# UPDATED SELESTUDY REPORT

### FOR

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

# JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE JECRC CAMPUS, SHRI RAM KI NANGAL, VIA SITAPURA RIICO, OPP. EPIP GATE, TONK ROAD, JAIPUR 302022 302022

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Submitted To

# NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

# BANGALORE

# December 2020

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# **<u>1. EXECUTIVE SUMMARY</u>**

# **1.1 INTRODUCTION**

Jaipur Engineering College and Research Centre (JECRC) is a self financed institute affiliated to Rajasthan Technical University, Kota. It is located around 10 Kms from Jaipur International Airport and is situated on main national highway NH-12. Jaipur is the state capital of Rajasthan and is well connected through Rail, Road and Air. It is a tourism city of world fame.

Jaipur Engineering College and Research Centre (JECRC) was established in the year 2000, under theflagship of National Society for Engineering Research and Development (NSERD) society with three programs and 180 students. Two decades of journey has grown JECRC many folds and in the year 2019-2020 the total number of programs has increased to 7 and total sanction intake has increased to 990.

The academic departments, placement section, curricular / co-curricular activities and social initiative section are the four pillars of JECRC that has shown growth over the years.

Out of seven programs, viz. Mechanical Engineering, Electronics & communication, Computer science and Engineering, Information Technology, Electrical Engineering, Civil Engineering and Artificial Intelligence & data science (2020), two programs were Accredited in the year 2009 for three years viz., Computer Science & Engineering (CSE) and Electronics & Communication Engineering (ECE) and again two programs are Accredited by National Board of Accreditation (NBA) in the year 2018 for three years are Electronics & Communication Engineering (ME). These seven programs have adequate faculty members as per AICTE. Faculty members are regularly appreciated for their efforts through well defined appraisal system. The appraisal form includes performance of the faculty member based on their research & innovation and involvement in curricular & co-curricular activities that enables them to upgrade their knowledge from time to time. Faculty welfare schemes allow them to out-reach and help them to establish professional and personal relationships at national and international level.

#### Vision

To become renowned centre of outcome based learning and work towards academic, professional, cultural and social enrichments of the lives of individual and communities.

#### Mission

The Mission of the institute is as under -

- 1. Focus on evaluation of learning outcomes and motivate students to inculcate research aptitude by project based learning.
- 2. Identify areas of focus and provide platform to gain knowledge and solutions based on informed perception of Indian, regional and global needs.
- 3. Offer opportunities for interaction between academia and industry.
- 4. Develop human potential to its fullest extent so that intellectually capable and imaginatively gifted

leaders can emerge in a range of professions.

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

#### **Institutional Strength**

1. Recognize slow and fast learner based on Course outcome/activities and improvement upon. (practicing outcome based education)

2. Taking regular feedbacks, making summary and taking action.

3. Bridge the gap between academia and industry looking into the current demands of the industry through industry experts and strong alumni association.

4. NBA accreditation of Electronics & Communication Engineering and Mechanical Engineering.

5. Spiritual research cell provides knowledge of yoga and yoga practices, it provides energy centers of human body , mentoring students to create research based activities at the center etc.

6. College provides social services like platelet donation, blood donation, coaching to the poor children of slum areas through institute's student, provide sanitization awareness to girls/mothers in the nearby area on regular basis.

7. Active national/international collaborations/MoUs for quality research and academic outcomes.

8. Nurturing long term association with reputed companies /organizations for providing internship and placements.

9. Company specific rigorous training of more than 200 hrs, execution of training with tailor made content as per the industries standards.

10. Provide placements to the students who are not eligible because of one or the other reason as per industry standard.

11. Campus is recognized for green audit, energy audit and environmental audit (roof top power, water harvesting, waste water management).

12.Properly defined startup/incubation facility and policy, student welfare policy, faculty welfare policy, staff retention benefits etc.

13.Holistic development of students beyond class room activities, social work and community engagement are regularly exercised.

14. Centre of excellence, student activity clubs (technical and co-curricular) are added advantage to address content beyond syllabus.

15. Qualified and experienced faculty & staff members with good retention, strong ethics and commitment to quality, positive moral, commitment to seek opportunities, excellent team work among faculty and students.

#### Institutional Weakness

- 1. Relatively a smaller number of placements drives at campus for manufacturing and infrastructure segment.
- 2. Difficulty to attract sizeable research funds from the Government funding agencies.
- 3. Less companies with offers more than Rs. 10 lakh per annum.
- 4. Sponsored research projects from any funding agency, consultancy are the area of concern.
- 5. Students have low motivation for higher studies.
- 6. Due to global competition there is a need to establish language centric centers viz. English, French, German, Spanish etc.
- 7. Some of the alumni are out of reach.

#### **Institutional Opportunity**

- 1. Exploring new sectors like Online-Education, Business development, Healthcare, Insurance etc. Nowadays verticals like Logistics, HealthCare/ Pharmaceutical, Fintech & Service deliveries companies, E- commerce and Digital marketing companies are need of today for global competence.
- 2. Most of the Companies recruit through contest-based hiring therefore students and faculty members are mentored new opportunities
- 3. Due to strong alumni network, students who are working in reputed industries in every sector, the institute has great opportunity to connect corporate through alumni.
- 4. Internship opportunity to the students through tie-up with Internshala & other initiatives of AICTE.
- 5. Industry skill requirement is changing as per current scenario that is to be explored.

As the world now grapples with the unenviable situation of sitting at home, this gives an opportunity to content creators across various platforms. Contributing to green initiatives for sustainable development of nation and society, more MOU's from industries and institution of national and international repute are the areas of concern for innovation and integration.

#### **Institutional Challenge**

- 1. Motivating students to go for higher studies and do become entrepreneur.
- 2. Strive to achieve significant number of placements in companies with salary higher than 10 Lac per annum.
- 3. Provide trainings on latest technologies and communication skills to make the students industry ready.
- 4. Keeping pace with global developments in higher education and research.

#### Self Study Report of JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE 1.3 CRITERIA WISE SUMMARY

#### **Curricular Aspects**

Institute follows the curriculum provided by Rajasthan Technical University, Kota .The curriculum planning and delivery through various means as the institute is affiliated to Rajasthan Technical University, Kota and limitation in syllabus is provided by the affiliating university. There is a need to discuss content beyond syllabus i.e. extracurricular activities, co-curricular activities for grooming of students.

The gap is identified through various means and various measures like invited talks, workshops are organized to bridge the gap. As per the academic calendar all the activities are included into it. The Rajasthan Technical University has implemented choice-based credit scheme for all the courses.

Criteria-1 also discusses about certificate courses, cross cutting issues and implementation at institute. Average percentage of courses that include experiential learning through project work/field work/internship during last five years is approximately 77.52%, percentage of students undertaking project work/field work/ internships is around 82.75% is reported.

Social awareness and community service are inculcated among the students through various social clubs. JECRC also encourage institute students to become job creators through strong entrepreneurship development and incubation resulting into big number of entrepreneurs. The institute has provided an incubation Centre for motivating the students to create ideas for startups.

Criteria also included feedback received from various stake holders viz faculty members, students, alumni etc. on teaching learning various issues. The analysis reported is also included in this criterion. There is a well-structured feedback system that includes feedback from all the stakeholders, the feedback is analyzed and appropriate corrective actions are taken .

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

The criteria discuss about student and faculty strength. Average enrolment percentage of last five years is approximately 99%. Average percentage of seats filled against allocated seats are reserved for various categories as per applicable reservation policy of Rajasthan Technical University (RTU) during the last five years, is around 100%.

Full time teacher ratio for the latest completed academic year is 1:17 and average percentage of full-time teachers against sanctioned posts during the last five years is 111.87% (as per AICTE). Letter of Approval based on 80% is 99.81%. Average percentage of full-time teachers with Ph.D. during the last five years, considering only highest degree for count is approx. 18.61%. Average teaching experience of full time teachers in the same institution (Data for the latest completed academic year in number of years) is 5.07 years. Average pass percentage of students is 94.39%.

The institute has set policies and procedures in place in order to identify the learning ability for each student and conduct counter measures such as extra lectures, remedial classes and mentoring sessions. Majority of the teachers use ICT in their teaching. Students and teachers regularly follow NPTEL and utilize other e-resources to enhance their teaching and learning. Many students and faculty have completed online courses.

The focus of JECRC has been on student centric learning and various means are used to improve the learning level of students in the area of critical thinking, communication and team cohesiveness. Summer Internships for a project of 6-8 weeks are also considered as an integral part of the Curriculum as per RTU.

The Examination Regulations are very rigorous and schedules are strictly maintained. A set of well-drafted policy is adopted by the department. Internal assessments following RTU guidelines and mandatory transparency policy like internal marks display, student-access to evaluated answer scripts, and continuous evaluation of laboratory course is a regular practice of the institute. Grievances related to examination are addressed by the examination committee along with the respective heads of departments and record is maintained. Through this process slow and advance learners are identified and mentored.

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

Total Grants from Government and non-governmental agencies for research projects/endowments in the institution during the last five years (INR in Lakhs) is 104.06 lakhs. Each department has contributed to get research grant from Govt./Non-govt.

Number of Seminars/conferences/workshops conducted by the institution during the last five years is 189.

Faculty members are motivated enough and published research papers on regular basis in National/International level. Faculty also publish their articles/Books on regular basis (585).

Extension activities are carried out in the neighborhood community and various awards (78) and recognition are received for extension activities from Government/Government recognized bodies during the last five years. Seventy two (72) number of extension and outreach programs are conducted during the last five years where 97.45% Students have taken participation at different level. The Institution has signed 18 MOU's in the last five years with Industry/Institute to conduct activities outside classroom and provide additional training at a very subsidized cost.

#### **Infrastructure and Learning Resources**

The institution has adequate facilities for teaching-learning, cultural, sports, games (Indoor and Outdoor), gymnasium, yoga etc.

In addition to vibrant academic environment, institute is also equipped with cutting edge infrastructure w.r.t. Technical activities, startup, incubation, and non-Technical clubs (Dance/Photography/Music etc.). Classrooms and seminar halls are equipped with ICT - enabled facilities.

Approximately 14.16% of expenditure, excluding salary has been utilized for infrastructure augmentation during last five years. Library is automated using Integrated Library Management System (ILMS) and percentage per day usage of library by teachers and students (foot falls and login data for online access) is approximately 5.04%.

Institution frequently updates its IT infrastructure such as campus is fully Wi-Fi and student–computer ratio is 1:5, bandwidth of internet connection in the Institution is 250 mbps. The security measures are provided for unauthorized access and prevention of illegal sites. Average percentage of expenditure incurred on maintenance

of infrastructure facility time to time (physical and academic support facilities) excluding salary component during the last five years is approx.2.19%.

The laboratory equipment's are updated based on curriculum as well as for carrying out co-curricular activities. Feedback of stakeholders is sought regularly about infrastructure and learning resources for ensuring their satisfaction. Accordingly, continuous review of infrastructure and learning resources is carried out by respective committees and the recommendations are integrated in the Annual Planning for upgrading, maintaining and utilizing physical, academic and support facilities.

#### **Student Support and Progression**

Students are the key stakeholders at JECRC. There are key pillars focused at JECRC in different ways as: Enhancing students in Teaching and Learning through conscious implementation of mentoring, establishment of component library, systematic and well planned academic plan, university examination oriented prelims, extra help to slow learners through remedial classes and guidance for GATE, competitive examinations, higher studies and career guidance for advanced learners and encouragement for MOOCs and NPTEL courses, Concerned and active students are groomed for startup through incubation centre.

Students and faculty members are made aware of the transparency to be maintained in the system of assessment. JECRC believes in the holistic grooming of students and hence equal emphasis on extracurricular & co-curricular activities which are facilitated through the various active student clubs. Placement cell maintains strong relationship with industry and support students in placement through training of soft skill, technical skill, aptitude test training through in-house as well as expert trainers, mock tests to know about the achievement after such trainings to make students employable.

JECRC alumni network by itself is one of the best professional networking platforms available today. Leveraging the alumni community is a win-win for both the institution and the alumni. Many of them are willing to 'Give-Back' to their alma-mater as a sign of their gratitude and affinity towards the institution. Alumni contribute as guest lecturer, advisor in committees, industry experts and cooperative partners in projects with the college. They play a key role in preparing students for the pre-placement preparations. This improves the development of their alma mater. Progression of students for higher education, placement and going for family business or starting their own venture is analyzed annually. Institute regularly engages with its alumni through alumni meets.

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

The governance of the institution is reflective of and in tune with the vision and mission of the institution. The effective leadership is visible in various institutional practices such as decentralization and participative management.

The leadership at the college level and within the constituent units ensures the development of a robust management system, its implementation and continuous improvement; apart from creating systems for identifying the dynamic organizational needs and for fulfilling them as shown in the organizational chart.

Institute organizational structure helps in sustaining institutional capacity and education effectiveness through involvement of stakeholders in Committee/ Boards at various levels. The minutes of the meeting of all the

committees are thus maintained and action taken are analyzed on regular basis.

The Institute continuously promotes a culture of participative management. The students and staff members are allowed to express themselves and any suggestions to improve and growth of Institute. The functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment and service rules, procedures, etc. The institution has effective welfare measures for teaching and non-teaching staff. Institution has Performance Appraisal System for teaching and non-teaching staff.

The college has a mechanism for internal and external financial audits. The Internal Quality Assurance Cell (IQAC) is looking after the various aspects in the department related to improvement in performance of students, faculty members and enhances quality of education. The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC. IQAC has both internal and external members to review the academic and support systems, collects feedback from students, Parents and Alumni on different criteria prepare a summary and propose various action for improvement. Head of the Department nominate the project coordinator and project review panel based on the specialization of faculty members. Students are provided with brief idea of various fields for selecting the project.

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

The institute aims to maintain gender equity; it is the situation of equal ease of access to resources and opportunities irrespective of gender including leadership positions and participation in activities.

Gender equity comes under the Sustainable Development Goals (SDGs). Institute encourages the students by organizing many gender equity programs and motivates them in their education and career.

The Institute has the alternate source of energy which is a roof top solar power plant of approx. 400 KW. Environmental initiatives like green campus, use of solar energy, Rain water harvesting, and septic tank, zero water discharge, no smoking zone, waste management system etc. have been implemented.

The institute has ramps and disabled friendly washrooms at various points for easy access for Divyangjan. There is also provision of signage including lights, display boards and signposts at different locations for guidance of divyangjan.

Various social activities are organized at campus like blood donation, SDP (single donor platelet) donation, teaching to under privilege students, mentoring of ladies & girls who left education, addressing various societal issues like nukkad natak at various places, health checkup, cleanliness drive, clothes distribution engagement with old age home & orphanage etc. These activities help to introduce tolerance and harmony towards the social and communal side. Institution celebrates / organizes national and international commemorative days, events and festivals. Students are encouraged to participate and organize activities within and outside the institute. The institute has taken many initiatives for greening the campus that includes 230 different varieties of fruit plants.

