also addressed by IQAC.
- Online feedback have also been scheduled periodically and collected in time.
- Based on the feedback from students, faculty members have been directed properly to overcome the issues.
- Periodic reviews and audits are conducted by the IQAC.
- Orientation programmes have organized every year for the young and newly joined faculty members to adapt themselves to the systematic process of the institution.
- Internal assessment tests are periodically conducted as specified in the academic calendar.
- Question paper and the answer scripts are audited periodically.
- Course end survey is conducted at the end of every course, to know about the satisfaction level of teaching learning process in each subject.
- By the end of every month, all faculty meeting is organized by the Principal to ensure the smooth run of all activities in each department.

### **Case Study 2 - To impart quality research to faculty members that fosters research and development**

#### **Initiative:**

- Faculty members are encouraged to publish research papers in Scopus journals, Patents and consultancy work.

#### **Implementation:**

- Guest lectures and seminars are conducted by industrial experts to bridge the gap between academia and industry in each subject.
- Mentors are allotted to guide the faculty members for the research support.

#### **Impact Analysis:**

- 338 research publication in Scopus index in the academic year in 2019-20.
- Faculty members are encouraged to publish books and the book chapters.
- Faculty are patenting the novel ideas.

- Faculty members are carried out the consultancy projects.

**6.5.2 The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms and recorded the incremental improvement in various activities ( For first cycle - Incremental improvements made for the preceding five years with regard to quality For second and subsequent cycles - Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives )**

**Response:**

The teaching-learning process that is followed by the college and the improvements that have come about through effective implementation of the IQAC process is described below:

**Case Study 1: Performance Enhancement classes (PEC):**

- To help the students in clearing their arrears, special coaching classes have been conducted on Mondays (Weekly-off days) for selected subjects throughout the semester.
- Based on the arrears and nature of the subjects, PEC assigned faculties based on the expertise.
- A day comprises 8 periods with break. Problem based subjects (mathematics) are allocated with first 2 contact hours, remaining subjects (core) are allocated 3 contact hours. Additional teacher are also allocated for tutorial hours for analytical subjects.
- Apart from the arrear subjects, for regular subjects, based on the internal assessments marks, special coaching classes have conducted beyond regular working hours.
- As the outcome of the PEC classes, the results have been improved and the students are clearing their arrear papers.

**Case Study 2: Faculty preparation plan (FPP):**

- Before start of the semester, every faculty have to prepare notes for the subject.
- In this way, faculty is able to completely revise that subject before beginning of the semester and will be able to impart teaching effectively.
- FPP would comprise detailed notes for 5 units, short and long questions & answers for each unit, list of previous year question papers, Content beyond syllabus, etc.
- Teachers should mention the type of teaching methodology like green-boards, LCD projectors depending on the topics being discussed.
- Expert lectures have to planned in a semester in each department to cover difficult topics or topics beyond the syllabus for knowing the latest developments in the subject.
- Video lectures by eminent experts are sometimes played in the classes for the benefit of the students and mentioned in the lesson plan.
- Professors prepare online course material and send the link to the students for refreshing the topics and will be verified by the IQAC.
- Apart from the theory subjects, FPP have also been prepared for the laboratory classes.
- Since real learning comes with hands-on working, theory subjects are supplemented heavily with

laboratory classes.

- Both the faculty and instructors refresh themselves on the experiments by actually performing them, before the start of the semester and should be recorded in the master lab record.
- Lab manual have to be prepared and got approval from IQAC.
- Lesson plan will be very useful to the faculty to identify which books to use, what learning tools to be adopted and how much time should be spent for each topic in the syllabus. Faculty members have to get approval in the lesson plan from the IQAC.

### 6.5.3 Quality assurance initiatives of the institution include:

1. Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analysed and used for improvements
2. Collaborative quality initiatives with other institution(s)
3. Participation in NIRF
4. any other quality audit recognized by state, national or international agencies (ISO Certification, NBA)

**Response:** A. All of the above

File Description	Document
Upload e-copies of the accreditations and certifications	<a href="#">View Document</a>
Institutional data in prescribed format(Data template)	<a href="#">View Document</a>

## Criterion 7 - Institutional Values and Best Practices

### 7.1 Institutional Values and Social Responsibilities

#### 7.1.1 Measures initiated by the Institution for the promotion of gender equity during the last five years.

##### Response:

“Freedom cannot be achieved unless women have been emancipated from all kinds of oppression.” — Nelson Mandela.

· To promote gender equity, our institution established Women Empowerment Cell with the motto of “*Helping women discover their wings*“. The cell aims to empower girl students and faculty to enhance their understanding of issues related to women and to make the college campus a safe place for girls and women and to address the practical issues related to the welfare and equal opportunities for Women Faculty and Students. All the students were encouraged to participate in various Technical Workshops, Seminars and Smart India Hackathon without any gender discrimination.

- Our Chairperson, the driving force behind all the success heads the institution by her innovative approach in learning and knowledge acquisition. The ratio of 50:50 has been reflected among Staff and students. Women faculty are heading the dept and member in the all statutory as well as decion making bodies.

· With a view to take up women’s issues and problems, the cell aims at creating awareness of their rights and duties. It also provides a platform for women to share their experiences and views regarding their status in the society. Aiming at intellectual and social upliftment of the female students, the cell stands for facilitating women’s empowerment through Guest Lectures, Seminars, Awareness Programs and other welfare activities.

· Women’s Sports day conducted every year in connection with Women’s day.

##### 1. Safety and Security:

· Workshops were conducted on “Women self-defense addressing the need for knowing self-defense mechanism to protect themselves“. The woman communities were given exposure on types of attack such as rear attack, ground reversal, boundary setting. The rescue mechanism and strategies were taught for the students by demonstrations. Also the benefits of learning self-defense for protecting themselves and their family were highlighted.

· Campaigns were conducted on Women health and hygiene. It emphasizes the need for health and hygiene practices to be followed. Awareness about menstrual hygiene and diseases caused by the lack of it was stressed.

· Seminars were organized for the girl students and women faculty members to generate awareness about legal rights for women and girls.

· CCTV cameras are installed in class rooms and throughout the college premises to ensure women



safety and security in all aspects.

- Active ICC and women grievance redressal mechanisms.

## 2. Counseling for Girls by Female faculties:

A separate woman in-house Counselor will be available in the college to help the students to resolve their issues and help them to live in a safe and secure environment. The Female faculties are given salary during their maternity period. It is made as a mandatory practice to have a general and personal counseling for girl students every semester. Schedules have been planned and allotted in the beginning of every semester to meet the students in person and address their issues.

## 3.Common Room

Girl's common rooms are set up to provide first aid and to facilitate the sick students to take rest

### 7.1.2 The Institution has facilities for alternate sources of energy and energy conservation measures

- 1.Solar energy
- 2.Biogas plant
- 3.Wheeling to the Grid
- 4.Sensor-based energy conservation
- 5.Use of LED bulbs/ power efficient equipment

**Response:** B. 3 of the above

File Description	Document
Any other relevant information	<a href="#">View Document</a>

### 7.1.3 Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 500 words)

- Solid waste management
- Liquid waste management
- Biomedical waste management
- E-waste management
- Waste recycling system
- Hazardous chemicals and radioactive waste management

**Response:**

#### **SOLID WASTE MANAGEMENT**

- Various solid wastes such as cups, paper etc., are segregated in the college. They are separated as bio-degradable and plastic waste. Various pits such as vermin composting pit, Solid waste pits are formed.
- All the used papers have been recycled by an external agency and re-utilized.
- All non-essential documents are sent through soft copy. Single sided papers is used for printing

### LIQUID WASTE MANAGEMENT

- Smart toilets installed in the campus also help in water conservation. A water monitoring device has been developed in the campus, to save the water consumption for green plants.
- Using IoT-enabled device for monitoring of water consumption at the RIT Green House – This device has led to a saving of 25% of the water usage, which has enabled a corresponding increase in the campus greenery due to the availability of the saved water and money.
- A STP (Sewage Treatment Plant) is installed in the campus. The recycled is reused for plants and trees.

### E-WASTE MANAGEMENT

- E-waste from labs is properly collected and is given to the licensed recycler, reused wherever possible, donated and sold if possible. Non-working Computers, Monitors, and Printers are discarded and scrapped on a systematic basis. Some parts useful for other systems are kept aside for future use. Students are also imparted awareness and education about E-Waste.

### WASTE RECYCLING SYSTEM

- The college has effective STP in which the water is recycled and used for gardening purpose. Toilets installed in the campus also help in water conservation.
- Awareness by the community service on the usage of toilet and safe sanitation has tremendously improved the standard of living of the nearby village.

#### 7.1.4 Water conservation facilities available in the Institution:

1. Rain water harvesting
2. Borewell /Open well recharge
3. Construction of tanks and bunds
4. Waste water recycling
5. Maintenance of water bodies and distribution system in the campus

**Response:** C. 2 of the above

File Description	Document
Any other relevant information	<a href="#">View Document</a>

#### 7.1.5 Green campus initiatives include:

1. Restricted entry of automobiles
2. Use of Bicycles/ Battery powered vehicles
3. Pedestrian Friendly pathways
4. Ban on use of Plastic
5. Landscaping with trees and plants

**Response:** Any 4 or All of the above

File Description	Document
Any other relevant documents	<a href="#">View Document</a>

**7.1.6 Quality audits on environment and energy regularly undertaken by the Institution and any awards received for such green campus initiatives:**

1. Green audit
2. Energy audit
3. Environment audit
4. Clean and green campus recognitions / awards
5. Beyond the campus environmental promotion activities

**Response:** C. 2 of the above

File Description	Document
Reports on environment and energy audits submitted by the auditing agency	<a href="#">View Document</a>

**7.1.7 The Institution has disabled-friendly, barrier free environment**

1. Built environment with ramps/lifts for easy access to classrooms.
2. Disabled-friendly washrooms
3. Signage including tactile path, lights, display boards and signposts
4. Assistive technology and facilities for persons with disabilities ( Divyangjan) accessible website, screen-reading software, mechanized equipment
5. Provision for enquiry and information : Human assistance, reader, scribe, soft copies of reading material, screen reading

**Response:** A. Any 4 or all of the above

File Description	Document
Policy documents and information brochures on the support to be provided	<a href="#">View Document</a>

**7.1.8 Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities (within 500 words).**

**Response:****Tolerance and Harmony towards Cultural & Regional factors**

Based on the lines quoted “There is no religion better than love, no color better than the color of happiness and no language better than the language of compassion.” the institute puts lot of efforts/initiatives in bringing an inclusive environment. The students and staff of this institute are from different cultural background and from different states. The staff and students belong to different communities like Hindus, Muslims, Christians etc. being their mother tongues different like Hindi, Telugu, Tamil, Malayalam etc. The institution believes that “Line of control should be a garden, a place of art and cultural festival.” and a very effective approach to maintain tolerance and harmony even though they belong to different communities and with different culture by organizing the events which bring the harmony and integrity among the students. The students actively participate in various extracurricular activities including Dance, Street Plays, Social Awareness programs, Orchestra, Fine Arts, Drama, Elocution, Quiz, , etc. Constitution day is celebrated sensitizing students about the Constitution of India and also creating awareness about practicing social harmony. Faculty members and students take pledge to preserve unity, integrity and security of the nation.

**Linguistic factors:**

Language club of RIT periodically organize debates, essay competitions to commemorate the festival days

**Communal Factors**

Students have formed various clubs at the campus levels which also support and propagate the idea of diverse cultures. The institutional efforts/initiatives in the regard are as follows:

- Diwali fest events have given opportunities to students from various state backgrounds to showcase their rich dance forms, culture and beliefs. These events have also seen fusion performances of all cultural dances and drama performances.
- The college celebrates religious festivals which includes Ganesha Festival, Ayudha Puja/Durga Puja etc. giving spiritual sense to the students/faculty of the Institute. Cultural activities are organized in annual social gathering for the student as well as faculty. Cultural day is celebrated where students wear clothes representing their culture.
- In the annual event, the college invites popular music singers to enthrall the students with rich cultural songs. Traditional dance provides enthusiasm and team spirit among students. The college organizes annual social gathering every year. It is a team event held under the Chairmanship of the Principal and is entirely organized by the cultural committee including students and faculties. It helps in enhancing the leadership, organizing qualities and inculcating a sense of responsibility besides sheer entertainment for the students. It includes a number of intra and inter-college competitions. Winners of the competitions are awarded certificates, trophies and cash prizes.

**Socio-economic & other diversities**

- Faculty members are appointed as Local Guardians, who are providing support to students in all aspects including guidance to apply for scholarship from Government (economic backward class, free scholarship for the schedule caste and schedule tribe and other backward classes) / Non-

Government organization. Nearly 75% of the students got employment and supporting their families. The institute strives for uplifting the students and their families socially and economically.

**7.1.9 Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens (within 500 words).**

**Response:**

The college takes pride in the fact that apart from preparing a sound academic foundation of the student community; the college constantly works upon to develop them as better citizens of the country. In this regard, apart from imparting professional, legal education, inculcates a feeling of oneness among the student community through various practices and programs. Various faculties have always been in the practice of organizing activities that not only initiate but also motivate the students to adopt various practices that promote the “Unity in Diversity” of our motherland. The college ensures that the students participate very enthusiastically in all such activities. Since the last five years, the college has strived forward with great effort to increase the level of awareness and appropriate practices amongst the students with regard to the following areas:

1. National Identities and Symbols: The College has always taken various direct and indirect steps which promote the awareness about various National Identities and Symbols. The Indian Tricolour flag stands tall at the main entrance of the college and in this way the college spreads the message of nation first policy. The college celebrates the Independence Day and Republic Day with great pomp and vigour. The college also organizes and celebrates the Constitution Day on an annual basis and thus contributes to the spreading of Constitutional values and ideals.
2. Engineers Day is celebrated annually on 15th September as a tribute to greatest Indian Engineer Sir. M Visvesvaraya every year. Essay competition is also conducted in the campus on this occasion to make the young minds to think the role of engineers in developing India.
3. Gandhi Jayanti is celebrated every year on 2nd October
4. The most loved President APJ Abdul Kalam’s birthday is celebrating as Students’ day on 15th October.
5. National Mathematics Day is celebrated in remembrance of Dr. Srinivasa Ramanujan on 22nd December.
6. Teacher’s day (5th Sept.) is marked in the fond memory of Dr. Sarwapalli Radhakrishnan every year in the college campus. Senior students of the institute conduct the classes and honour the teachers by offering flowers. Students understand the role of teachers in their career.
7. International Women’s Day-8th March: The day is marked to respect women in society. Women’s forum of the institute organizes the event every year.