Faith by Government agencies for providing grant for setting up center of excellence, state of art facilities for startup and incubation and providing platform to the students to develop their technical and managerial skills

That is helping students to get placement in reputed organization. The institute has sections, organize various social initiatives and placement to their ineligible students, as some of the key best practices.

Institute core values are available on website and lay significant emphasis on ethics, values and community engagement. JECRC celebrates all important days of national/international importance and conducts large number of activities to promote universal values.

# <u>2. PROFILE</u>

# 2.1 BASIC INFORMATION

Name and Address of the College		
Name	JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE	
Address	Jaipur Engineering College and Research Centre JECRC Campus, Shri Ram Ki Nangal, Via Sitapura RIICO, Opp. EPIP Gate, Tonk Road , Jaipur 302022	
City	Jaipur	
State	Rajasthan	
Pin	302022	
Website	www.jecrcfoundation.com	

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	Vinay Kumar Chandna	0141-2770120	9891406784	0141-277080 3	principal@jecrcma il.com
IQAC / CIQA coordinator	Mahendra Pratap Singh	0141-2770232	9414203639	0141-277027 4	iqac@jecrc.ac.in

Status of the Institution	
Institution Status	Private and Self Financing

Type of Institution		
By Gender	Co-education	
By Shift	Regular	

<b>Recognized Minority institution</b>	
If it is a recognized minroity institution	No

#### **Establishment Details**

Γ

Date of establishment of the college	13-07-2000

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

State	University name	Document
Rajasthan	Rajasthan Technical University	View Document

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 AuthorityRecognition/App roval details Inst 				
AICTE	View Document	31-07-2020	12	

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

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

Location and Area of Campus				
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.
Main campus area	Jaipur Engineering College and Research Centre JECRC Campus, Shri Ram Ki Nangal, Via Sitapura RIICO, Opp. EPIP Gate, Tonk Road, Jaipur 302022	Urban	10.54	35000

# **2.2 ACADEMIC INFORMATION**

Details of Pro	ogrammes Offe	red by the Col	lege (Give Data	a for Current	Academic year	)
Programme Level	Name of Pr ogramme/C ourse	Duration in Months	Entry Qualificatio n	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BTech,Civil Engineering	48	XII	English	120	120
UG	BTech,Comp uter Science And Engineering	48	XII	English	240	240
UG	BTech,Electr ical Engineering	48	XII	English	120	95
UG	BTech,Electr onics And C ommunicatio n Engineering	48	XII	English	180	176
UG	BTech,Infor mation Technology	48	XII	English	150	150
UG	BTech,Mech anical Engineering	48	XII	English	120	60
UG	BTech,Artifi cial Intelligence And Data Science	48	XII	English	60	60

	Teaching Faculty											
	Profe	Professor				Associate Professor			Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government			1	29		1		58		1		177
Recruited	10	5	0	15	9	13	0	22	112	65	0	177
Yet to Recruit		1		14				36			1	0
Sanctioned by the Management/Soci ety or Other Authorized Bodies				0				0	J	1		0
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit				0				0				0

Non-Teaching Staff									
	Male	Female	Others	Total					
Sanctioned by the UGC /University State Government	5	->'		67					
Recruited	53	14	0	67					
Yet to Recruit				0					
Sanctioned by the Management/Society or Other Authorized Bodies				0					
Recruited	0	0	0	0					
Yet to Recruit				0					

Technical Staff									
	Male	Female	Others	Total					
Sanctioned by the UGC /University State Government				41					
Recruited	40	1	0	41					
Yet to Recruit				0					
Sanctioned by the Management/Society or Other Authorized Bodies			-	0					
Recruited	0	0	0	0					
Yet to Recruit				0					

#### **Qualification Details of the Teaching Staff**

				Perman	ent Teach	iers				
Highest Qualificatio n	Professor			Associate Professor			Assistant Professor			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	10	5	0	9	13	0	3	1	0	41
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	110	66	0	176

	Temporary Teachers											
Highest Qualificatio n			Associate Professor			Assistant Professor						
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total		
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 Qualificatio n	Professor			Associate Professor			Assistant Professor					
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total		
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	Male	Female	Others	Total			
engaged with the college?	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	2766	265	0	0	3031
	Female	643	59	0	0	702
	Others	0	0	0	0	0

Programme		Year 1	Year 2	Year 3	Year 4
SC	Male	35	25	32	24
	Female	7	6	3	8
	Others	0	0	0	0
ST	Male	24	15	16	20
	Female	1	4	3	1
	Others	0	0	0	0
OBC	Male	177	148	197	209
	Female	38	17	24	14
	Others	0	0	0	0
General	Male	488	501	624	603
	Female	131	126	127	168
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
Total		901	842	1026	1047

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

# **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		
406	401	398		398	398		
File Description				Document			
Institutional data in prescribed format				View Document			

#### 1.2

#### Number of programs offered year-wise for last five years

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

### 2 Students

#### 2.1

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

2019-20	2018-19	2017-18		2016-17	2015-16
3816	3988	4254		4323	4232
File Description		Document			
Institutional data in prescribed format		View	Document		

#### 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
282	215	275	275	255

File Description	Document
Institutional data in prescribed format	View Document

#### 2.3

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

2019-20	2018-19	2017-18		2016-17	2015-16
1027	1051	1082		1061	931
File Description			Docun	nent	
Institutional data in prescribed format		View ]	<u>Document</u>		

# **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	
228	239	222		227	232	
File Description		Document				
Institutional data in prescribed format		View	Document			

#### 3.2

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

2019-20	2018-19	2017-18		2016-17	2015-16	
256	186	186		211	202	
File Description		Document				
Institutional data in prescribed format		View	Document			

# **4** Institution

#### 4.1

Total number of classrooms and seminar halls

#### **Response: 60**

#### 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
2259	2373	2461.85	2074.54	1713.55

#### 4.3

#### **Number of Computers**

Response: 868

4.4

Total number of computers in the campus for academic purpose

#### Response: 762

# 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:**

Jaipur Engineering College and Research Centre (JECRC) is an institution which is affiliated to Rajasthan Technical University (RTU) and it follows the curriculum as provided by the University. Considering the global issues and diversity of the Indian geographical needs and requirements, the curriculum provided by the university is focused on various issues viz.:

- 1. Technical knowledge with respect to core discipline.
- 2. Development of knowledge to cater to the need of the economy, society, the country as a whole so as to contribute to the development of the nation.
- 3. Acceptance of stakeholders (students) at the global level.
- 4. Inculcating human values amongst the students.
- 5. Use of cutting-edge technologies etc.

The focus of the curriculum on the above-mentioned issues needs well-researched documents before it is delivered to the students and other stakeholders. Based on the discussions with the stakeholders and feedback received from the stakeholders, planning for the curriculum delivery is carried out based on the following:

- 1. Curriculum Delivery.
- 2. Content beyond syllabus.
- 3. Add-on/Certificate courses.
- 4. Cross-cutting issues related to professional ethics, human values, environment and sustainability.
- 5. Experiential learning through project work, internship, etc.
- 6. Extension and outreach program

The planning of curriculum delivery is shared with the departments through IQAC so that they may plan their activities as per the shared plan and include them in the academic calendar of the department.

#### **Curriculum Planning**

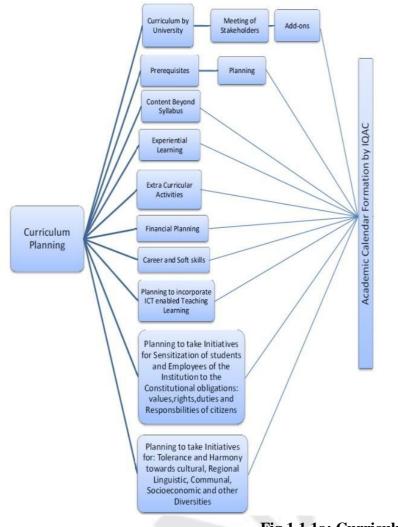


Fig 1.1.1a: Curriculum Planning

Curriculum Planning:- Curriculum planning is done under the consideration of the following points,

- 1. Curriculum by University: Institute follows the curriculum provided by the university in all programmes.
- 2. Prerequisites: Subject wise prerequisites are discussed and explained to students.
- 3. Content Beyond Syllabus:- After the feedback received from different stakeholders the gap in the curriculum is identified and delivered by various means.
- 4. Experiential Learning: Different activities are planned for students at the institute and department level to give the opportunity of learning by doing in addition to the RTU syllabus.
- 5. Extra-Curricular Activities: Extra-curricular activities are planned by departments wherein the number of students is participating; it is planned in the academic calendar.
- 6. Financial Planning:- For various planned and unplanned activities, financial planning is carried out.
- 7. Career and Soft skills:- Training and placement department provides placement training to students for career building and placement activities.
- 8. Planning to incorporate ICT (Information and Communication Technology) enabled Teaching-Learning:- For innovation in teaching-learning, different ICT based software and hardware tools are planned to use.
- 9. **Planning to take Initiatives for:** Sensitization of students and Employees of the Institution to the Constitutional obligations: values, rights, duties, and responsibilities of citizens.

10.**Planning to take Initiatives for:** Tolerance and Harmony towards cultural, Regional, Linguistic, Communal, Socioeconomic and other Diversities.

On the basis of the above-listed considerations, IQAC (Internal Quality Assurance Cell) finalized the academic calendar of the institute.

File Description	Document
Upload Additional information	View Document
Link for Additional information	View Document

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

#### **Response:**

Jaipur Engineering and Research Centre (JECRC), Jaipur is affiliated to Rajasthan Technical University (RTU), Kota, Rajasthan. JECRC Institute follows the RTU academic calendar for Continuous Internal Evaluation (CIE). The institute receives an academic calendar from the university which includes the tentative dates of

- Commencement of classes and last working day,
- Midterm exam date,
- Date of commencement of theory exam and
- Date of commencement of Practical exams.

Then IQAC sends this academic calendar to all the departments of the institute for updating the dates of their respective departmental activities (Curricular, Co-curricular and Extracurricular) to be held. Then, this academic calendar is sent back to IQAC for its final approval. If any suggestion is proposed by IQAC, then the calendar is sent back to DQAC of respective department(s) & updated accordingly and finalized. Now this final academic calendar has to be adhered to by all the departments. Any unplanned activities proposed by Central/State govt., MHRD, AICTE etc., are also incorporated in academic calendar.

The planning for Continuous Internal Evaluation (CIE) is started from the guidelines provided by IQAC. Each department adheres to these guidelines and performs the various tasks for CIE. All the departments conduct their internal evaluation process based on CO's. The departments follow the transparency in evaluation process and solve student's grievances.

The IQAC ensures the quality and standards of exam papers. The faculty member identifies slow and advance learners based on CO analysis and conduct activities according to performance.

#### Process of conduction of internal exam:

• Schedule of Midterm Tests is given in Academic calendar which is displayed well in advance

Before commencement of session.

- Evaluation method comprises of internal examinations held progressively during the semester and is designed to check the periodic performance of the student.
- Internal examination schedule is displayed on notice board in advance.
- Two set of Question papers for each subject are set based on Course outcomes by the respective faculty members along with the Model Answers and marking scheme and DQAC approved one set of question paper.
- The examination evaluation is performed on the basis of course outcomes which ensure the result of the achievement of outcomes. Generally, this criterion for achievement is 60%.
- For internal assessment of practical, evaluation is based on different parameters like Practical Records, Performance and Viva-Voce. Day to day performance of the students is assessed for every experiment which includes regularity, performance, viva and submitting the record.

File Description	Document
Upload Additional information	View Document
Link for Additional information	View Document

# **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 followingacademic 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: A. All of the above

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

#### Academic Flexibility

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

Response: 100

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

Response: 6

File Description	Document			
Minutes of relevant Academic Council/ BOS meetings	View Document			
Institutional data in prescribed format	View Document			
Any additional information	View Document			

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

#### Response: 35

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

2019-20	2018-19	2017-18	2016-17	2015-16
9	9	10	3	4

File Description	Document	
Institutional data in prescribed format	View Document	
Brochure or any other document relating to Add on /Certificate programs	View Document	
Any additional information	View Document	

# **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: 15.88

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
673	717	806	764	303

File Description	Document
Details of the students enrolled in Subjects related to certificate/Add-on programs	View Document
Any additional information	View Document

#### **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:**

The institute inculcates the human values in the students through various activities and measures. The institution assesses the learning levels of the student right from the beginning when the student is admitted to the Institute. Before the start of the semester as per AICTE, a 15 days Induction Programme is organized that includes various activities such as communication skill development, physical activities, motivational talks, literary activities etc., so that students may feel comfortable and at equal level irrespective of their rank and marks at senior secondary level.

The institute is affiliated to Rajasthan Technical University (RTU) and it receives curriculum to be taught to the students of all programmes as provided by the University. Looking into the global issues and diversity in Indian geographical needs and requirements, the curriculum provided by the university focuses on various issues. Institute has organizes various workshops, seminars and invited talks to promote universal human values.

To inculcate human values, social clubs are run by the students of institute under social arm of JECRC such as Zarurat, Soch, Ashayein and Suhasini.

The institute has a separate Yoga/Meditation centre which organizes different activities like workshops, invited talk, webinars etc. for students and all staff members for stress management and to maintain the harmony at work place. This centre also provides the facility for meditation & research.

The Institute is preparing the students to sustain in a global professional environment. Professional ethics are inculcated in students through various activities/measures like curriculum delivery, industrial visit, entrepreneurship, incubation centre, conferences, and other technical activities.

**Gender Equity:** - Institute assures equal opportunity regardless of gender-specific for all. Institute has a separate women grievance cell which ensures safety and security to all female students and other staff members of the institute. This cell also prevents any sexual abuse towards the female staff and students. The institute also promotes women in leadership position, organizing activity, participation in various activities, teaching learning etc. At JECRC College, girl child education program is organized by Suhasini group. This group laid by students of JECRC foundation on national girl child day. This group is working on the theme of "BETI BACHAO BETI PADHAO" Abhiyan.

**Environment and Sustainability:** The Institute ensures an Environment and sustainable campus for its stakeholders. The campus is equipped with a solar plant. The institute has clean & green campus and

Promotes the plantation activities. The institute applies different methods for waste management. Students also learn about environment and sustainability in various courses included in curriculum of different programs. National or International Conferences are organized related to environment and sustainability.