2. Fundamental Duties and Rights of Indian Citizens: The College has organized various academic and co-curricular activities for the propagation of the Fundamental Duties and Rights of the Indian citizens like

a. Academic programs like Seminar, Conferences, Expert talks, etc which have enriched the awareness about this aspects.

b. Various activities like poster making competition, etc.

3. Constitutional Obligations: The students have participated in various activities. All these have been organized to promote the awareness about various constitutional and legal obligations. Further, apart from the above mentioned activities, the college has also organized student centric activities like Paper-Poster Making and Essay competition, which have always received huge participation from the students and promoted their awareness about various aspects of Indian citizenship.

**7.1.10 The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard.**

- 1. The Code of Conduct is displayed on the website**
- 2. There is a committee to monitor adherence to the Code of Conduct**
- 3. Institution organizes professional ethics programmes for students, teachers, administrators and other staff**
- 4. Annual awareness programmes on Code of Conduct are organized**

**Response:** A. All of the above

<b>File Description</b>	<b>Document</b>
Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programs etc., in support of the claims.	<a href="#">View Document</a>

**7.1.11 Institution celebrates / organizes national and international commemorative days, events and festivals (within 500 words).**

**Response:**

- Since its establishment, institution organizes National Festivals and Birth and Death Anniversaries of great Indian Personalities. National festivals play an important role in planting seed of Nationalism and Patriotism among people of India.
- The college celebrates these events with great enthusiasm to commemorate the ideology of nationalism and to pay tribute to our great National Leaders. The Faculty, Staff and Students all come together under one umbrella to celebrate these occasions and spread the message of Unity, Peace, Love and Happiness.
- Gandhi Jayanti is celebrated every year on 2nd October to understand the ideology of our great leader Mahatma Gandhi.
- The college celebrates International Yoga day on 21st of June every year. The yoga Instructor organizes the yoga camp and a short speech is conducted to make everyone aware on how Yoga embodies unity of mind and body; thought and action; restraint and fulfillment. The college celebrates International Yoga day on 21st of June every year. The yoga Instructor organizes the yoga camp and a short speech is conducted to make everyone aware on how Yoga embodies unity of mind and body; thought and action; restraint and fulfillment. Keeping its Indian values intact, the college imparts right kind of education based on moral values and ethics which makes our students responsible global citizens

- 26th January Republic Day- Republic Day is celebrated on January 26 to commemorate the adoption of constitution. On this day, various formal events including flag-hoisting and march-past are organized, which are followed by “constitution awareness program” in which students and staff members acquire information of their duties towards their nation and rights given to them by their constitution. By organizing such type of events institute does its share to promote patriotism and also to create awareness to next generation.
- 15th August Independence day- It is celebrated every year with patriotic fervour. The air is filled with patriotic feelings that emit from various songs aired on the campus radio. The programme consists of patriotic songs sung by students and speeches eulogizing the great sacrifices made by our freedom fighters.
- 15th September Engineers day (Birth Anniversary of Sir Visvesvaraya) - We celebrate this day on 15th September consistently as an exceptional tribute to the best Indian Engineer, Bharat Ratna Mokshagundam Visvesvaraya.
- National Science Day is celebrated to mark the discovery of the Raman effect. College regularly observes National Science Day by conducting Science Exhibitions, Seminars; Quiz competitions etc. associating to the theme of National Science Day of every year.
- National Mathematics Day is celebrated to honour Dr. Srinivasa Ramanujan for his contribution to Mathematics on 22nd December. The day is observed by conducting Seminars, talks by eminent personalities in the field of Mathematics and exhibitions.

## 7.2 Best Practices

### 7.2.1 Describe two best practices successfully implemented by the Institution as per NAAC format provided in the Manual.

**Response:**

#### **Best Practices -1**

1. **Title of the Practice: Skill development strategy to ensure employability**

2. **Objectives of the Practice:** The objective of this skill development approach is to make the students to ensure that education comprehensively covers all aspects of life in its total perfection. By undergoing this approach, students can keep balanced thoughts; can develop integrity and honesty, and the ability to cope with all possible situations in a better way with will power and confidence, without compromising on the basic human values identified as Truth, Righteousness, Peace, Love and Non-violence. The skill development approach is confined into exclusive employability Residential camp, Personality development programme, mandatory internship and Industrial visit. Students from our institution use to get involved in various training sessions conducted by experts from many industries to get adapted to industrial environment. During the residential camps, the students are being inculcated with three dimensional talents in various domains such as professional and ethical attitude, Team work and Good communication skills. The personality development programme aims to empower students to upgrade their abilities and to use their talents, interests and passions to influence their learning and better transform of their lives. The mandatory internship approach provides the students to gain valuable work experience, to be in the network with professionals in the same field and also to explore a career path. Industrial visits help the students to improve their theoretical knowledge as well as industrial knowledge. The ultimate goal of this

skill development strategy approach is to make the students professionally fit to grab the opportunities from core companies.

**3. The Context:** Since its inception during Placement period, the college has requested all its students to stay in the college hostel. This practice has been adopted, in the view of introduction of unique educational system. Clearly, the various components of education and its different objectives need twenty four hours of monitoring, guidance and interaction. This stands in contrast to the prevalent system in other institutions where the major concern is exclusively with secular education. The personality development programme has been frequently conducted in our institution by experts and the programme include Communication Skills Programs, Leadership Development Workshops, Soft Skills & Behavioral Programs, Team Building Workshops, and Technical Training Workshops. The internship and industrial visits provide the students to acquire knowledge about process/methods followed in the industries and practical insights of industry operations in their respective domains.

#### 4. The Practice

This practice has several aspects – the most important points are stated as follows:

1. All students with no exception have to stay in the college hostel. They have been monitored and guided by the enough number of faculties. Each faculty has assigned 10 students. One big room has been allotted for ten students and one room has been allotted for two faculties. The students have been continuously monitored and guided by the faculty mentors to enhance their progression towards placement. The hostel has necessary and basic facilities such as dining hall, medical care, maintenance, communications including telephone and postal services, stores, and so on.
2. The personality development programme has been conducted in the college seminar hall and mandatory for every year students. Trainers from various organizations gives training to the students which includes Communication, Time Management Strategies, Body Language & Etiquette, Goal Setting, Presentation Skills, Develop Confidence, How to handle criticism, Leadership Skills, Stress Management, Master Your Mind, Work Life Balance, and Decision Making Skills.
3. Students have been allowed to attend the internship program during vacation for a number of weeks to develop their interaction towards industry. After completion of the program, students need to submit the reports for evaluation.
4. Industrial visit has been arranged by the institution for all students every year to make them to explore the industrial activities

#### Evidence of Success

The skill development strategy which is outlined above has proven to be very effective. The clear sustainable advantages that are now quite visible are as follows:

- a) The student community enjoys the feel of fulfillment and a sense of belonging to the Institute. The overall ambience becomes just “ideal”.
- b) Students develop a variety of skills; on top of it a strong sense of self-confidence in handling tough situations and challenges gets boosted.
- e) In a very important and helpful way, this practice has served as a mechanism for student feedback on



courses, programmes, teaching quality and related matters. This leads to continuous improvement which leads to increase the success rate in placements. The success rate in placement has been increased considerably year by year. Excellent feedback reports have been received from the top recruiters.

6. **Problems Encountered and Resources Required:** There have been no major obstacles to this system over the past 2 years. However, relatively minor problems are promptly occurred too and get resolved. The communication system is quite efficient and the spirit of love and mutual concern get inculcated fairly and quickly. The interaction between the students and teachers is well and good. The practice will be adequately effective only if an overwhelming proportion of students stay in the hostel. Moreover, it is necessary that a considerable number of teachers also should stay in the hostel. Thus the basic resources required are advanced hostel facility and a committed number of teachers who are capable and liable to serve as role model for students. The academic class timings between personality development programme, internship programs and industrial visits should not be clashed.

## Best Practices -2

### 1. Title of the Practice: RIT Green initiatives

2. **Objectives of the Practice :** A Green Campus is an area where education and eco-friendly practices combine to promote sustainable pollution-free environment in the campus. The green campus concept provides an offer to the institution to take up the lead in recapitulate its environmental culture and incorporating new standards by creating sustainable solutions to environmental, economic and social demands of the humankind.

3. **The Context :** Green campus has been established by clearing away useless things and utilizing the prevalent sources of energies power generation, proper waste disposal handling and conducting effective recycling awareness programs. The college campus has been scaled-down into a form of an urban system. The green campus has main elements of a city, which includes roads, electricity, and transportation along with infrastructure. The campus has buildings and systems that use energy and discharge away the wasteful products. Due to this, a college campus can act like a test model in order to analyze the effects of green features and green systems that could be applied to future cities. National Social Service Scheme (NSS) volunteers of our institution are also going to propagate these initiatives amongst the adjacent villages to move towards Greener and eco-friendly environment.

4. **The Practice :** Since the college students will be the deciding authority of our society in near future, they have been highly educated to have social responsibilities and sufficient knowledge about Green India policies to effectively enact the Green initiatives in the campus. Students and faculties have been encouraged to use electric vehicles and also bicycles instead of automobiles. The institution has Vermicomposting unit to discharge and recycle waste products. The Green building in our campus has been constructed to be a benchmark for green initiative which highlight the Energy efficient, water efficient, On-site waste water treatment and reuse process. Students from our campus have been practiced to planting trees, save water and energy, and complete ban of plastics through many awareness programs. They have been trained to transform the energy wasteful campus to green campus in order to handle emergency issues of global warming and also to improve the well-being of the society.

## Evidence of Success

As a result of implementing green campus initiatives in our campus, Pleasant and Peaceful green environment has been maintained in our college campus. No air pollution can be felt inside our college

campus. Rain water has been collectively saved and used which in turn no water scarcity has been faced in our campus even in summer. The usage of LEDs in our college campus has sufficiently reduced the usage of energy and heat emissions.

### **Problems Encountered and Resources Required**

The timing between the academic classes and the green campus initiative training have been clashed sometimes. The more faculties from the campus after college hours should come forward to train the students to enact green initiatives. The special timing for this initiative has been planned to be allotted for all students weekly once in a time to make everyone get involved in this act.

### **Best Practices – 3**

#### **1. Title of the Practice: Awareness on social responsibility**

**2. Objectives of the Practice:** To inculcate the awareness on social responsibilities among the young adults which

Enhances their volunteerism, leadership, teamwork and philanthropy.

**3. The Context :** Each and every individual is essential and correspondingly accountable to certain roles and responsibilities when living in a cultured society. Social responsibility is an ethical philosophy in which persons are liable for satisfying their civic duty, and the activities of an individual must profit the entire society. The four modules of social responsibility are ethical, economic, legal and philanthropic. In this way, there must be a stability between economic evolution, the environment and the wealth of society.

Creating awareness on social responsibility includes the awareness, understanding and commendation of interactions among the people and natural environment. In this connection Rajalakshmi institute of technology – RIT is having the units like The National Service Scheme (NSS), youth red cross (YRC) and rotract units to inculcate the awareness on social responsibility.

**4. The Practice :** The N.S.S. unit of RIT offers an opportunity for the students to develop the abilities of management, ethical and social awareness in them. Students are directed to different societal areas like villages, schools, general hospitals, etc., to inculcate the social awareness among the various set of people and mitigate the difficulties of the persons as their level best.

In the YRC unit of RIT, any student from any stream can become YRC member. The foremost purpose of establishing the Youth Red Cross is: inculcating young fellows and others about the roles and responsibilities, significance of the Red Cross and stimulate them to contribute. An awareness on the care of the people and their own health. The objectives of RIT YRC unit are

- Advancement and protection of health and life
- Self-sacrificing services to the sick and suffering
- Elevation of national and international friendship
- Disaster relief to the sufferers
- Donate Blood & Save Life

The group activities for the students between 18 to 25 years of age are organized at initial stages. Youth volunteers take a substantial contribution to fulfill the desires of the most susceptible society people with in their resident populations through Youth Red Cross activities.

Rotaract simply means “Rotary In Action”. The Rotaract wing of RIT possess 250 numbers of rotaractors and green rotaractors which focuses on the enhancement of young adults as leaders in their societies and workstations.

**Evidence of Success:** The students from our college always keeps the college campus clean and green. The villagers living adjacent to the campus are being serviced by our college students as a team. This is the evidence of improved individual and social responsibility. This practice enriches the skills like team work, volunteerism and leadership.

**Problems Encountered and Resources Required:** Initially the students felt embarrassed in approaching the people who are really needy. The students were unable to apply their skills among the people due to their noncooperation.

#### **BEST PRACTICES -4**

**1. Title of the Practice:** Active functioning of RIT clubs for the betterment of the students.

#### **2. Objectives of the Practice**

1. To explore the co-curricular and extra-curricular talents of the students.
2. To enrich the students' skills such as teamwork, leadership, adaptability and communication.
3. To equip the young minds with creative thinking and innovative thoughts for their future career.

#### **3. The Context**

RIT has carried a legacy of imparting knowledge in various fields and to explore the talents of students through various club activities. Our students are actively involved in many club activities.

#### **4. The Practice**

Extra-curricular and co-curricular activities are conducted for the students to enhance professional acumen and enrich their career with personality development and professional development skills.