File Description	Document
Upload the list and description of courses which address the Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum.	<u>View Document</u>
Any additional information	View Document

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

Response: 77.52

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
307	308	313	311	312

File Description	Document
Programme / Curriculum/ Syllabus of the courses	View Document
MoU's with relevant organizations for these courses, if any	View Document
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document

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

Response: 76.99

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

Response: 2938		
File Description	Document	
Institutional data in prescribed format	View Document	
Any additional information	View Document	

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

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

**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: A. Feedback collected, analysed and action taken and feedback available on website

File Description	Document	
Upload any additional information	View Document	
URL for feedback report	View Document	

### Criterion 2 - Teaching-learning and Evaluation

#### **2.1 Student Enrollment and Profile**

Response: 98.77

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

2019-20	2018-19	2017-18	2016-17	2015-16
901	842	1026	1047	1073

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

2019-20	2018-19	2017-18	2016-17	2015-16
990	990	990	990	990

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: 100

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
282	215	275	275	255

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:**

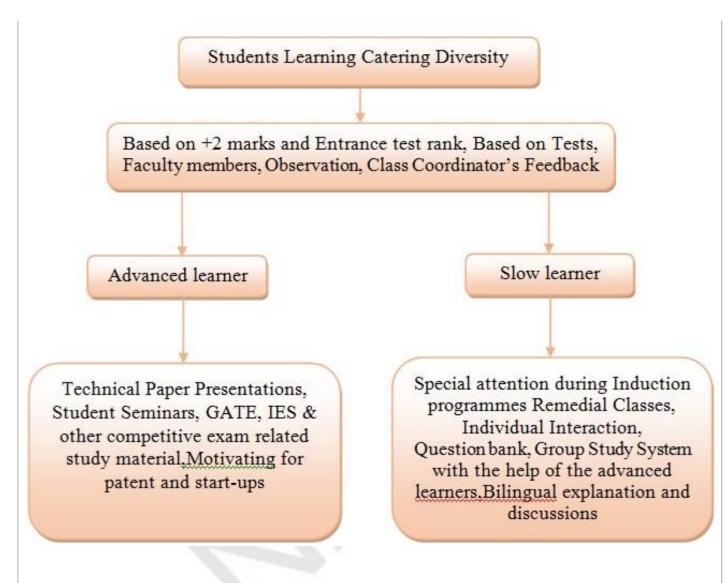
The performance assessment of the students commences at the institute right at the beginning as the students enter the college. As per AICTE guidelines, a 15-days induction program is organized by the institute that includes various skill development activities to access student's levels irrespective of their results of senior secondary.

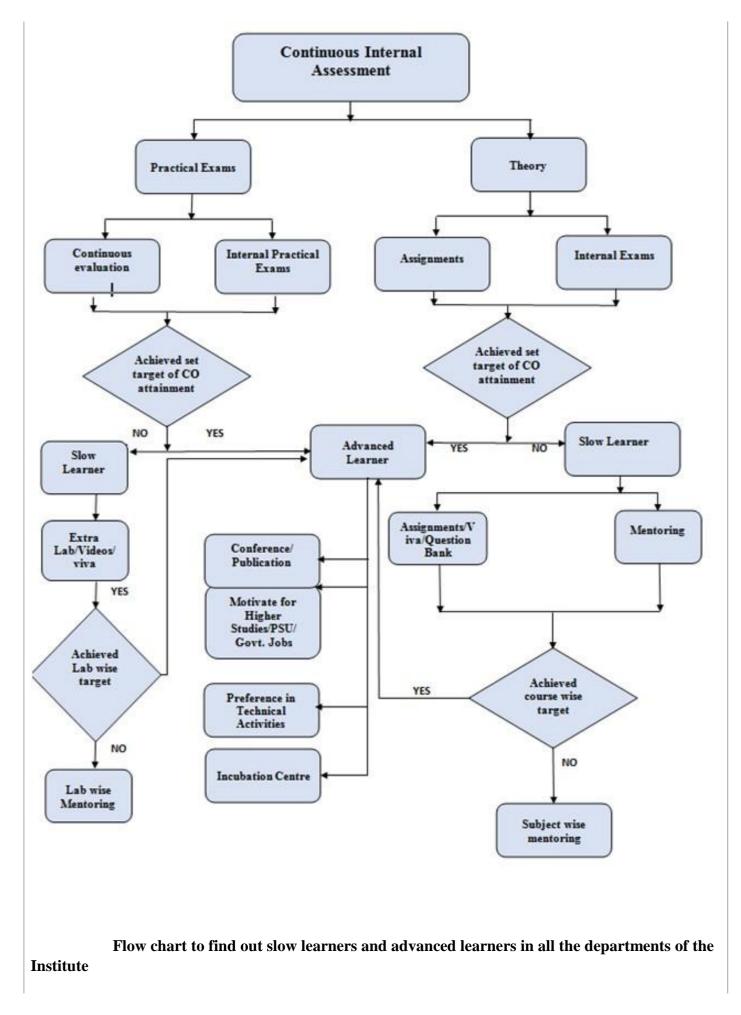
Advanced and slow learners are categorized with the aid of continuous internal assessment based on the achievement of the set target of CO attainment in the internal examination, and practical examinations. If the obtained marks in all the CO's are greater than 60%, then the student is considered an advanced learner. Those students who fail to achieve the set target of CO attainment i.e. 60% are categorized as slow learners.

Mentoring of students is carried out to improve the academic performance of slow learners. Along with that, supplementing the class notes with additional (Revision) study material, discussing University questions and answers, and giving some specific assignments to them, help in improving their overall academic performance. After that, reassessment is done to access the improvement level of the students. If the targets are not achieved after reassessment then counseling sessions are carried out to motivate them towards their improvement in academics.

Advanced learners are encouraged to participate and present papers in various seminars/conferences/workshops. They are also encouraged to participate in inter-college and intra-college curricular and co-curricular activities, lab, institute events, and organizing committee. They are also motivated to participate in project developments, start-ups, and incubation centre activities. Meritorious students from every semester in respective departments are awarded certificates.

The Flow chart below illustrates the process to find out slow learners and advanced learners at the initial level (first year):





File Description	Document
Upload any additional information	View Document
Paste link for additional Information	View Document

#### 2.2.2 Student- Full time teacher ratio (Data for the latest completed academic year)

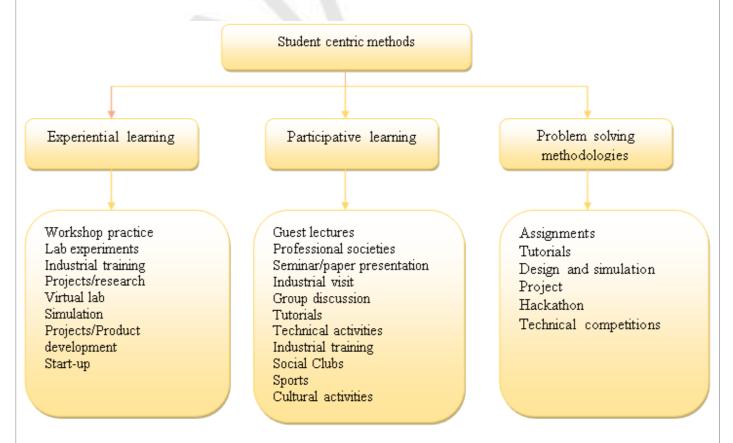
Response: 17:1	
File Description	Document
Any additional information	View Document

#### 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:**

Student-centric teaching-learning methodologies have been effectively adopted by the Institute to develop the learning aspirations of students. The following measures are taken to make learning student-centric:



**Experiential learning:** The Institute focuses on imparting that kind of knowledge which enhances critical thinking and gives scope for creative imagination among students so that when they grow up they become a responsible citizen of the country. This type of learning is provided to the students by the means of

- Practical and Designed Experiments in laboratories
- Projects development
- Industrial Training
- Incubation Centre activities
- Startups
- Workshops

**Participative learning:** In participative learning, students are encouraged to participate in various technical, cultural, and social events. Different sports activities are carried out in which students participate to exhibit talent in a variety of games to cultivate the spirit of unity and leadership. Students are encouraged to participate in inter-university competitions, technical competitions, sports competitions. To inculcate human values social clubs are run by the students which are mentioned as follows:

The Social Arms of JECRC are as follows:

• **Zarurat:** "The Help Beyond" an Initiative by JECRC students for social concern that is educating the underprivileged kids who can not avail the facility of schooling.

**Limca Book of Records (National Record):** Students of Team Zarurat, JECRC, Jaipur assembled 24,626 tricolored handmade origami flowers in a flower basket - a record for the largest display of origami flowers - at the college premises.

- **SOCH (Soch kuch kar dikhane ki):** Soch is a social initiative in JECRC started by the students to help needy persons of slum areas.
- **ASHAYEIN:** "Aashayein Ek Abhiyaan" is a club managed and run by JECRCians. The objective of Ashayein Club is Blood donation, Fest and Birthday Celebration in Old Age Homes, and Tree Plantation.
- **SUHASINI** is a social initiative taken by the students of JECRC to create awareness towards the education of girl child in society. This group is working on the motto "BETI BACHAO BETI PADHAO" motto.

Cultural events are carried out to make learning more interactive and collaborative.

**Problem Solving Event:** Problem-solving skills being the most valued skills in the workforce. The faculty educates students with problem-solving skills like problem identification, selection of the right methodology for solving the problem, and evaluating the results before dissipation. Also, faculty members discuss the problems in the classroom and give assignments/tutorials to the students. Assignments are designed to promote understanding of concepts taught in theory along with their practical applications. Also, in lab hours, students learn Problem solving methodologies through simulation which includes Define the problem, Create a model, Develop a computational method for solving the problem, Implement

the computational method, and testing the solution.

Projects also encourage creativity, innovation, and adaptation of ideas to yield multiple need-based solutions to meet the challenges of contemporary society. Students are given projects to find creative solutions to the real-world problems and challenges of organizations they work with.

File Description	Document	
Upload any additional information	View Document	
Link for additional information	View Document	

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

#### **Response:**

JECRC College, being an Engineering College, encourages the use of ICT enabled tools, online resources for effective teaching and learning process. Faculty members use ICT tools and resources available on the college campus such as Projectors, Video Conferencing, Google Classroom, Google quiz, MOOC, and various e-learning technologies. The institute campus has well-equipped seminar halls, auditorium, and conference room with ICT facilities. Faculty members have developed e-content of their respective subjects. Guest lectures and invited talks arranged by industry experts. ICT enabled tools used for students' development in the following manner:

- Attending classes through Google classroom, google meet, zoom, etc.
- Attending Virtual Labs/Lab videos.
- Videos made by faculty members and uploaded on website.
- Receiving information about curricular, co-curricular, and technical activities.
- Company-specific training and Placement drive.
- Industry Institute Interaction.
- Swayam Prabha, NPTEL, MOOC videos.

The faculty uses ICT facilities for the following purposes.

- Dissemination of video lectures, video labs/virtual labs.
- Swayam Prabha, NPTEL, MOOC videos.
- Industry Institute Interaction (FDP/Conferences/Webinars.)
- For continuous assessment (assignment/tutorial,etc.).

ICT enabled tools are also used for Industry-Institute Interaction as well as interaction with alumni in the following ways:

- Information for placement, industrial visit, and industrial training.
- Add-on Courses
- Recent advancement in technology ( For gaps)
- Invited talks

• Alumni meet

File Description	Document
Upload any additional information	View Document
Provide link for webpage describing the ICT enabled tools for effective teaching-learning process.	View Document

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

Response: 20:1

2.3.3.1 Number of mentors

Response: 190

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

#### 2.4 Teacher Profile and Quality

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

**Response:** 111.87

File Description	Document
List of the faculty members authenticated by the Head of HEI	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document

## 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: 18.61

## 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	
64	58	38	31	23	
File Description					
File Descriptio	on		Document		
-	on ta in prescribed form	at	Document View Document		

# 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: 5.07 2.4.3.1 Total experience of full-time teachers Response: 1155.83 File Description Document Institutional data in prescribed format View Document Any additional information View Document

#### **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 institute takes various measures to increase the efficiency and effectiveness of the students and continuous internal assessment. There is complete transparency in the internal assessment as described below.

#### **1. Midterm Examination**

- The schedule of Midterm test is given in the Academic calendar which is displayed well in advance before commencement of the session.
- The evaluation method comprises of internal examinations held progressively during the semester and is designed to check the periodic performance of the student.
- The internal examination schedule is displayed on the notice board in advance.
- Two sets of question papers for each subject are set based on Course Outcomes by the respective faculty members along with model answers and marking scheme and moderation

committee approves one set of question paper.

- The examination evaluation is performed on the basis of course outcomes which ensure the result of the achievement of outcomes. Generally, this criterion for achievement is 60%.
- Each faculty member shows internal examination answer books after evaluation to the students in the class for self-evaluation, discussion, and verification of marks.
- Students are free to interact with the teacher to resolve grievances if any, regarding the assessment. If the student is still not satisfied with the evaluation of the answer sheet then he/she can go to the grievance cell and fill the grievance form regarding the evaluation of the answer sheet.
- Finally, the marks of students are displayed on the notice board within a week after the end of the Midterm test.

#### The Theory subjects are assessed through:

- Two internal tests
- Assignments

#### Practical subjects are assessed through:

For internal assessment of practical, evaluation is based on different parameters like Practical Records, Performance, and Viva-Voce. Day to day performance of the students is assessed for every experiment which includes regularity, performance, viva, and promptness in submitting the record.

#### **Projects work assessment:**

To ensure the quality of projects, the department has drafted a committee named as **Project Assessment Committee (PAC)**.

- The project ideas received from the students and faculty members are filtered by the **PAC** on the basis of CO's. The final list of finalized projects has been made and display on the notice board.
- The student/team can select the project from the finalized list of projects according to their interest.
- A faculty member is appointed as a project guide to each group as per the faculty's expertise field.
- The project coordinator displays the deadline on the notice board for the progress report presentations and final submission of the project report.
- Progress report presentation followed by viva-voce has been carried out twice in a semester in front of Project assessment committee, then Project assessment committee review the progress and gives suggestions.
- A presentation followed by viva voce is also carried out at the end of the semester in front of the external examiner and other students.

File Description	Document	
Any additional information	View Document	
Link for additional information	View Document	

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

#### and efficient

#### **Response:**

The institute has a well-structured mechanism for the redressal of grievances after evaluation of answer sheets through the following steps:

Students are free to interact with the teacher to resolve grievances if any, regarding the assessment. If the student is still not satisfied with the evaluation of the answer sheet then he/she can go to the grievance cell and fill the grievance form regarding the evaluation of the answer sheet. The students can apply within seven days after the declaration of the result. The grievance cell sends the student grievance to the IQAC and IQAC gives instructions to the department to appoint a subject expert other than the previous assessor. If there is a change in score, it is corrected by the department examination cell. Department examination cell has to declare the final revaluation result within seven days and send the final report to the IQAC.

File Description	Document
Any additional information	View Document
Link for additional information	View Document

#### 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:**

The institute is committed to provide the best education to students and to act as a catalyst in shaping a bright and sustainable future for the students. The Program outcomes are a set of competencies, skills, and abilities that the students develop, within their course of study. Programs offered are synchronized with the vision of the institute and thus program/course outcomes help in creating competent and skilled students. The vision, mission, program outcomes, and program educational objectives of different programs offered are displayed at various locations on the campus. With the help of this, the students can achieve critical and analytical competencies, creativity and problem solving, interpersonal skills, etc. Faculty members in each department prepare course outcomes of their concerned subjects and discussed with other faculty members for the suggestions. Departments have also prepared program-specific outcomes which are displayed at various locations in the department as well as the website of the institute. Course outcomes are prepared to provide deep knowledge to be acquired in the particular subject domain for theoretical and practical learning outcomes. Course outcomes are conveyed to the students through subject faculty members in the introductory class. Course outcomes are mapped with Program outcomes so that students can gain critical thinking, decision making, inter-personal and leadership skills, behavioral change, creativity, research, innovation, entrepreneurial skills.