**5. Evidence of Success** Our students are skilled in academic, extra-curricular and co-curricular activities by actively participating in these club activities. They are getting the opportunity to interact with other college students, industry persons and academic experts. Active involvement of the students in one or more clubs is one of the best practices followed in our college.

#### **5.1 Noteworthy activities and events conducted by the clubs**

- "Thomas Edison said that to invent, you need a good imagination and a pile of junk. Innovative Project Cell and STEAM Club convened the first 'Maker's Meet' on 12th October 2019 to

emphasize the philosophy of 'learning-by-doing'. The Makers, studying in first year at RIT, participated in this meet to fabricate a working model of a Mini Frog Robot."

- Introduction to 'MIT App Inventor' Platform was provided in a workshop conducted by STEAM club on 3rd October 2019. Hands on session on creating powerful apps for the mobile phones was also provided.
- An event called Codigo was conducted by the Techsparks club on 14.03.2020. It was a code debugging event for the second year students of all the departments. The system credentials and the code were provided to the participants. The timeline for each participant was 60 minutes. They were asked to find the bugs in the code, debug them and execute the programs to obtain the intended output. Students gained confidence on how to crack the code and debug the errors through this program.
- Yuva club of RIT conducted Yi Chennai Badminton Championship 2019 on 22nd September 2019 for all college students.
- Infinitus, the maths club of RIT conducted Maths and Science expo on 29th February, 2020. This event was conducted on account of National Science Day remembering the discovery of Raman Effect by the renowned physicist Sir C.V. Raman for which he was awarded the Nobel Prize in 1930.
- Artististic League- Cultural Club of RIT conducted an open Mike event to show the talents of individuals in an open forum on September 2019.
- On account of International women's day, 'BRIDGES- Connecting People and Ideas', a seminar on building necessary skills and bridging the gap to connect the right people with optimized ideas was organized.
- Rotaract club conducted an Orientation program for green Rotaractors to help them understand the history of rotary, and our very own legacy of RIT – rotaract club.
- Language club of RIT has conducted Matribhasha Diwas Celebrations on 21/02/2020 to promote and preserve Mother Language by highlighting the linguistic diversity of our country and encouraging the usage of not only the respective mother Language, but other Indian languages as well.

## 6. Problems Encountered and Resources Required

During the participation of club activities, students felt embarrassed. In some critical situations, they met unbalanced circumstances to cope up with the regular curricular activities.

## 7.3 Institutional Distinctiveness

### 7.3.1 Portray the performance of the Institution in one area distinctive to its priority and thrust within 1000 words

**Response:**

#### **NPTEL- ACTIVE LOCAL CHAPTER**

Our institute is effectively using NPTEL online learning platform for both students and faculty members every year. Students register for online courses in different domains and gain vivid knowledge in that domain. Through NPTEL courses, students get exposed to solve real-time problems and programming

assignments. They take it as a good platform to improve their professional skills. This is greatly helpful for them while facing training and placement programs and interviews. Faculty members serve as mentors for few courses and impart the knowledge gained through NPTEL courses to the students during lecture hours. They happen to discuss about the assignments and their solutions in the classroom. This creates interest among other students and they register for the courses in the next academic year. Our management is kind enough to encourage the students who are registering and appearing for the NPTEL exam. Our institution offer the course fee (Rs.1000 per course) to all the students and faculty members who appeared for the exam. Our students and faculty members have made a remarkable performance in NPTEL examination.

### **Outstanding Performance of Students: Attached as additional documents**

NPTEL- Active Local chapter is functioning in an effective manner in our Institution which makes our institute as more distinct. This step will be continued in future with full enthusiasm

### **2. Students grooming Programme:**

Many learning sessions are organized for final year students on the special platform “College Connecting Corporate” to prepare them for industries and raise their awareness of corporate culture. This session covers very important learning skills such as Planning, Effective Communication skill, Attitude, Time Management, Verbal and Nonverbal Reasoning Power, Team Building, Group Discussion and Interview Skills. This session gives first priority to improve the English proficiency of the students Since English is the predominant professional language which reflects the business skills of the students. Therefore, it is highly required to provide the necessary support for the students to improve their language proficiency and its accent. The English proficiency test is being conducted at periodic intervals for the students in order to evaluate their level of improvement.

Students are instructed to read and incorporate speaking and writing skills. Likewise, to clear the written test in recruitment process, the students are being well trained in aptitude such as linguistics, mathematics and logical reasoning by experts from various academy. Their improvement is being continuously monitored with the assessments. They are being educated about Listening, Critical thinking, Speaking with Confidence while involving in Group discussion.

### **3.Industry institute interaction – Problem Box**

Innovations in science and technology are essential to the economic development of any nation. RIT has a special platform that would lead to holistic practical oriented development of every individual and also to enhance the typical investigation for information or knowledge in various fields of study. Problem Box houses a diverse group of academia with rich interdisciplinary research experience who work directly with industry clients to solve their challenges. Problem Box assists its clients with suitable and tailored programs at every level of their business – either as a trusted consultant to the top management or as a hands-on coach for the front line. It is a platform where the companies from varied sectors can post their requirements related to the projects.

For every requirement of our clients, an adequate team will be deputed to meet the desired outcomes. No matter what the challenges are, we focus on delivering visible and tangible results. The team consists of faculty members as principle investigator (PI) and co-pies and a batch of students who are interested in that particular field related to the project. They all work in tandem by put their concrete efforts

towards the solution of the problem. The expected outcomes are to bridge the gap between industry and institute to create 'Industry associated Institute' and also to give opportunities among deserving students to improve their proficiency towards research at a free of cost. This would be a dream of RIT to entrust our nation the incredible professionals who can think, innovate and create history.

### **More details on Problem Box**

- Innovations in science and technology are integral to the long-term growth and dynamism of any nation. The pursuit of science also creates a spirit of enquiry and discourse which are critical to modern, open, democratic societies.
- Problem box literally means the cooperation of various organizations or disciplines to
- produce a combined greater result and that's what we aimed at that the various faculties interact with each other and produce innovative projects by solving the issues created in industry that are actually through an interdisciplinary approach.
- Problem box literally means the cooperation of various organizations or disciplines to produce a combined greater result. The faculties of different disciplines interact with each other and produce innovative projects by solving the issues created in industry.
- This enhances the general research capability of budding technocrats by way of participating in conferences, seminars, workshops, project competition, etc. Every student of the college works on an idea during the odd semester and makes sustained effort in preparation of an innovative project.
- The objective is to carry forward projects focusing on basic and advanced specialized education in all the disciplines being pursued through faculties. This platform would lead to holistic practical oriented development of the manpower engrossed in various specialties. These institute dreams of giving India the professionals, who can actually think, create research and innovate.
- This platform encourages research and innovation among students. It also helps in overall personality development of the student with improvement in team building, communication and presentation skills. The college provides all the financial and administrative support to their students and faculty for the projects prepared for the event. The Problem box is a platform which motivates our own students and faculty members to think new ideas in their respective areas. Thus, we are able to groom the students, emphasizing the practical aspects of training and how each innovation helps to transform society in the smallest possible manner.