The POs/PSOs are published and disseminated among:

- College Website
- HoD office
- Staff Rooms
- Class Rooms
- Notice Boards
- Laboratories
- Library
- Magazines and Newsletters
- Course Files
- Lab Manuals
- Placement office
- Alumni connect cell
- Professional bodies

#### While COs are published and disseminated among:

- College Website
- Course Files
- Lab Manuals
- Question Papers
- Assignments

File Description	Document
Upload COs for all courses (examples from Glossary)	View Document
Upload any additional information	View Document
Paste link for Additional information	View Document

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

#### **Response:**

Internal assessment is the requirement of the continuous assessment and is essential for the fulfillment of the COs, POs/PSOs. The institute follows Outcome Based Education which evaluates the performance, knowledge, and skills of the student through Course Outcomes, Program Outcomes, and Program Specific Outcomes. According to Bloom's taxonomy, course outcomes of all the subjects are designed individually and mapping of CO-PO/PSO is carried out for each course.

IQAC deals with the effective implementation of the evaluation reforms regarding the attainment of course outcomes, programme outcomes, and programme specific outcomes. The IQAC has designed tools to

assess the attainment of program outcomes, programme specific outcomes as well as course outcomes. The course outcome target attainment level is set as 60% for all the courses. The CO-PO/PSO attainment has been carried out by considering direct and indirect attainment tool. The direct attainment tool includes continuous assessment via test, assignments, internal assessment, and end semester examination result. Indirect assessment is carried out using feedback from students.

Direct assessment of students for attainment of program outcomes is carried out using MTT result, final RTU result, project, lab/experiments, and industrial training while indirect assessment of students for attainment of program outcomes is carried out through Placements, Students curricular and co-curricular activities, course exit survey, program exit survey from students and Alumni feedback.

File Description	Document	
Upload any additional information	View Document	
Paste link for Additional information	View Document	

#### 2.6.3 Average pass percentage of Students during last five years

#### Response: 82.98

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
833	798	892	911	841

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

2	2019-20	2018-19	2017-18	2016-17	2015-16
1	.027	1051	1082	1061	931

File Description	Document
Upload any additional information	View Document
Institutional data in prescribed format	View Document
Paste link for the annual report	View Document

#### 2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process		
Response:		
File Description	Document	
Upload database of all currently enrolled students (Data Template)	View Document	
Upload any additional information	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: 66.56

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
0	0	24	0	42.56

File Description	Document
Institutional data in prescribed format	View Document
e-copies of the grant award letters for sponsored research projects / endowments	View Document
Any additional information	View Document

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

#### Response: 6.67

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

201	9-20	2018-19	2017-18	2016-17	2015-16
	0	0	1	0	1

#### 3.1.2.2 Number of departments offering academic programes

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

File Description	Document
Supporting document from Funding Agency	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Paste link to funding agency website	View Document

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

#### Response: 182

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
57	48	41	19	17

File Description	Document
Report of the event	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document

#### **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: 0.595

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

2019-20 201	18-19	2017-18	2016-17	2015-16
52 29	2	25	7	6

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document

**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: 0.88

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
30	34	65	18	29

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Any additional information	View Document

#### **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:**

Jaipur Engineering College and Research Centre fosters holistic development of a student to sensitize them with social, intellectual and ethical values. The institution has encouraged various extension activities in the neighbor-hood community through social faces: Aashayein, Zarurat, Suhasini and Soch.

#### Aashayein-The Life Saviours

Aashayein is a group started in 2013 to fulfill the demands of Blood and SDPs. The team strive day and night to spread smiles to as many lives as possible by providing the needy with blood and SDP It has the record of saving more than 1400 lives and has collected 16,677 units of blood till now. The students of JECRC are also registered with many hospitals for helping in pandemic situations.

**Events:** 

**Blood Group Check-up Camp:** Team is available 24\*7 for the patients suffering from dengue, thalassemia and other related diseases.

Blood Donation Camp: To save many invaluable lives.

Old Age Home Visit: To give students an opportunity to spend blissful moments with the elders.

Felicitation Day: applaud the contribution of every single SDP donor.

#### Zarurat-The Help Beyond

The roots of ZARURAT were sowed on 20th November 2011 to provide free of cost elementary education to the underprivileged children living in the nearby slum areas of JECRC. It develops leadership qualities, interpersonal relationships and moral values in students.

#### **Events:**

Saturday Activities: The team maps the overall growth of the children.

Joy of Giving Week (DaanUtsav): Different events organized to bring smile on the faces of kids.

Children's Day Celebration: Different fun activities organized on 14th November for Zarurat kids.

Founders' Day Celebration: On 20th November, all the founder members are thanked.

Zarurat Celebrating Innocence: Almost 200 kids from prominent NGOs are acknowledged.

Limca Book of Record (Largest Display of Handmade Origami Flowers): Team registered in 2017.

Rajasthan Book of Record (Big Picture of Mahatma Gandhi and Lal Bhadur ShastriJi): Team registered on 2nd October 2019.

#### SOCH

SOCH began its journey in August 2014 to process active thinking among people and to eradicate the negative norm developed by the society.

#### **Events:**

Cleanliness Drives: To spread awareness about cleanliness.

Foundation Day Orphanage Visit: To spread smiles on the faces of children and adults of the orphanage.

**Vastra Samman**: Clothes and other essentials are distributed to the poor and needy on the occasion of Diwali.

**OCIP**: A whole day is spent with orphans invited in the college from various orphanages.

#### Suhasini

The foundation of Suhasini was laid down on 24th January 2015 (National Girl Child Day) to aim women empowerment by connecting them with mainstream education. Suhasini has connected more than 12, 000 people from different areas of Jaipur and has brought more than 200 girls to the education mainstream.

#### **Events:**

**Road Shows:** To connect with the masses for the cause.

Seminars and Presentations on Women Health and Hygiene: 'Story behind Red, an awareness campaign organized for menstrual health and hygiene.

**Celebration of International and National Girl child Day:** Timely celebration at college campus as well as in city areas.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

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

**Response: 3** 

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
2	0	0	1	0

File Description	Document
Institutional data in prescribed format	View Document
e-copy of the award letters	View Document
Any additional information	View Document

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: 45

# 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., yearwise during the last five years

2019-20	2018-19	2017-18	2016-17	2015-16
17	14	7	3	4

File Description	Document	
Reports of the event organized	View Document	
Institutional data in prescribed format	View Document	
Any additional information	View Document	

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

#### Response: 69.98

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
4165	3573	2713	1582	2151

File Description	Document
Report of the event	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document

#### **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:** 45

#### 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 5 11 13 12 4 **File Description** Document Institutional data in prescribed format View Document e-copies of linkage related Document View Document View Document Any additional information

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

#### Response: 36

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
10	12	11	2	1

File Description	Document
Upload any additional information	View Document
Institutional data in prescribed format(Data template)	View Document
e-Copies of the MoUs with institution./ industry/ corporate houses	View Document

#### **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:**

JECRC has so far completed its memorable journey of two decades. Every year on average of more than 900 engineering graduates pass out from this institute to make their mark felt in the global arena. At any given time, it is having more than 4000 students on its campus under the 7 UG programs. The institute has created the world-class infrastructure to impart quality education to its students and it is constantly updating its infrastructure facilities from time to time by renovating and adding infrastructure and facilities.

JECRC is spread on sprawling 10 acres of green campus. It has sizable and sufficient capacity classrooms, laboratories, and other computing facilities and adequate infrastructure as per the norms prescribed by All India Council for Technical Education (AICTE). The entire campus is under CCTV surveillance for safety and security purposes. Also, the college has campus-wide Wi-Fi access, free email accounts for its faculty and staff with unlimited cloud storage, and many more facilities. High-speed internet connectivity of bandwidth 250 Mbps with Wi-Fi access across the campus.

The institute has the following Centre of excellence in the area of:

- JECRC Incubation Cell (JIC) coordinates and leverages the synergies in various strands of excellence driving innovation and entrepreneurship at JECRC, Jaipur consisting of cutting-edge research, industrial interactions.
- Spiritual Research Lab which has a soundproof 'Meditation Room' developed as a silence zone for meditation and self-contemplation. It also includes a Spiritual Library, with a collection of best selling spiritual and inspirational books. A Research Laboratory for researching meditation is equipped with EEG, EMG, Karada scan, Aura Scanning, and other health monitoring devices.
- Infosys campus connects collaboration in which technical and soft skills trainings are given to students.

Some of the facilities which have been created for technical enrichment of students are as follows:

- 3D printing lab
- Workshop of design and fabrication for GOKART and ATV
- Industry support automobile training centre in the association of BABA automobile,
- Computer-aided design centre in association with CADD centre,
- IOT centre using raspberry pie, a coding centre for C language, java, python, .net, etc.
- The robotic club of the institute is developing Drones, Humanoids, and other socially beneficial projects.
- ICT enabled classrooms and seminar halls

The conference hall has a capacity of 50 seats and seminar halls have a capacity of 100 with the necessary Projector, screen, whiteboard, audio-video systems, and recording facilities. An auditorium of 300 seats wherein institute's wide events like conferences, cultural festivals, and meetings are held with a provision

of live filming and well-equipped audio-video broadcast facilities and necessary enclosures.

The Institute is equipped with a rooftop Solar System which ensures environmental sustainability.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

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

#### **Response:**

The students of the institute participate in cultural activities at the state and national levels. This not only sharpens and develops the creative skills of the students but also create awareness about social issues amongst the students.

Cultural activities are essential for all-round personality development of the students which in turn enables them to achieve excellence in their career. Some of the socio-cultural initiatives of the institute are as follows:

- Zarurat, Aashayein, Soch, and Suhasini the Social Arm of JECRC Foundation represents the four initiatives led by students, aiming the growth and development of all the sectors simultaneously.
- Nukkadnatak that creates social awareness
- Vande Mataram is another event that is loved by the entire JECRC Family and with a presence above 5000 people every year.
- The JECRC Blood Donation Camp is one of our oldest traditions of serving the community. With more than 1500+ donations every year this festival of celebrating life is now yours to participate in.
- The institute has a creative club-like Atrangi (Includes poetry competition, open-mic storytelling competition, poster competition, best out of waste, Kavi Sammelan, etc.)
- Fotografreaks, which is the photography club of JECRC, students of this club are responsible to create memories of all the amazing things that happen on this campus.
- The dramatics club named face n footlight.
- Our very own bhangra crew is called Khalas.
- The group for contemporary dance forms called Enigma.
- JECRC MUN has an eight years old legacy. Till the eighth edition, Institute has hosted approximately2500 delegates, including international delegates as well.

The students are given free access to seminar halls, open space, auditorium, and other rooms to rehearse for multiple events.

The institute has adequate facilities for the promotion of sports as per AICTE norms.

• Sports competitions are organized under the supervision of a qualified sports officer. A good

number of students have bagged first prizes (shields and trophies) at other institutes in face of very tough competitions. Institute has ample facilities for indoor and outdoor sports. Special self-defense classes have been initiated for female students where they are taught the art of Karate.

- Regular Yoga sessions are arranged to channelize the focus and energy of students and faculty members to train and sharpen the body, mind, and spirit in the right direction. This is supported by celebrating the International Yoga Day every year.
- Yoga and meditation are performed at Spiritual Research Cell, JECRC.
- The institute has all necessary kits, accessories and courts for indoor and outdoor sports viz. cricket, football, basketball, volleyball and badminton, table tennis, carrom, chess, ludo, indoor badminton and gymnasium.

File Description	Document
Upload any additional information	<u>View Document</u>
Paste link for additional information	View Document

## **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: 60

File Description	Document
Upload any additional information	View Document
Institutional data in prescribed format(Data template)	View Document
Paste link for additional information	View Document

### **4.1.4** Average percentage of expenditure, excluding salary for infrastructure augmentation during last five years(INR in Lakhs)

Response: 14.16

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
12.55	196.54	304.40	1043.67	140.84

File Description	Document
Upload audited utilization statements	View Document
Upload any additional information	View Document
Institutional data in prescribed format(Data template)	View Document

#### 4.2 Library as a Learning Resource

#### 4.2.1 Library is automated using Integrated Library Management System (ILMS)

#### **Response:**

- JECRC central library was established in 2000 to support the Educational and Research objectives of the institute by providing information in the field of basic science, engineering, humanities, and related fields.
- The library is using ALICE an integrated Library Management software package for issuing the books and keeping the details of the books issued.
- The modules of software support all the activities of the circulation section including the issue and return of books, book reservations, reminders and recall of books, and overdue charges.
- There are dedicated terminals (OPAC System) for searching the library collection and Rack index. Following modules of Integrated Library Management Software are used:
- Circulation: Books Return and Issue
- Cataloging: Preparing online Catalog and Classification
- \* Serial Control: Receiving/Tracing of Subscribe Print Journals Issues.
- Reports: Generate Reports(Statistics ) like All Long due to pending books, Today's Return/IssueBooks, etc.

Software	Automation	Version	Year of pure
LS for windows	Partially	6.0	2008
•			
•			
•			
• The library has su	bscribed to 36 international and	national journals.	

- JECRC central library has a total of 29113 volumes, 5181 titles, 37 Journals, and 8122 e-books are available.
- The library offers services such as a Book borrowing facility, Newspaper clipping.
- The Campus has a spacious central library with a total area of 880 m2.
- The dedicated staff helps the students find the necessary titles.
- The books are indexed, categorized according to programs and subjects.
- The library has over two thousand books related to the non-engineering genre. Where students canlearn about daily life, become better at decision making, and learn about self-development.
- Institute has books for competitive exams like GATE, CAT, and other government conducted tests.
- Library also possesses some reference books for better development.
- Students are also given special access to registered websites where they can read about the latest research, development, and other developments going on in the respective field. (e.g. IEEE, Research GATE)
- All the labs are equipped with Internet connections, which makes it easier to connect to the up to date and latest technology of the respective field.
- Library also has recorded videos of NPTEL and swayam prabha course contents which will be useful for teacher training and it will improve the quality of content to be delivered to students. For this purpose, 15 systems are provided.

File Description	Document	
Upload any additional information	View Document	
Paste link for Additional Information	View Document	

#### 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	View Document
Institutional data in prescribed format(Data template)	View Document

## **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: 1.668

## 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
2.81	2.07	1.32	1.79	0.35

File Description	Document
Institutional data in prescribed format(Data template)	View Document
Audited statements of accounts	View Document
Any additional information	View Document

## **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: 5.04

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

Response: 204

File Description	Document	
Details of library usage by teachers and students	View Document	
Any additional information	View Document	

#### **4.3 IT Infrastructure**

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

#### **Response:**

As per AICTE norms, the institute creates and enhances the infrastructure to facilitate effective teaching and learning which consists of ensuring maximization and optimization of space and infrastructure so that the end-user gets the best out of the available.

The institution is continuously updating its IT facilities such as internet bandwidth, the configuration of computers, laptops, LCD projectors, ICT facilities, etc., to provide state of the art infrastructure for the teaching-learning process. During the start of the academic year, the requirement for replacement and updating of existing IT accessories and the purchase of new equipment is collected from each department.

The institute is very keen on upgrading internet bandwidth from time to time. Currently, internet bandwidth has been increased to 250 Mbps to provide internet access. Wi-Fi facility is provided all over the campus.

At present, the institute has 868 systems, 762 systems out of them are in various laboratories to meet the requirements of curriculum and content beyond the curriculum to make them contemporary and industryready. Currently, the configuration of computers is upgraded significantly, In addition to this, all CRT monitors are completely replaced with LCD monitors. To provide security from unauthorized users, the institution is using the Sophos firewall to prevent illegal access to the internet. All departments have printers in various sections like an exam, placement cell, etc. The printer is available in the Principal office, all HOD chambers, and other higher administrative official's offices. A laser printer is available in all the departments to take printouts.

Computer labs with the latest software and Internet facility are available to the students. Hardware and software updation take place in line with the demand of the latest syllabus as well as student's feedback. Bio-metric Attendance System has been effectively implemented in the institution. CCTV cameras have been installed in all the prominent and required venues to achieve 24x7 campus surveillance The maintenance of computers, and installation of software are done by programmers whereas, hardware and internet related issues are handled by hardware and networking professionals.

File Description	Document	
Upload any additional information	View Document	
Paste link for additional information	View Document	

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

#### Response: 5:1

File Description	Document	
Upload any additional information	View Document	
Student – computer ratio	View Document	

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

#### **Response:** A. ?50 MBPS

File Description	Document
Upload any additional Information	View Document
Details of available bandwidth of internet connection in the Institution	View Document

#### 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: 2.19

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
4	45.91	60.21	46.55	62.13	48.42

File Description	Document
Upload any additional information	View Document
Institutional data in prescribed format(Data template)	View Document
Audited statements of accounts	View Document

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:**

#### LABORATORIES

- Laboratory in charge, along with their respective laboratory assistants, ensure proper working of all equipment at the beginning of each semester. Repair and maintenance of equipment and instruments are initiated by Laboratory In charges as and when required and the same is communicated to the respective HOD for further action.
- Before the commencement of the academic year, a lab audit is conducted and a report on the requirement of new equipment, is prepared along with the requirement of consumables, non-consumables as per the university guidelines to conduct experiments.
- Maintenance of computers is taken care by the computer science & Engineering department.
- According to the time table, the students perform their experiments in their assigned labs in the supervision of faculty member and lab technicians
- Installation of antivirus and firewall ensures that the software and system are secured.
- If the problem is minor, the technical support staff of the lab rectifies it for major problem experts from the outside agency been called.
- Periodic maintenance is done by regular cleaning of the lab spaces, software updates, and antivirus updates.
- The stock is verified for the available equipment and discarded equipment, by a stock verification

process by HOD.

• Fire Safety equipment is maintained in labs as a precautionary measure.

#### LIBRARY

- Books are issued on the presentation of the library card. Issue of books is initially for a period of 14 days and the book is to be returned on or before the due date stamped on the slip pasted on the book.
- If the due falls on a holiday the next working day shall be the due date. Books that are in circulation can be reserved.
- Books that are to be reserved will not be renewed and reissued.
- If the books are lost, then the borrower replaces the books of the same edition or latest edition or pays double the cost of the book after getting permission from the Principal.
- Loss of borrower card is reported to the librarian in writing. After checking the borrowing register they will be issued a duplicate card. Library borrower cards are valid for the respective academic period.
- Library updates its books repository on regular basis. Requisitions from the faculty members are collected in the prescribed format for books to be procured.
- The Library committee discusses and approves the procurement of these books.
- Stock verification of all library books, print journals, etc is carried out once in two years.
- The library facility is available from 8 am to 6 pm from Monday to Saturday, which is extended to 8 pm during the examination period.

#### **SPORTS**

- Students are permitted to play only during sports hours and to practice for any competition.
- Students are permitted to utilize and take sports material with prior notice to the Physical instructor.
- In case of any damage observed, the same is recorded in the register pending further action.
- A first aid box is always available for the students in case of any emergency.

#### COMPUTERS

- All the classrooms in the institute are ICT enabled. Exclusive personnel from the hardware maintenance department are available to constantly monitor, repair, and keep up the usage of the systems.
- Additional portable projectors are available in each department in case of failure of any classroom projector to enable smooth classroom delivery without causing disturbance to the lecture.
- Computers are upgraded based on the compatibility required for software and academic requirement. Stipulated procedures are documented and executed for the maintenance of the systems.

#### CLASSROOMS

- All the classrooms, laboratories are utilized optimally during college hours and even kept open beyond college hours and on Sundays when required by students and faculty for project work.
- Classrooms and computer laboratories are utilized for various competitive examinations which are usually conducted on Sundays.
- The cleaning of the classrooms is done every day.

• In case of any damage to the projector, internet, or the audio systems, the class co-ordinator brings it to the notice of the HOD by registering the problem in the breakdown register. The necessary follow up is done by the department and steps are taken to fix whatever is broken.

Maintenance of the entire campus is carried out with proper planning, without disturbing any academic activities by the institute's dedicated team. Annual Maintenance Contract is signed for Generator, UPS, Water Purifier, Air conditioners, etc.

The general cleanliness of the entire campus is maintained by the housekeeping team. Safety of personnel, buildings, and equipment is ensured by periodic testing and maintenance of the fire protection system and equipment. Utilization and maintenance of playgrounds and all sports-related equipment and its servicing are carried out under the supervision of Sports In charge.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

#### **<u>Criterion 5 - Student Support and Progression</u>**

#### 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: 5.692

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
220	250	245	340	120

File Description	Document
upload self attested letter with the list of students sanctioned scholarship	View Document
Upload any additional information	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: 2.56

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	
250	250	0	0	1	
ile Descriptio	n	D	ocument		
-	n litional information		Pocument		

**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

<b>Response:</b> A. All of the above
--------------------------------------

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Link to Institutional website	View Document

## **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: 33.46

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
387	224	373	386	241

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document

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
Upload any additional information	View Document
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	View Document
Details of student grievances including sexual harassment and ragging cases	View Document

#### **5.2 Student Progression**

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

#### Response: 57.074

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
744	585	527	429	485

File Description	Document
Upload any additional information	View Document
Self attested list of students placed	View Document
Institutional data in prescribed format	View Document

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

#### Response: 15.29

5.2.2.1 Number of outgoing student progressing to higher education.

#### Response: 154

File Description	Document
Upload supporting data for student/alumni	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document

#### 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: 17.75

## 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
82	47	70	69	24

# 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
387	224	373	386	241

File Description	Document
Upload supporting data for the same	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document

#### **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: 125

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
26	14	34	42	19

File Description	Document
Institutional data in prescribed format	View Document
e-copies of award letters and certificates	View Document
Any additional information	View Document

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

#### **Response:**

JECRC believes in the holistic grooming of students and hence the institute stress equal emphasis on round the year extra-curricular & co-curricular activities which are facilitated through the various active student clubs at JECRC. One of the many reasons why our students have done wonderfully well year after year in their campus placements is that they are not just technically sound but have inculcated the necessary confidence and capabilities to do well in the demanding & rapidly transforming corporate world. Students take part in different activities under various clubs.

#### Moon Riders:

Moon riders formed in 2009, is a group of auto enthusiasts burgeoning into engineers. It is a diverse team of talented engineering students from different majors of study like Mechanical, Electrical & Computer Science. The team to its credit has an All-Terrain Vehicle (ATV) developed in our state of the art workshop and was selected to represent India at Formula SAE, Italy.

#### Xananoids:

Xananoids is the robotics club at JECRC. Established way back in 2004 with a vision to make students capable with the technical knowledge to develop indigenous and cost effective robots. The team specializes in behavior based and hybrid locomotive robots.

#### Model United Nation:

The annual chapter of JECRC MUN is one of the most awaited MUNs of the region that involves academic competition and/or educational simulation where students learn about diplomacy, international relations and the United Nations.

#### Zarurat:

Zarurat, conceived in 2011 is a social service group of JECRC entirely run by its students. It works to provide free of cost elementary education to slum children and focuses on imparting them with a healthy over all development.

#### Soch:

Soch is a social initiative that aims to work for the betterment of the society. Its aim is to help the underprivileged sections of the society and to work at grassroots level and serve the needy byproviding them with the necessities of love and care.

#### Live Blood Donation Initiative-Aashayein:

Aashayein is a unique student initiative of JECRC that works 24\*7 to meet the blood requirements of families in distress. These students are available round the clock for live blood and platelets transfusion and save lives of over a hundred patients suffering from dengue whenever this deadly disease hits the city.

#### Photografreak:

Photografreaks is the official photography club of JECRC. Initiated by students who have a penchant for capturing the finer details, the group focuses on honing the talent of amateur photographers.

#### Face &Footlite:

Face & Footlite consists of a bunch of talented students of JECRC with a knack for drama and theatrics. These students perform street plays on relevant social issues and help in creating social awareness among their colleagues.

#### Enigma & Khalas:

They say dance is the hidden language of the soul. It's not just a beautiful way to express once feelings but is also a very healthy exercise. JECRC has two dance groups, which involve a bunch of spirited souls whose expertise lie in freestyle, bhangra, and street dance forms.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

## **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: 39.8

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
32	35	39	42	51

File Description	Document
Upload any additional information	View Document
Report of the event	View Document
Institutional data in prescribed format	View Document

#### **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:**

JECRC Alumni Association is a well-established and active association to bridge the gap between college and alumni. JECRC Alumni Association is a strategic asset of JECRC to maintain a strong relationship with its alumni which is creating a powerful positive impact to the institute academically, socially and professionally. JECRC Alumni is responsible for keeping complete track of alumni with their required details, informing them about the achievements of the institute. Along With our hundreds of notable alumni JECRC boasts of having 9000+ alumni in 30+ countries in 1000+ organizations out of which 180+ are the International organizations.

Alumni visit campus at regular intervals to support the existing batch of students in planning and organizing events, extend support and guidance for functioning of various students clubs. During many interactions alumni have highlighted the importance of current trends in the market and guided the students about the career opportunities in different fields. Alumni who are entrepreneurs have been providing inputs on how to start a new venture and turning them in to job providers. Whenever these alumni visit the campus they motivate students to follow their path for the betterment of the society.

The JECRC Alumni organizes many **Alumni Meets** every year. During the program alumni give insights of various specializations and industry to the existing batch of students. Alumni association provides continuous support to students for summer internship, winter internship and placement assistance, judging & mentorship, training, online sessions.

JECRC has started to harness the power of alumni through various networking platforms like Linked-in, Facebook, Twitter etc. by creating JECRC Alumni accounts on these platforms. JECRC Alumni believes in giving back to alma mater.

Alumni contribution happens in various non-financial forms such as:

(1) **Expert Guests:** Experiences that are shared by JECRC alumni with students whether in time management, financial management, development of self-discipline and character, or in career management are accepted as guidance and inspiration by students.

(2) **Placements:** The alumni network of JECRC Foundation is one of the finest sources of placement opportunities to the students. Alumni helps students get placed at their respective organizations.

(3) Career Guidance & mentorship: JECRC Alumni play an active role in voluntary programmes like mentoring students in their areas of expertise, supporting the students by mentoring them on their career opportunities in the industry and opening channels for the students for acceptance, either in undergoing practical learning or work experience in the institutions where the alumni reside in.

(4) Networking Platform: JECRC alumni network by itself is one of the best professional networking platforms available today.

Besides that, the JECRC alumni also contribute by providing their expertise in their occupation in developing new study programs in the university. Alumni contribute as a guest lecturer, advisor in committees, industry experts and cooperative partners in projects with the college. This improves the development of their alma mater. Experiences in the college and the success of the alumni in their work were the significant factors for students in our Alumni Interaction Series.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

5.4.2 Alumni contribution during the last five years (INR in lakhs)		
Response: A. ? 5 Lakhs		
File Description     Document		
Upload any additional information View Document		

#### **<u>Criterion 6 - Governance, Leadership and Management</u>**

#### 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:**

Jaipur Engineering College & Research Centre provides an ecosystem for technical, social, cultural, and research benefits of the society through the technical courses, social clubs, and research activities. The objective of the Institute is to have an all round development of all the stake holders i.e. the alumni, the faculty members and the students. The organization structure has the chairman as the root of the organization who is responsible for providing all the necessary guidelines and planning which are analyzed and implemented by the other members like director, principal and other governing members.

The vision and mission of the institute reflects the outcome of students and faculty members based on their participation in curricular and co-curricular activity at the institute which in turn transforms the student for effective participation at all levels, technically and socially. During the course of their career, the prime responsibility of various governing sections of the institute is to provide a platform to enhance technical knowledge, social awareness and initiative to take responsibility, in association with various academic industrial establishments.

The institute follows a hierarchical tree like structure where the roles and responsibilities of every individual is defined. The governing body provides a transparent environment which promotes healthy communication and zeal to work towards betterment of organization. The governing body of the institute in association with the various stakeholder like program in-charges, faculty members and other section in-charges make sure that a pre-planner curricular and co-curricular activity may be included in the academic calendar and delivered in effective manner to enhance the capability of students, so that they can emerge in various fields of profession, based on effective feedback and also corrective measures are the key to success. Initiatives taken based on the present competitive scenario are evaluated time to time to reflect the achievements of students and faculty members. Active participation of the governance motivates the faculty members and stakeholders to compete and achieve at global level.

The organization structure also controls and maintains the quality of all the decisions and planning through formation of IQAC which is responsible for assuring the quality in every frame. The decisions taken by IQAC are well taken to promote the participative management and decentralization of decision powers.

The structure of the organization ensures that the vision statement is achieved by complete participation and active involvement of all stake holders

#### Vision of the Institute:

To become a renowned centre of outcome based learning, and work towards academic, professional, cultural and social enrichment of the lives of individuals and communities.

#### Mission of the Institute:

- Focus on evaluation of learning outcomes and motivate students to inculcate research aptitude by project based learning.
- Identify, based on informed perception of India, regional and global needs, the areas of focus and provide platform to gain knowledge and solutions.
- Offer opportunities for interaction between academia and industry.
- Develop human potential to its fullest extent so that intellectually capable and imaginatively gifted leaders may emerge in range of profession.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

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

#### **Response:**

The leadership at the college level and within the constituent units ensures the development of a robust management system, its implementation, and continuous improvement; apart from creating systems for identifying the dynamic organizational needs and for fulfilling them. The organizational structure is as follows:

Governance of JECRC is the collective efforts of the following towards achieving mission and vision:

- **Board of Governors JECRC: -** The institute governing body (NSERD) regularly meets to discuss various decisions and actions taken are analyzed. All the minutes of the meeting are presented in institute BOG as per AICTE from time to time and institute performance also presented.
- **Chairman**: The in-charge of NSERD of the institute.
- Vice-Chairman: Vice-chairman stands in for the Chairman in his or her absence. And also manage all the responsibilities related to the organization and gives suggestion to the growth of the organization.
- Vice-chairperson: Vice-chairperson also stands in for chairman in his absence.
- Sr. Advisor: Are a former administrative officer and regularly interacts with various bodies.
- **Principal:** As Head of the Institution, he shall exercise his authority for institution building. He will act as a Competent Authority for all Faculty Members and office staff and be responsible for overall human resource management of their appointment, utilization, retrenchment, termination, disciplinary action. Etc. He will exercise signing powers as Competent Authority.
- **IQAC**: Internal Quality Assurance Cell takes the sole responsibility of enhancing prosperity and viability of institution by remaining vigilant about the quality of the education and other aspects with respect to grievance, maintenance, outreach, placement, etc.