## 5. CONCLUSION

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### Additional Information :

We focus on “BELIEVE IN THE POSSIBILITIES ” through quality technical education and promotes an environment

- Where we believe that education should stimulate the minds of the young and inflame their intellect.
- Where global citizens of tomorrow are groomed by dedicated and trained faculty.
- Where the focus is on teaching not just to make a living but how to make a life.
- Where there is symbiosis of technological development and human values.
- Consistent institutional growth with respect to student intake, faculty, infrastructural, facilities, etc.
- Students performance at university examination.
- Campus placement for eligible students.
- Increase in number of students planning for higher studies.
- Organization of successful national and international level events.
- Conduct of university curriculum with full effectiveness and performance monitoring.
- Residential training camps and Mock test to boost confidence and performance in campus placement.
- Emphasis on extra-curricular and co-curricular activities for overall growth of personality.
- Industry – Academia Linkage for Partial course delivery, Internship, field projects, Field visits, Certification courses.
- Where there is a platform to transform the innovative idea of students and faculties into reality and linkages to outside world through professional societies.

### Concluding Remarks :

We are following

"Excellence is a Continuous Process and not an Accident"

Dr A P J Abdul Kalam

Right from its inception in 2008 with just four branches of undergraduate Engineering courses, the Institution has grown leaps and bounds both in its size as well as stature till this day and promises to continue in its progressive mode of placing at the hands of our nation , Engineers with knowledge, skill as well as human values. The Institution has been constantly refining its focus in achieving the Vision it has set for itself. The descriptive summaries and the accompanying data under each criterion are a proof of the sincere efforts of the Institution in this direction. It is a firm belief as well as the perception of the Management of this Institution that the growth in infrastructure, academics, research, co-curricular and extracurricular activities, activities on social and national issues for creating awareness as well as mitigating the problems, contributions in terms of activities of relevance to local community around the Institution - have all been in keeping with the expectations of NAAC - a wing of the UGC, highly relevant to the present-day educational scenario in the country.

## 6.ANNEXURE

### 1.Metrics Level Deviations

Metric ID	Sub Questions and Answers before and after DVV Verification																				
1.1.3	<p><b>Teachers of the Institution participate in following activities related to curriculum development and assessment of the affiliating University and/are represented on the following academic bodies during the last five years</b></p> <ol style="list-style-type: none"> <li>1. Academic council/BoS of Affiliating university</li> <li>2. Setting of question papers for UG/PG programs</li> <li>3. Design and Development of Curriculum for Add on/ certificate/ Diploma Courses</li> <li>4. Assessment /evaluation process of the affiliating University</li> </ol> <p>Answer before DVV Verification : A. All of the above            Answer After DVV Verification: D. Any 1 of the above            Remark : DVV has select D. Any 1 of the above as per nomination letter of teachers in evaluation provided by HEI.</p>																				
1.2.2	<p><b>Number of Add on /Certificate programs offered during the last five years</b></p> <p>1.2.2.1. <b>How many Add on /Certificate programs are offered within the last 5 years.</b>            Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> </tr> </thead> <tbody> <tr> <td>34</td> <td>35</td> <td>22</td> <td>6</td> <td>2</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1"> <thead> <tr> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> </tr> </thead> <tbody> <tr> <td>25</td> <td>22</td> <td>15</td> <td>6</td> <td>2</td> </tr> </tbody> </table> <p>Remark : DVV has excluded Short term Course on Workplace Competence (III year), Five day Course on Presentation Skills (Windows Package), Introduction to Programming in C, Interpersonal Skills, etc.</p>	2019-20	2018-19	2017-18	2016-17	2015-16	34	35	22	6	2	2019-20	2018-19	2017-18	2016-17	2015-16	25	22	15	6	2
2019-20	2018-19	2017-18	2016-17	2015-16																	
34	35	22	6	2																	
2019-20	2018-19	2017-18	2016-17	2015-16																	
25	22	15	6	2																	
1.2.3	<p><b>Average percentage of students enrolled in Certificate/ Add-on programs as against the total number of students during the last five years</b></p> <p>1.2.3.1. <b>Number of students enrolled in subject related Certificate or Add-on programs year wise during last five years</b>            Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> </tr> </thead> <tbody> <tr> <td>1344</td> <td>1404</td> <td>1556</td> <td>967</td> <td>847</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1"> <thead> <tr> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	2019-20	2018-19	2017-18	2016-17	2015-16	1344	1404	1556	967	847	2019-20	2018-19	2017-18	2016-17	2015-16					
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1344	1404	1556	967	847																	
2019-20	2018-19	2017-18	2016-17	2015-16																	



2019-20	2018-19	2017-18	2016-17	2015-16
1188	1234	1078	967	847

Remark : DVV has excluded the Short term Course on Workplace Competence (III year), Five day Course on Presentation Skills (Windows Package), Introduction to Programming in C, Interpersonal Skills, etc.

1.4.1 ***Institution obtains feedback on the syllabus and its transaction at the institution from the following stakeholders***

**1) Students**

**2) Teachers**

**3) Employers**

**4) Alumni**

Answer before DVV Verification : A. All of the above

Answer After DVV Verification: E. None of the above

Remark : Provided feedback report has unclear . Also year has not reflected.

1.4.2 **Feedback process of the Institution may be classified as follows:**

**Options:**

1. **Feedback collected, analysed and action taken and feedback available on website**
2. **Feedback collected, analysed and action has been taken**
3. **Feedback collected and analysed**
4. **Feedback collected**
5. **Feedback not collected**

Answer before DVV Verification : A. Feedback collected, analysed and action taken and feedback available on website

Answer After DVV Verification: C. Feedback collected and analysed

Remark : DVV has made the changes as per shared analysis report by HEI.

2.1.2 **Average percentage of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy ) during the last five years ( exclusive of supernumerary seats)**

**2.1.2.1. Number of actual students admitted from the reserved categories year wise during last five years**

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
232	307	416	440	429

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
232	307	352	348	354

Remark : DVV has made the changes by looking seats earmarked against the students admitted from the reserved categories.

**3.1.1 Grants received from Government and non-governmental agencies for research projects / endowments in the institution during the last five years (INR in Lakhs)**

**3.1.1.1. Total Grants from Government and non-governmental agencies for research projects / endowments in the institution during the last five years (INR in Lakhs)**

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
39.16	13.01	4.43	6.13	0

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
34	10.01	3.34	4.12	0

Remark : DVV has update the input by excluded grant for student's project, AICTE modrop, for conducting FDP programme.

**3.1.2 Percentage of departments having Research projects funded by government and non government agencies during the last five years**

**3.1.2.1. Number of departments having Research projects funded by government and non-government agencies during the last five years**

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
4	3	3	2	0

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
2	2	1	1	0

**3.1.2.2. Number of departments offering academic programmes**

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16

4	4	4	4	4
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Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
4	4	4	4	4

Remark : As per metric 3.1.1 DVV has update the input by excluded grant for student's project, AICTE modrop, for conducting FDP programme

**3.2.1 Number of papers published per teacher in the Journals notified on UGC website during the last five years**

**3.2.1.1. Number of research papers in the Journals notified on UGC website during the last five years.**

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
334	37	53	35	23

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
310	32	34	23	12

Remark : DVV has updated and verified the ISSN number from website of SCOPUS, Web of Science, Science Direct and UGC CARE.