**Head of the Departments**: HOD is the programme coordinator and implements all the rules and regulations of affiliating university/ AICTE within the department. His responsibility includes preparing a budget, managing resources, coordinate with institutes/industries, repute for the benefits of faculty and students. He is having special financial empowerment to deal with exigencies in the department.

**Faculty Members**: They ensure effective curriculum delivery along with participation and organize various technical and non-technical activities in the department.

**Director T&P:-** Is responsible for Training and placement related issues in the campus

**Staff:** Technical staff members work for the smooth and functioning of laboratories and non-technical staff members handle administrative assistance.

**Students:** They organize and participate in technical and non-technical activities under the mentorship of faculty members.

Maintenance In-charge: Is responsible for maintenance related issues on the campus.

Alumni In-charge: It brings together a wealth of talented and capable professionals who share their expertise and experience, and brainstorm on the prospective avenues.

**Registrar**: Deals with the implementation of policies of regulating bodies and an affiliating university.

**Chief Executive officer** Is responsible for comfortable lodging and boarding of all the students residing in hostels within the campus.

**Librarian:** Is responsible for selecting, developing, cataloging, and classifying library resources. **Accounts Officer:** The Account Officer looks after the financial resources of the institute.

#### **Decentralization of Power**

In the institute power are transferred from Chairman to the lower level it can be seen in the Organization chart

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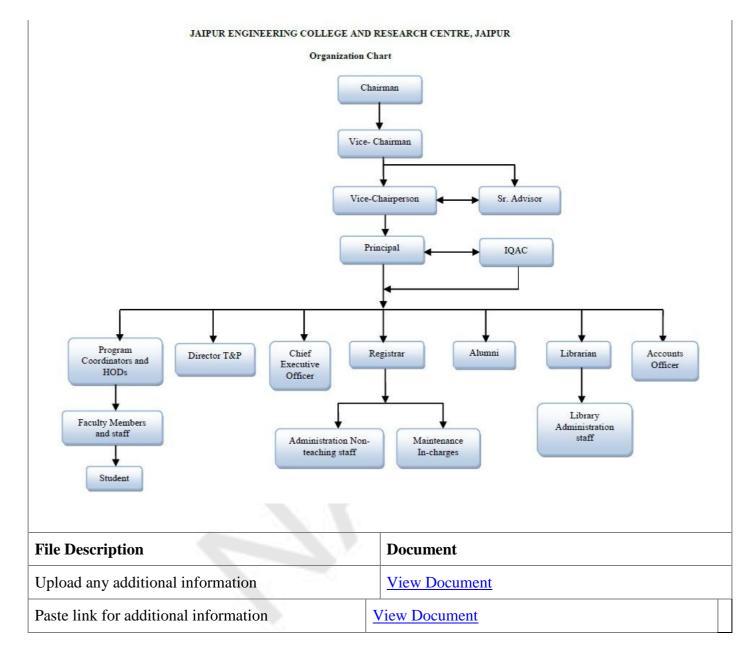
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#### 6.2 Strategy Development and Deployment

#### 6.2.1 The institutional Strategic / Perspective plan is effectively deployed

#### **Response:**

The education sector is facing a transformation phase to cater to the need of society at the global level. There are many challenges that the institutions facing today are effective curriculum delivery, planning, modernization of the syllabus, providing state of the art facilities, interaction with the industry for collaboration projects, generating funds for providing facilities that match with the need of today and are not included in the syllabus, motivation to the students, overall development of students, providing platform curricular and co-curricular activities, placement opportunities including startup and innovation, motivation to faculty members and staff, training to faculty members and staff, social initiatives, developing organizational and participative skills, etc. are some of the prime areas of focus.

Keeping in view the above-mentioned challenges in the education sector, now there is a need for strategic

planning for each and individual sector for their growth. The planning to meet challenges to bridge the gap and focuses on a vision for the future to meet global needs and requirements.

Planning and strategy is required for the following sectors:

- 1. Curriculum Delivery
- 2. Placement
- 3. Accommodation and life at campus
- 4. Faculty welfare
- 5. Curriculum enrichment
- 6. Experiential learning
- 7. Co-curricular activities
- 8. Incubation / startup
- 9. Feedback from stakeholders
- 10. Financial planning and support

**Curriculum Delivery:** Jaipur Engineering College and Research Center (JECRC) is an affiliated institution of Rajasthan Technical University (RTU) and it receives curriculum to be taught to the students as provided by the University. Looking into the global issues and diversity in Indian geographical needs and requirements, the curriculum provided by the university needs a focus on various issues viz.:

- 1. Technical knowledge with respect to core discipline.
- 2. Development of knowledge to cater to the need of the economy, society, the country as a whole to contribute to the development of the nation.
- 3. Acceptance of stakeholders (students) at the global level.
- 4. Inculcating human values among the students.
- 5. Use of cutting-edge technologies etc.

File Description	Document
Upload any additional information	View Document
Strategic Plan and deployment documents on the website	View Document
Paste link for additional information	View Document

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:**

The Institute has a clearly defined organizational hierarchy and structure to support decision-making processes. These are clear and consistent with its purposes and supports effective decision making. The organizational structure lends itself to sustaining institutional capacity and educational effectiveness through the involvement of external members in various Committees/ Boards.

The Principal/ HOD's with the help of faculty members, review the progress at various levels, and gaps are thus identified. Based on the gap various sections/committees propose necessary corrective measures. The presence of the faculty members can be found in all the various committees as under.

#### **Committee:**

#### NSERD

Board of Governance(As per AICTE) Anti-Ragging Committee Grievance Redressal Committee Women Cell Committee Students Disciplinary Council Committee Anti-Ragging Squad Committee SC/ST Cell Committee IQAC Committee

All the above-mentioned bodies regularly conduct meetings related to the smooth functioning of various sections and review the process and procedure from time to time. The policies with respect to various sections are defined and updated after regular intervals of time as the case may be. Faculty welfare, Student Welfare, appointment, and service/promotions/retention benefits rules and are clearly defined and visible.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document
Link to Organogram of the Institution webpage	View Document

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

File Description	Document
Screen shots of user interfaces	View Document
Institutional data in prescribed format(Data template)	View Document
ERP (Enterprise Resource Planning) Document	View Document
Any additional information	View Document

#### 6.3 Faculty Empowerment Strategies

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

#### **Response:**

Teaching and non-teaching staff are the key stakeholders of an institution and their growth is linked with the growth of the institution. There is a need to motivate Teaching and non-teaching staff for their career growth and also individual growth in an organization. Individual growth is linked with the freedom of taking initiatives and getting platform at different levels from organization to participation at the institute and outside the institute.

Skill development of faculty members (teaching and nonteaching staff) is carried out through various workshops/FDP conducted at institutes or other institutes.

The motivation includes financial support, paid leaves, and other benefits as the case may be. Motivation to enhance their knowledge by increasing qualification certificate, attending skill-based training and workshops, publishing papers are some of the key elements that the institution is providing.

Handbook related to faculty members is published and circulated among them for their benefit. The Handbook document includes:

- 6.3.1.1 Information about salary and pay scale.
- 6.3.1.2 Financial support as Retention benefit to staff and skill enhancement
- 6.3.1.3 Career advancement and increment based on qualification improvement
- 6.3.1.4 Holidays, leave and vacations
- 6.3.1.5 Testing and consultancy rules
- 6.3.1.6 Performance appraisal for teaching and non-teaching staff
- 6.3.1.7 Financial support for attending conference and paid leaves
- 6.3.1.8 Appraisal for startup/incubation/IPR
- 6.3.1.9 Provident fund facility
- 6.3.1.10 Maternity benefits for the staff members
- 6.3.1.11 Additional increment in salary based on performance.

(1) Various kinds of leave – Casual leave, Duty leave, and other paid leaves: The Faculty members are provided with 5-10 days of duty leaves. Faculty members are entitled to 45 days of paid leaves in a year (which includes Dipawali, winter break, and summer break). Teaching staff entitled to 15 days and

Non-teaching staff for 12 days casual leave in the year on an accrual basis.

(2) **Provident fund:** As per the rule, the non-teaching staff provided with this facility.

(3) Medical facilities: Institute has tie-up with to provide medical facilities through Apex Hospitals Pvt. Ltd. and Rungta Hospital. On subsidized rate paid maternity leaves to the account of 60 days provided to the female faculty member as per rule.

(4) ESI Scheme Facility: Non-teaching staff entitled to the benefit of the Employees State Insurance Scheme (ESI) as per the Central Government rules.

(5) Faculty Appraisal scheme: Institution has an API System for Teaching staff and Non-teaching members as prescribed by the Head of the institution.

(6) **Transport facility:** On the campus, there is a Transport (BUS) facility for Teaching and Non-Teaching Staff to get benefits as per the salary Slab.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

### 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: 40.65

template)

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	
67	130	149	115	4	
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Institutional data in prescribed format(Data View Document

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: 7.2

#### 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
10	4	7	4	11

File Description	Document
Upload any additional information	View Document
Institutional data in prescribed format(Data template)	View Document

#### 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: 60.26

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
126	153	152	113	148

File Description	Document
Upload any additional information	View Document
IQAC report summary	View Document
Institutional data in prescribed format(Data template)	View Document

#### 6.3.5 Institutions Performance Appraisal System for teaching and non-teaching staff

#### **Response:**

Institution has a Performance Appraisal System for teaching and non-teaching staff.

For teaching and non-teaching staff members, a performance-based appraisal system as prescribed

by the Head of the institution is implemented. There are laid down guidelines for the assessment of teaching staff on basis of various criteria in API such as teaching-learning profile, Research Publication activities, Faculty development programme, patents, Innovation in teaching-learning methods, Technical activity organized at college level etc and department level activities related of the concerned faculty. The faculty member is required to earn a specific number of points in Academic Performance Indicators (API) in accordance with laid down criteria to be eligible for promotion or advisory issued to the staff members.

The institute has well define API system for both teaching and non-teaching staff on the basis of API Score there is provision for issuing advisory and appraisal letter to the concerned person. The process of API has the following steps, which if get accomplished.

The principal reviews the performance of teaching and non-teaching staff members every year and based on faculty appraisal, annual increment, career advancement; etc is granted.

The following are the important provisions:

1. Every faculty member submits his/her annual performance report in the form of appraisal format prescribed.

2. Detailed proof of the documents is attached along with the API. It is incumbent on the part of HOD, to check the entries and append his/her comments in an unbiased manner.

3. The report of the HOD's is evaluated by Registrar for final approval of the Principal.

4. These are the performance indicators that showcase the improvement and enhancement of knowledgebased and regular appreciation is the key to motivate proving platform to stakeholders and various participative and organizational events, also approves their relationship with different stakeholders.

The Institute has a performance appraisal system to assess the progress and potential of staff members. The self-appraisal form is filled by the staff member concerned for the appraisal. It is further assessed by HOD/reporting authority, Registrar and Principal based on the below-given Performance Indicators:

S.No	Performance Indicator for Teaching Staff	
1	Academic Result	
2	Research Publication	
3	FDP	
4	National and International conference	
5	Research grant	
6	Patent	
7	New skill	
8	Innovation	
9	Technical activity organized	

10		Social Initiatives	
11	Institute level activity		
12		Award received	
13		HOD Recommendation	
15		HOD Recommendation	
on-teaching staf arly appraisals	-	using the below-given Performance Indicators for their	
S. No	P	erformance Indicator for Non-Teaching Staff	
1		Regularity	
2		Maintenance & repair	
3	How many experiments performed by yourself		
4	Cleaning		
5	Stock register		
6.	Behavior with faculty and HOD's		
7.	New skill certificate taken for lab		
8.	HOD Recommendations		
	overall appraisal is calculate entives are decided.	ed as outstanding/Very good/Good/Poor based on which	
ile Description		Document	
bload any additional information <u>View Document</u>			
bload any additio		<u>view Document</u>	

#### 6.4 Financial Management and Resource Mobilization

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

#### **Response:**

An external financial audit is carried out by the Chartered Accountant (CA) firm M/s Vimal Agarwal & Associates for transparency and proper utilization of funds. Institute is not carrying any internal financial audit.

Audited statements are uploaded for your kind reference.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

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

Response: 23.4

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	5.28891	6.48	6.38	5.25

File Description	Document
Institutional data in prescribed format(Data template)	View Document
Any additional information	View Document

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

#### **Response:**

Funds are generally characterized as planned and unplanned. Plan funds include salary and providing facilities in various sections which were visible in the past based on policies defined in the past.

As far as unplanned funds are concerned they are made available to NSERD as the budget for the coming year. It is thus approved by the committees to improve the quality of teaching and learning there is a need to organize various technical and non-technical events at the institute and these activities are again subdivided into various categories for which fund generation is required from inhouse/sponsored/government Grants/endorsement activities. Faculty members, section in-charges are well informed about various schemes available through Government and non-government agencies from where funds are mobilized. There are various events for faculty members and students where participation by means of the registration fee is also one of the means by which funds are generated and efficiently utilized for creating facilities in various departments. Inter-departmental activities and central timetable committee ensure optimal utilization of the resources viz. classroom, Laboratories are adjusted such that their maximum utilization may take place during working hours and also beyond working hours.

An audited statement of account reflects the mobilization of funds for various sections and the Central timetable shows the utilization of resources to its maximum extent.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

#### 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:**

IQAC has contributed significantly to institutionalizing the quality assurance strategies and processes, the following two practices are the results of IQAC initiatives.

#### 6.5.1.1 Course Outcomes (COs)

The COs for each course of the curriculum is formulated by the respective faculty, who is assigned for taking up the course, before the commencement of the semester. The COs are formulated keeping in mind the following:

- 1. Contents of the course
- 2. Bloom's taxonomy levels of cognitive knowledge
- 3. Ability to map maximum number of Program Outcomes (POs) and Program Specific Outcomes (PSOs)

About 3-6 COs are written for each course, in which, the action verbs corresponding to Bloom's taxonomy level for cognitive learning are identified and highlighted.

#### **Attainment of Course Outcomes**

Direct attainment of COs can be determined from the performances of students in all the relevant assessment instruments. Indirect attainment of COs can be determined from the course exit surveys. The exit survey form permits receiving feedback from students on individual COs. The computation of indirect attainment of COs may turn out to be complex; the percentage weightage to indirect attainment can be kept at a low percentage, as 20%. Targets attainment are set for each CO of a course is > 60% marks

For external assessment:

Direct attainment of COs can be determined from the performances of students in end term examination which consists of a weightage of 80 %.

As the information on performance in semester end term examination on each student in individual COs is not available, so the Institution/Department has taken that attainment for any CO by calculating average marks and taking the value for all COs of the course is the same.

Attainment of CO in a course = 80% of attainment in end term-examination + 20% of attainment in internal assessment\*

\* internal assessment = 80% attainment in midterm-examination +20% of attainment in course exit survey(indirect assessment)

#### 2. Program Outcomes (POs)

POs deal with the general aspect of graduation for a particular program, and the competencies and expertise a graduate will possess after completion of the program.

The (POs) are achieved through the medium of the curricular courses. If through the COs in all the courses in the curriculum, certain POs are not addressed or attained, then it is said that there are curricular gaps in achieving the POs. These curricular gaps are addressed through co-curricular and extra-curricular activities, which are beyond the curriculum.

The IQAC has designed tools to assess the attainment of POs,PSO The PO/PSO attainment has been carried out by considering direct and indirect attainment tool. The direct attainment tool includes continuous assessment via test, assignments, internal assessment, and end semester examination result. Indirect assessment is carried out using feedback from students.

Direct assessment of students for attainment of POs is carried out using internal examination result, end term result, project, lab/experiments, and industrial training while indirect assessment of students for attainment of POs is carried out through Placements, Students curricular and co-curricular activities, course exit survey, program exit survey from students and Alumni feedback.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

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 IQAC reviews the teaching-learning process, structures, and methodologies of operations and learning outcomes by introducing several initiatives.

#### 1. Internal academic audit

IQAC conducts an internal academic audit in a semester and takes appropriate remedial actions to improve the quality of technical education. During the audit of course files, the University syllabus and lesson plan of the corresponding subjects are verified. CO-PO Mappings, CO attainments, and lecture notes of the corresponding subjects are verified. Also, previous university question papers along with question banks are verified. To fulfill the content beyond the syllabus various workshops, Guest lectures, Industry visits areorganized. Lab audit has been carried out before the commencement of each semester. It also reviews the preparation of SAR for NBA and takes corrective actions for meeting POs/PSOs.

Mentoring of students has been carried out to improve the academic performance of slow learners. In addition to this, extra efforts have been made for slow learners like providing additional (Revision) study material, assignments, discussion of previous years University questions papers, and viva-voce. After that, reassessment has been carried out to access the improvement of the students. If the targets are not achieved after reassessment then counseling sessions are carried out to motivate them towards their improvement in academics.

Advanced learners are encouraged to participate and present papers in various seminars/conferences/workshops. They are also encouraged to participate in inter-college and intra-college curricular and co-curricular activities, lab, institute events, and organizing committee. They are also motivated to participate in project developments, start-ups, and incubation center activities. Meritorious students from every semester in respective departments are awarded certificates.

#### 2. Faculty appraisal

The performance of each employee is assessed annually. The objective is not only to objectively evaluate the performance as per established norms but also to identify potential aspects for improvement that can eventually lead to further progress and growth of the employee. The following factors are effectively scrutinized in the appraisal system for teaching staff. The examination results, research publication, faculty development program attained, research grant, patent, new skills, innovation in teaching-learning, technical activity organized, institute level activity organized, any award received like session chair in the conference, guest lecture, invited talk and HOD recommendation.

According to the classroom teaching, presentation techniques, course delivery, evaluation of test papers, syllabus coverage, and fulfilling the academic commitments in time; the performance of a faculty is assessed based on the mark allocation to the above criteria, The outcome of the performance appraisal will reflect in the annual increment, incentives and the promotion of the faculty. An effective performance appraisal system helps the faculties in improvising their performance, enhancing their professional growth, and contributing to institutional performance. The performance appraisals provide the information useful for promotion/increment determinations and at the same time, it offers an opportunity for evaluation and discussion of employee weaknesses and strengths.

The HOD's evaluation based on the above analysis subsequently the following actions are implemented; Faculty members are encouraged to evaluate and identify their strengths and weaknesses aspects. Faculty members are encouraged to incorporate changes suggested by the appraisal report, to strengthen the quality deliverables. Faculty members are encouraged to undertake R&D projects, consultancy work, and apply for research grants. Financial support will be provided for filing patent/copyrights. Encouragement is given to the faculty members, to participate in conferences and

publish the research papers in international/national journals. By granting academic leave to the faculty members based on their competency requirement, are counseled to attend FDP, STTP, and workshops organized by the reputed Institutions/ universities. The faculty members are encouraged to organize national/international seminars/ guest lecturers/workshops/conferences by sponsoring such events from the institute.

All non-teaching staff is also assessed through annual performance appraisals. The various parameters for staff members are assessed under different categories i.e. regularity, involvement in maintenance & repair of lab equipment, knowledge of equipment, cleaning of lab, efficient organization of documents, Cooperation with faculty members, a new skill, and HOD recommendation. The Annual Performance Appraisal System has significantly helped in the evaluation of the performance of employees. On the basis of the marks obtained in the appraisal form, an appreciation letter/advisory is given to the employee for motivating them, analyzing their strengths and weaknesses, and ensuring better performance.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

#### 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	View Document
Upload any additional information	View Document
Institutional data in prescribed format(Data template)	View Document
Paste web link of Annual reports of Institution	View Document

### **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:** 

Women Empowerment and Gender Equity Programs:

#### **Curricular activities**

Ø under Women Empowerment JIC Team supports girl students and helps in identifying many young innovators in the campus. Such innovators are supported to work on their unique ideas.

 $\emptyset$  In events like Hackathon it is compulsory for a female student to be in each group. This ensures inclusion and motivates female students to participate.

#### **Co-curricular activities**

Ø SUHASINI is a social initiative by the students of JECRC to create awareness towards the education of girl child in the society. Students of SUHASINI visit various villages and other backward sections of the society and talk to people on a door to door basis. This group is working on the motto "BETI BACHAO BETI PADHAO". Members monitor the situation of girls in villages by door to door survey and try to solve their problems by proper counseling, education and awareness. Suhasini team also organizes Nukkad Nataks and Workshops on occasions like Women's Day & Girl Child Day to attract a larger audience towards the cause.

Ø Aashayiein is a student initiative of JECRC that works 24\*7 to meet the blood requirements of families in distress. Volunteers of Aashayiein (including girls and boys both) are available round the clock for donating blood when required.

Ø Zarurat is a student's organization, working towards providing elementary education free of cost to the underprivileged children living in the nearby slum areas of JECRC, Jaipur. Under this initiative a higher number of girl students participate compared to boys.

 $\emptyset$  In JECRC campus, workshops are organized on women self-defense for students and faculty. The training is given by trained police officers. Cyber security awareness programs related to the safety and security of women employees and students are also conducted.

#### Facilities for women on campus

 $\emptyset$  Institute has CCTV surveillance throughout the campus. CCTV is continuously monitored by Security personnel making the campus safer. Proper lighting arrangements are provided throughout the campus at all key locations, classrooms and common facilities. "No Helmet no Entry" is strictly practiced at institute. An awareness campaign for safe driving is also conducted here. "

Ø JECRC has girl's hostel with 24\*7 safety and security with a properly maintained entry & exit register. Girls Hostel has strong surveillance network with a lady warden. Girl's hostel organized a camp on female health and hygiene in association with P & G.

 $\emptyset$  Women Development Cell was constituted in campus for grievance redressal and sexual harassment issues.

Ø Anti-ragging messages are prominently displayed at all strategic places within the campus and hostel area.

 $\emptyset$  The institute has a mentor-mentee programme in which every student has a mentor allocated to him/her and the mentor helps the students by counseling about academic as well as non-academic issues.

Ø In JECRC, many female faculty members working on leadership positions like Deans, HOD's, Event Coordinators, Class Coordinators and Chief Librarian.

File Description	Document
Specific facilities provided for women in terms of: a. Safety and security b. Counselling c. Common Rooms d. Day care center for young children e. Any other relevant information	View Document
Annual gender sensitization action plan	View Document

### 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:** A. 4 or All of the above

File Description	Document
Geotagged Photographs	View Document
Any other relevant information	View Document

**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:**

**Waste Management:** Jaipur Engineering College and Research Center aims to manage all the waste which is produced from hostel, kitchen, laboratories, and debris material. The JECRC Foundation believes in "Let's go green and keep our campus clean". JECRC's pivotal operations have very less impact on the environment as the institute is very conscious of generating less waste and recycling waste by passing it through a system that enables the used material to be reused ensuring that less natural resources are consumed. Environmental initiatives like use of solar energy, rain water harvesting, septic tank, zero water discharge, no smoking zone, waste management system etc have been implemented. Environment consciousness is embodied in the heart of the college by tree plantations from spiritual cell teams every year which is the predominant motive of the management to maintain the pristine purity and beauty of the college and also to provide a positive atmosphere for the academic and non-academic pursuits.

**Management of Biodegradable waste:** In JECRC, A composting method is used for the management of degradable waste. In composting, the biodegradable wastes are dumped into a pit and covered for a time period. Due to the action of microbes, waste decomposes and is later used as manure for cultivation purposes.

The institute's waste management practices are divided into three parts:

- 1. Solid Waste Management
- 2. Liquid Waste Management
- 3. E-Waste Management

#### Solid Waste Management:

The Department of Civil Engineering has introduced various projects for the students of the final year in areas such as Solid and Liquid Waste Management and sewage treatment plants which enhance the knowledge about waste management in the students and motivates them for proper management of solid and liquid waste.

**Liquid Waste Management:** The liquid wastes generated in the campus include Sewage, hostel academic blocks and canteen waste. The above waste is treated through a Sewage Treatment Plant (STP) setup in the JECRC Campus. The entire treated water is used for watering the gardens and lawns maintained in the campus. The sludge settled in the STP is removed and is dried on drying beds and used as manure for the gardens.

File Description	Document
Geotagged photographs of the facilities	View Document
Relevant documents like agreements/MoUs with Government and other approved agencies	View Document
Any other relevant information	View Document

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

File Description	Document
Geotagged photographs / videos of the facilities	View Document
Any other relevant information	View Document

#### 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
Geotagged photos / videos of the facilities	View Document
Any other relevant documents	View Document

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

<b>x x</b>		
File Description	Document	
Reports on environment and energy audits submitted by the auditing agency	View Document	
Certification by the auditing agency	View Document	
Certificates of the awards received	View Document	
Any other relevant information	View Document	

#### 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
Geotagged photographs / videos of the facilities	View Document
Details of the Software procured for providing the assistance	View Document
Any other relevant information	View Document

# 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:**

Ø SUHASINI is a social initiative taken by the students of JECRC to create awareness towards the education of girl child in the society. Students of SUHASINI visit various village and other backward sections of the society and talk to people on a door to door basis. This group is working on the motto "BETI BACHAO BETI PADHAO" motto. Members monitor the situation of girls in villages by door to door survey and try to solve their problems by proper counseling, education and awareness. Suhasini team also organizes Nukkad Nataks and Workshops on occasions like Women's Day & Girl Child Day to attract a larger audience towards their cause.

Ø Aashayein is a student initiative of JECRC that works 24\*7 to meet the blood requirements of families in distress. Aashayein volunteers including girls and boys both are available round the clock for live for

live blood.

Ø Zarurat is a student's organization, working in the direction to provide elementary education free of cost to the underprivileged children living in the nearby slum areas of JECRC, Jaipur. In the team Zarurat, numbers of girls' volunteers are more as compared to boys.

Ø Women's car rally was organized as theme MAA TUJHE SALAAM on 17th March 2019, 150 women faculty participated from the college.

Ø Students celebrate the different festivals with joy and enthusiasm which help them to implant socialand religious harmony. Republic Day and Independence Day are celebrated every year. Republic day is celebrated on 26th Jan by organizing activities and highlighting the importance of Indian Constitution. Similarly, Independence Day is also celebrated every year to highlight the struggle of freedom and importance of Indian constitution.

 $\emptyset$  Being a large country with a large population, India presents endless varieties of physical features and cultural patterns. To represent our Indian culture, on the eve of college annual gathering, The Institute organize afashion show. In this competition students wear different attire representing the different states, religions and cultures. Through this activity students get acquainted with the different cultures of our nation and help to develop tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities.

Ø The college faculty, staff, and students also participate in Marathon which promotes the communal and social economic achievements.

Ø JECRC has organized a special programme to commemorate the 21st International Women's Day. All the speakers lauded the social, economic, cultural and political achievements of women in the last three decades and felt that the day is also a reminder of their responsibility to achieve gender equality.

 $\emptyset$  Institute celebrates the International Yoga Day on 21st June to bring peace, harmony, happiness, success and healthy life to every soul in the world. It embodies unity of mind and body; thought and action; restraint and fulfillment; harmony between man and nature.

File Description	Document
Any other relevant information.	View Document
Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	View Document

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:** 

JECRC is undertaking various initiatives in the Institution for inculcating values for being responsible citizens.

JECRC organize different events with joy and enthusiasm which help them to implant social and religious harmony and inculcating values for being responsible citizens as reflected in the Constitution of India.

Republic Day and Independence Day are celebrated every year. Republic day is celebrated on 26th January by organizing activities and highlighting the importance of Constitution. Similarly, Independence Day is also celebrated every year to highlight the struggle of freedom and importance of Indian constitution.

Giving can result in personal growth. Giving can help you be a good role model to the young people in your life and most importantly, giving makes the world a better place for us all to live in. Our institution organizes an event called 'Joy of giving week'. This event aims to give the time, money, resources and skills to the people who are in need.

At College, many workshops are organized by the Spiritual Cell such as Thought Management Workshop, Workshop on Self-Empowerment through meditation, Enlightenment: Exploring the Self through the meditation workshop etc. These workshops help to introduce truth, honesty, loyalty, love, peace in human.

Institute celebrated the International Yoga Day on 21<sup>st</sup> June to bring peace, harmony, happiness, success, and healthy life. It embodies unity of mind and body; thought and action; restraint and fulfillment; harmony between man and nature.

A lot of social activities are organized in the campus like blood donation, health checkup, cleanliness drive and clothes distribution. These activities help to introduce tolerance, harmony and peace towards the social and communal side.

National Voters Day is celebrated in our institute on 25 January. The sole purpose to celebrate this day is to make student aware of their voting rights and to attract more people mostly the newly eligible younger generation, to vote and contribute to the electoral political process.

File Description	Document	0
Any other relevant information	View Document	
Details of activities that inculcate values; necessary to render students in to responsible citizens	View Document	

**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

0

File Description	Document
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.	<u>View Document</u>
Code of ethics policy document	View Document
Any other relevant information	View Document

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

**Response:** 

Ø **Republic Day and Independence Day**- Every year the institute celebrates republic day and Independence Day by hoisting Indian Tricolor Flag followed by patriotic musical performances by students and faculty and followed by departmental plantation of plants in campus.