**3.2.2 Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five years**

**3.2.2.1. Total number of books and chapters in edited volumes/books published and papers in national/ international conference proceedings year-wise during last five years**

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
104	53	64	63	61

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
98	45	56	54	45

Remark : DVV has made the changes by considered First page without ISBN numbers.

**3.3.4 Average percentage of students participating in extension activities at 3.3.3. above during last**

**five years**

**3.3.4.1. Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., year-wise during last five years**

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
1428	1172	1258	1172	934

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
867	454	945	340	560

Remark : DVV has not considered has not considered 5th International Yoga Day 2019 Gandhi Lathi - celebrating Mahatma Gandhi's 150th Birth Anniversary - RANGOLI & PAINTING Celebration on world environment day "A Call for Captain Planet" competition" Orientation Arise Onam Kondattam WORLD ENVIRONMENT DAY CELEBRATION Mini Marathon SUTRUM SORUPODUM Delight Celebrations: „Unity Illuminate India PALLIPAYANAM BACK TO SCHOOL DAYS - "Magudam" 350 MI GIFT Delight celebrations: ' Unity illuminate India' New World - "Pudhu Ullagam Athu Nullagam" Guru Wishes - " Perappu oru unnatha padippu" Scribe Exam - "Hands for Specially-Able" Pongal in Orphanage - "pasumani pongal" Triorally NAKSHATRA - Cultural for Differently Abled Anandha Deepavali RYLA TERRY FOX Posters - Save Food SINGARA CHENNAI

**3.4.1 The Institution has several collaborations/linkages for Faculty exchange, Student exchange, Internship, Field trip, On-job training, research etc during the last five years**

**3.4.1.1. Number of linkages for faculty exchange, student exchange, internship, field trip, on-job training, research etc year-wise during the last five years**

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
85	59	66	62	30

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
0	0	0	0	0

Remark : Job certificates, internship certificates, field trip documents, in plant training certificates cannot be considered. Request letters, permission letters, attendance certificates cannot be considered.

**4.1.3 Percentage of classrooms and seminar halls with ICT- enabled facilities such as smart class, LMS, etc. (Data for the latest completed academic year)**

**4.1.3.1. Number of classrooms and seminar halls with ICT facilities**

Answer before DVV Verification : 44

Answer after DVV Verification: 40

Remark : DVV has made the changes as per shared classroom and seminar halls photos by HEI excluding duplicates photos.

**4.1.4 Average percentage of expenditure, excluding salary for infrastructure augmentation during last five years(INR in Lakhs)****4.1.4.1. Expenditure for infrastructure augmentation, excluding salary year-wise during last five years (INR in lakhs)**

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
134.18	270.54	893.27	610.76	447.62

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
110.78	234.43	881.31	602.77	44.74

**4.2.3 Average annual expenditure for purchase of books/e-books and subscription to journals/e-journals during the last five years (INR in Lakhs)****4.2.3.1. Annual expenditure of purchase of books/e-books and subscription to journals/e-journals year wise during last five years (INR in Lakhs)**

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
10.20	6.15	6.16	28.97	15.83

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
10.20	6.15	6.16	28.97	15.84

**4.2.4 Percentage per day usage of library by teachers and students ( foot falls and login data for online access) during the last completed academic year****4.2.4.1. Number of teachers and students using library per day over last one year**

Answer before DVV Verification : 423

Answer after DVV Verification: 120

Remark : DVV has made the changes as per average of log book entries using library on 09/Sep/2019 to 13/Sep/2019.

4.4.1	<p><b>Average percentage of expenditure incurred on maintenance of infrastructure (physical and academic support facilities) excluding salary component during the last five years(INR in Lakhs)</b></p> <p>4.4.1.1. <b>Expenditure incurred on maintenance of infrastructure (physical facilities and academic support facilities) excluding salary component year-wise during the last five years (INR in lakhs)</b></p> <p>Answer before DVV Verification:</p> <table border="1" data-bbox="308 472 1046 607"> <thead> <tr> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> </tr> </thead> <tbody> <tr> <td>1155.30</td> <td>1122.89</td> <td>818.70</td> <td>697.91</td> <td>621.82</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1" data-bbox="308 685 1046 819"> <thead> <tr> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> </tr> </thead> <tbody> <tr> <td>126.63</td> <td>87.66</td> <td>91.85</td> <td>71.03</td> <td>56.78</td> </tr> </tbody> </table>	2019-20	2018-19	2017-18	2016-17	2015-16	1155.30	1122.89	818.70	697.91	621.82	2019-20	2018-19	2017-18	2016-17	2015-16	126.63	87.66	91.85	71.03	56.78
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126.63	87.66	91.85	71.03	56.78																	
5.1.2	<p><b>Average percentage of students benefitted by scholarships, freeships etc. provided by the institution / non- government agencies during the last five years</b></p> <p>5.1.2.1. <b>Total number of students benefitted by scholarships, freeships, etc provided by the institution / non- government agencies year-wise during last five years</b></p> <p>Answer before DVV Verification:</p> <table border="1" data-bbox="308 1099 1046 1234"> <thead> <tr> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> </tr> </thead> <tbody> <tr> <td>721</td> <td>853</td> <td>779</td> <td>335</td> <td>56</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1" data-bbox="308 1312 1046 1447"> <thead> <tr> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> </tbody> </table> <p>Remark : Supporting sanctioned letters has not provided by HEI.</p>	2019-20	2018-19	2017-18	2016-17	2015-16	721	853	779	335	56	2019-20	2018-19	2017-18	2016-17	2015-16	0	0	0	0	0
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2019-20	2018-19	2017-18	2016-17	2015-16																	
0	0	0	0	0																	
5.1.4	<p><b>Average percentage of students benefitted by guidance for competitive examinations and career counselling offered by the Institution during the last five years</b></p> <p>5.1.4.1. <b>Number of students benefitted by guidance for competitive examinations and career counselling offered by the institution year wise during last five years</b></p> <p>Answer before DVV Verification:</p> <table border="1" data-bbox="308 1805 1046 1939"> <thead> <tr> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> </tr> </thead> <tbody> <tr> <td>1510</td> <td>1559</td> <td>1685</td> <td>1439</td> <td>1396</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1" data-bbox="308 2018 1046 2085"> <thead> <tr> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	2019-20	2018-19	2017-18	2016-17	2015-16	1510	1559	1685	1439	1396	2019-20	2018-19	2017-18	2016-17	2015-16					
2019-20	2018-19	2017-18	2016-17	2015-16																	
1510	1559	1685	1439	1396																	
2019-20	2018-19	2017-18	2016-17	2015-16																	

0	0	0	0	0
---	---	---	---	---

Remark : List of activities conducted under coaching / guidance for competitive examinations are not valid as per metric and as per SOP.

### 5.2.1 Average percentage of placement of outgoing students during the last five years

#### 5.2.1.1. Number of outgoing students placed year - wise during the last five years.

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
327	399	390	328	270

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
145	276	157	165	145

Remark : DVV has update the input as per excluding unsigned appointment letters and offer letters for internship and training.

### 5.3.1 Number of awards/medals won by students for outstanding performance in sports/cultural activities at inter-university/state/national / international level (award for a team event should be counted as one) during the last five years.

#### 5.3.1.1. Number of awards/medals for outstanding performance in sports/cultural activities at university/state/national / international level (award for a team event should be counted as one) year-wise during the last five years.

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
1	12	11	18	11

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
0	01	04	03	04

### 5.3.3 Average number of sports and cultural events/competitions in which students of the Institution participated during last five years (organised by the institution/other institutions)

#### 5.3.3.1. Number of sports and cultural events/competitions in which students of the Institution participated year-wise during last five years

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16

14	24	29	24	20
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Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
03	15	12	15	15

Remark : DVV has made the changes as per considering all activities under an event to be counted as one event.

### 6.2.3 Implementation of e-governance in areas of operation

1. Administration
2. Finance and Accounts
3. Student Admission and Support
4. Examination

Answer before DVV Verification : A. All of the above

Answer After DVV Verification: B. 3 of the above

Remark : DVV has select B. 3 of the above because supporting documents for administration (sl. No.1) is not valid

### 6.3.2 Average percentage of teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the last five years.

#### 6.3.2.1. Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies year wise during the last five years

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
62	46	61	76	49

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
47	45	61	75	49

### 6.3.3 Average number of professional development /administrative training programs organized by the institution for teaching and non teaching staff during the last five years

#### 6.3.3.1. Total number of professional development /administrative training Programmes organized by the institution for teaching and non teaching staff year-wise during the last five years

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
---------	---------	---------	---------	---------



18	14	15	15	12
----	----	----	----	----

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
11	8	6	6	7

6.3.4	<p><b>Average percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP)during the last five years (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course ).</b></p> <p>6.3.4.1. <b>Total number of teachers attending professional development Programmes viz., Orientation / Induction Programme, Refresher Course, Short Term Course year-wise during the last five years</b></p> <p>Answer before DVV Verification:</p> <table border="1"> <tr> <td>2019-20</td> <td>2018-19</td> <td>2017-18</td> <td>2016-17</td> <td>2015-16</td> </tr> <tr> <td>110</td> <td>100</td> <td>129</td> <td>103</td> <td>82</td> </tr> </table> <p>Answer After DVV Verification :</p> <table border="1"> <tr> <td>2019-20</td> <td>2018-19</td> <td>2017-18</td> <td>2016-17</td> <td>2015-16</td> </tr> <tr> <td>65</td> <td>78</td> <td>65</td> <td>56</td> <td>62</td> </tr> </table> <p>Remark : DVV has excluded the programmes conducted by HEI on basic topic such as operative system, signals and system, complier design, dynamic of machinery, auto disk inventor etc.,</p>	2019-20	2018-19	2017-18	2016-17	2015-16	110	100	129	103	82	2019-20	2018-19	2017-18	2016-17	2015-16	65	78	65	56	62
2019-20	2018-19	2017-18	2016-17	2015-16																	
110	100	129	103	82																	
2019-20	2018-19	2017-18	2016-17	2015-16																	
65	78	65	56	62																	

7.1.2	<p><b>The Institution has facilities for alternate sources of energy and energy conservation measures</b></p> <ol style="list-style-type: none"> <li>1. Solar energy</li> <li>2. Biogas plant</li> <li>3. Wheeling to the Grid</li> <li>4. Sensor-based energy conservation</li> <li>5. Use of LED bulbs/ power efficient equipment</li> </ol> <p>Answer before DVV Verification : A. 4 or All of the above  Answer After DVV Verification: B. 3 of the above  Remark : DVV has select B. 3 of the above as per shared report of SI. No 1.2 and 5 by HEI.</p>
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7.1.4	<p><b>Water conservation facilities available in the Institution:</b></p> <ol style="list-style-type: none"> <li>1. Rain water harvesting</li> <li>2. Borewell /Open well recharge</li> <li>3. Construction of tanks and bunds</li> <li>4. Waste water recycling</li> </ol>
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**5. Maintenance of water bodies and distribution system in the campus**

Answer before DVV Verification : A. Any 4 or all of the above

Answer After DVV Verification: C. 2 of the above

Remark : DVV has select C. 2 of the above as per shared document of 4 and 5 by HEI.

7.1.6 **Quality audits on environment and energy regularly undertaken by the Institution and any awards received for such green campus initiatives:**

1. Green audit
2. Energy audit
3. Environment audit
4. Clean and green campus recognitions / awards
5. Beyond the campus environmental promotion activities

Answer before DVV Verification : A. Any 4 or all of the above

Answer After DVV Verification: C. 2 of the above

Remark : HEI has not provided the Green audit and environment audit from accredited auditing agencies and the award shown is only a appreciation letter. Hence only two can be considered.

**2.Extended Profile Deviations**

ID	Extended Questions																				
1.1	<p><b>Number of courses offered by the Institution across all programs during the last five years</b></p> <p>Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> </tr> </thead> <tbody> <tr> <td>153</td> <td>151</td> <td>145</td> <td>147</td> <td>144</td> </tr> </tbody> </table> <p>Answer After DVV Verification:</p> <table border="1"> <thead> <tr> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> </tr> </thead> <tbody> <tr> <td>250</td> <td>216</td> <td>178</td> <td>147</td> <td>144</td> </tr> </tbody> </table>	2019-20	2018-19	2017-18	2016-17	2015-16	153	151	145	147	144	2019-20	2018-19	2017-18	2016-17	2015-16	250	216	178	147	144
2019-20	2018-19	2017-18	2016-17	2015-16																	
153	151	145	147	144																	
2019-20	2018-19	2017-18	2016-17	2015-16																	
250	216	178	147	144																	
1.2	<p><b>Number of programs offered year-wise for last five years</b></p> <p>Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> </tr> </thead> <tbody> <tr> <td>4</td> <td>4</td> <td>4</td> <td>5</td> <td>5</td> </tr> </tbody> </table> <p>Answer After DVV Verification:</p> <table border="1"> <thead> <tr> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> </tr> </thead> <tbody> <tr> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> </tr> </tbody> </table>	2019-20	2018-19	2017-18	2016-17	2015-16	4	4	4	5	5	2019-20	2018-19	2017-18	2016-17	2015-16	5	5	5	5	5
2019-20	2018-19	2017-18	2016-17	2015-16																	
4	4	4	5	5																	
2019-20	2018-19	2017-18	2016-17	2015-16																	
5	5	5	5	5																	
2.1	<p><b>Total number of classrooms and seminar halls</b></p> <p>Answer before DVV Verification : 44</p>																				

Answer after DVV Verification : 40

2.2 **Total Expenditure excluding salary year-wise during last five years ( INR in Lakhs)**

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
1565	1602	1896	1488	1230

Answer After DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
1431.29	1331.15	1001.64	856.36	779.07