 $\emptyset$  **Basant Panchami Celebration** – Celebrated on the day to worship Goddess Saraswati, the symbol of knowledge and wisdom. To mark the occasion, a special assembly was held on this day. It started with the singing of 'Saraswati Vandana'. Teachers and Students offered yellow flowers to the Goddess and Prasad was distributed to all staff members and students.

Ø **5th September (Dr. Sarvepalli Radha Krishnan Birth Anniversary)** - On 5th September, JECRC celebrate Dr. Radhakrishnan's birthday as Teacher's Day with great fervor. The students organize a programme for the teachers and the Guru-Shishya parampara is celebrated.

 $\emptyset$  **15th September Engineers day (Birth Anniversary of Sir Visvesvaraya)** – JECRC celebrate this day on 15th September consistently as an exceptional tribute to the best Indian Engineer Bharat Ratna Mokshagundam Visvesvaraya. Special talks or lectures are arranged by renowned persons from academics or industries.

Ø 2nd October Mahatma Gandhi Birth Anniversary.- On this day the institute organizes an event called "Cleanliness drive".

 $\emptyset$  **14th November (Children's Day)** -Children's day is celebrated to mark the birth anniversary of Jawaharlal Nehru, who was extremely fond of children, the programme clearly depicts the spirit of the occasion. The children's day programme has a series of interesting and exciting events, all planned meticulously for a complete entertainment.

Ø Holi Festival– Holi, the festival of colors is very significant for our lives and body in various other ways than providing fun and the joy. Keeping this in mind, the institution celebrates this event with students, staff and other team members.

Ø National girl child day – Started by the Ministry of Women and Child Development and the Government of India in 2008, the National Girl Child Day is celebrated on January 24. The purpose of the

day is to spread awareness among the people about the inequalities girls face in India. It also aims towards promoting awareness about the rights of the girl child and to increase awareness on the importance of girl education, and their health and nutrition. The occasion of "National Girl Child Day" a week was dedicated by the team "Suhasini-an Initiative to save the smile of girl child "to celebrate with each smile that is rare to find.

 $\emptyset$  **International women's day celebration** – International Women's Day is celebrated around the world over, every year on the eight day of March. On this day, The Institute celebrates womanhood and pays tribute to the indomitable spirit of women across the globe.

Ø International Yoga Day- JECRC celebrates International Yoga Day on 21st June in the college premises to bring peace, harmony, happiness, success and healthy life to every soul.

In Institute other days are also celebrated like B.R. Ambedkar Jayanti, Unity Day, Valmiki Jayanti etc.

File Description	Document
Geotagged photographs of some of the events	View Document
Any other relevant information	View Document
Annual report of the celebrations and commemorative events for the last five years	View Document

#### 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 PRACTICE I:**

#### 1. Title of the best practice: The Social Arms of JECRC

#### **The Practice:**

The best practice at JECRC under different social initiatives is unique under different aspects:

With deep humility, JECRC firmly believes in the notion of serving the society. In this perspective, the Social Arm of JECRC has four verticals Zarurat, Aashayein, Suhasini and Soch that work for the upliftment of the needy and deprived sections of the society in different directions by engaging the students who are the future citizens of the country, thus aiming towards their holistic development. These four verticals have actively engaged more than 4000 students of JECRC and have revolutionized their perspective towards the most fundamental issues faced by the society. Over the last 10 years, social activities has touched the lives of more than 25000 people in need be it the kids of slum dwellers, senior citizens of old age homes, blood donation for patients, cleanliness drives, educating the girl child and

Women health and hygiene. In this quest JECRC is honored to have the leadership of Nobel Laureate Mr. Kailash Satyarthi, Padma Bhushan Awardee Dr. DR Mehta, Founder, Bhagwan Mahaveer Viklang Sahayta Samiti, Padma Shri Awardee Mr. Chandi Prasad Bhatt Environmentalist, Founder, DGSS (Dasholi Gram Swarajya Sangh), Rajiv Gandhi Khel Rathna Awardee and Arjun Awardee Mr. Devendra Jhajharia and many more with us. Zarurat works in the direction to provide free elementary education to the underprivileged children living in the nearby slum areas of JECRC, Jaipur.

#### Education campaign:

#### ZARURAT-THE HELP BEYOND

**Zarurat**: The Help Beyond which started in 2011, mentors and educates the underprivileged kids from nearby slum areas of JECRC by organizing one and a half hour class after college hours on daily basis in the college itself. Suhasini: an initiative to save the smile of a girl child laid its foundation on 24th January 2015 (National Girl Child Day) with a vision and mission to make a better place for girls to live in. Since its formation, the group is working actively and dedicatedly for the cause "BETI BACHAO, BETI PADHAO" in the villages- Goner, Badi ka Baas, Shree Ram ki Nangal, Barah Meel, Beelwa, Shivdaspura, Sitapura, Laxmipura and from different areas of Jaipur city to the cause and has brought more than 210 girls to the mainstream education. An aadhar card camp was also organized to connect the students with the school and thus help for the cause. Besides academics, various other activities like sports, soft skill development, computers, health check-up camps, moral values sessions and outdoor visits to some educational places are also organized by Zarurat and Suhasini at regular intervals for their overall development.

#### Aashayein: The Life Saviours

**Aashayein** - The Life Saviours is a group of young enthusiasts who started this social initiative in 2013. The group works 24\*7 towards fulfilling the demands of blood and SDP of the families in distress. Team Aashayein with the unsung support of the life-saving donors, has the record of saving more than 1400 lives by live SDP donations. In the last 13 years, 16,677 units of blood have been collected under the umbrella of JECRC Foundation, which in itself is a milestone. For this, an annual blood donation drive is organized in the campus which gets a huge response from the faculty members and the students. Apart from this the group is associated with hospitals and provides SDP to the patients suffering from Cancer, Thalassemia, Dengue, etc.

#### Suhasini: An initiative to save the smile of Girl child

Emerging with life's mantra -"A vision and mission to make a better place for girls to live in", the students of JECRC laid the foundation of SUHASINI on 24th January 2015 (National Girl Child Day).

Since its formation, the group is working actively and dedicatedly for the cause "BETI BACHAO, BETI PADHAO." To bring a change in the society for girls, Suhasini works in various domains and conducts survey and the members make door-to-door visits to know the basic roots of the problem, in which sex ratio, information of school going children etc. are collected. Suhasini also organizes 'Story behind Red, an awareness campaign for menstrual health and hygiene wherein girls are educated about the importance

of maintaining hygiene during menstruation which is conducted in various government schools and villages. Team also organizes timely celebration on International Women's day, National Girl Child day, International day of Girl Child in the college campus as well as in city areas and has performed Nukkad Natak at various places like Shree Ram ki Nangal, Janpath, Gaurav Tower, Jal Mahal, Amber Fort, City Palace and Albert Hall. More than 10,000 people have been addressed so far by these urban area campaigns. The team is also very active on social media and organizes social media campaigns like Selfie with girl child, She My Strength, Dream I Can, She Will Achieve etc. In the journey so far, Suhasini has succeeded in connecting people from 8 villages- Goner, Badi ka Baas, Shree Ram ki Nangal, Barah Meel, Bheelwa, Shivdaspura, Sitapura, Laxmipura and from different areas of Jaipur city to the cause. More than 210 girls have been connected to the education mainstream.

#### Soch: Kuch Kar Dikhane Ki

SOCH began its journey in August 2014. It is all about helping others and making others do the same. As per the name suggests, SOCH itself means a new and innovative idea that is aimed at encouraging the process of active thinking among people to eradicate the negative norms developed by the society. Cleanliness drives are organized in and outside college campus throughout the year with the motive of spreading awareness about cleanliness. QR Code technology is also implemented. Vastra Samman includes clothes and other essentials that are distributed to the poor and needy people by the students on the occasion of Diwali. In OCIP whole day is spent with orphans invited in the college from various orphanages. In CPR training Doctors are invited from Mahatma Gandhi Hospital and Apex Hospital in the campus to teach the students how to perform CPR and educate students about its importance.

#### **BEST PRACTICE 2:**

#### **Objective of best practice: Placement of Ineligible students**

#### • Vision of Placement Cell (Outset):

To become an Institution renowned for placements of its academically weaker special students and work towards providing them the employability skills desired by renowned companies Pan India.

To place all the special category of students desiring placements in well-known and reputed companies – within or outside the state of Rajasthan.

#### • Mission of Placement Cell (Outset):

Primary aim is to provide cent percent placement of the special category of academically weaker students every year.

Motivate the students to move with confidence to aim for a bright career and aspire for becoming a valuable citizen of the Country by providing them with the roadmap.

To become an Institution renowned for placements of academically weaker - but otherwise equally

competent - students and to work towards providing them with the employability skills desired by top level as well as MSME Companies.

# The context Challenges: contextual challenging issues that needed to be addressed in designing and implementation of best practices:

- There are advances in technologies and new challenges every year in the employment market. The technology companies are the ones that employ the major chunk out of the available manpower followed by the service sector. Hence the big challenge is to prepare the students to face the changes.
- As a result of the Pandemic, this time most of the companies have preferred to do the entire process of selections digitally and students have fared better than before. This has been possible due to the extensive pre-placement trainings provided to them through the online route so as to make them thorough with the pros and cons of the system that was going to be followed by the companies during the drives.
- To achieve significant number of placements in companies providing higher salaries.
- To get those students placed who have not achieved academic results required by larger companies.

# Best Practice and its uniqueness: Best practices adopted by the Placement Cell (Outset) in last 5 years:

- The Team for implementing the policies and systems of the area is formed by inviting the interested faculty members to discuss further. Once the Team Members are identified and selected, they are mentored and provided with the in-depth intricacies involved for working efficiently in the best interest of the concerned students as well as the Foundation.
- Advising concerned departments to update skills of their students as required by companies
- Provide trainings to pass the latest assessment tests and develop communication skills to make the students Industry ready.
- In order to provide quality placement to students, every year Institute plan industry visits to meet the potential recruiters and to maintain and form corporate relationship. Through these visits JECRC aim to enhance the association with the corporate by interaction with the concerned Industry officials.

Institute also takes help of the JECRC Alumni wherever required.

- JECRC Management has taken this unique initiative of starting a vertical exclusively for the placement of students with less than 60% marks and with some backlogs. OUTSET works for providing training, motivation and opportunities to these students who earlier could not even dream of a Campus Placement.
- As a part of the initiatives being taken by the institute, Institute is organizing interactions of students with Alumni who are placed in various companies and also those who have shifted to still better companies as a result of the experience gained by them in the initial company. This helps a lot to the current students since they get to know and obtain the real life experience of interview processes and the corporate life.

#### **Evidence of success**:

- JECRC has set an exemplary record in engineering placements with its students being chosen by industry leaders, year after year. Its evidence is shown in the 'Stand-alone Recruitment Drives' being organized every time where leading business houses participate to test the mettle of the students.
- The most crucial part of the job for the Team of Placement Cell (Outset) is to locate new companies year on year basis since the companies which visit during any one year generally do not look for recruitment during the following years. However, some of the companies do turn up due to reasons of attrition rates at their place and also for many reasons specific to them.
- JECRC has achieved a new height in its excellent track record of placements of the Outset category of students by getting more than 300 offers this year.
- The Institute has trained the students with rigorous training of 45 days/200 hours in which 100 + Faculties and external renowned agencies were involved to make students ready for the Placement session. They have been trained on Aptitude, Logical & Quant, Soft skills, Communication skills, Group discussion & Extempore, CBTs & Mock Drill, Subject wise Technical Training & Coding Languages.
- During the digital placement drives this year the average package offered to the students of the outset category has increased dramatically and some students have even got a package of Rs.6 LPA.

#### **Problems Encountered and resource required:**

- Relatively less number of placements in Technology and Infrastructure segments.
- Less companies with offers more than Rs.3 lakh per annum for the students of the outset category.
- Affiliated University syllabus does not fully match with the current industry requirements

#### **Strategies for overcoming the Challenges:**

- In the COVID 19 pandemic challenges, Training & Placement Cell (Outset) is putting auxiliary efforts to connect with the corporate.
- New companies have been approached.
- The pandemic emerged in different opportunities in verticals/sectors like HealthCare/ Pharmaceutical, Fintech & Service deliveries companies, E commerce and Digital marketing companies.
- From enterprise management solutions to IT solutions, technology will remain a green avenue for

Those with relevant skills. Hence institution continuous effort is to bring such companies to the

- campus. As the world now grapples with the unenviable situation of sitting at home, this gives an opportunity to content creators across platforms.
- Over the last 5 years of the existence of the Placement Cell (Outset), JECRC has learnt to establish connections with the companies which consume institute's special category of students and now Institute is taking the leverage to bring such companies onboard year on year basis.
- Institute is bringing best experts & training partners to train students before appearing in the placement drives.
- The Placement Cell (Outset) believes in continuous efforts and hence the institute is working rigorously forbringing in more and more companies to the college so Institute can provide good placement numbers. Institute also considers it as a duty towards the society and the Nation to fight with the unemployment scenario.

File Description	Document
Any other relevant information	View Document
Best practices in the Institutional web site	View Document

#### 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:**

Spiritual Research cell, a unique initiative of JECRC in collaboration with Education Wing of Rajyoga Education and Research Foundation is established on 6th October, 2016 with prime objective to conduct research on Spiritual Dimension of life and to enrich students and staff with the ultimate benefits of meditation and spiritual practices.

Since its inception this cell has been working persistently for the inner development of individuals. Several events and workshops are organized from time to time to empower students emotionally and spiritually. This cell also works as a counseling centre where students get solutions of their real life problems. Full time spiritual mentor cum researcher is appointed to help out students in overcoming negative emotions.

Spiritual research cell built up in 1000 sq. feet consists of a meditation room where contemplation, concentration and realization of real self can be done. All events and workshops take place in a beautiful sound proof "Wisdom Hall "which also acts as a digital class room. A spiritual library with a collection of beautiful titles adds value to this cell. A research lab cum office is also developed to facilitate research on various aspects of science and spirituality.

This cell is situated in the heart of JECRC campus and is a major attraction for guests and visitors. Till now, delegates from thirty five countries have visited this cell and witnessed the power of spirituality in human life. Honorable AICTE Chairman, Dr. Anil D Sahasrabuddhe has specifically visited JECRC campus to mark the importance of such initiatives for youngsters. Dr. A.S.Kiran Kumar, the then ISRO

Chairman also visited this cell and admired its need in present times.

This Cell regularly conducts events for the students as well as faculty members of JECRC and other institutions. Self-Empowerment through Meditation is a regular event organized for students in which learn to distinguish between physical and meta-physical being and thus could choose the better options in life. Events mainly focus on knowing thyself, knowing the Energy Source and practical experiencing through meditation. This cell also promotes the development of Universal Human Values among the students and faculty members.

"Enlightenment" a spiritual workshop is organized during the annual college fest "Renaissance" in which students from various institutions participates and enlightens them-selves with spiritual knowledge. Development of Techno-Spiritual exhibition is a recent achievement in which students showcased their technical knowledge and spiritual insights in the form of beautiful working models. These models are in the form of games and electronic gadgets and used to clarify spiritual concepts in very simple way.

Apart from all these, SRC celebrates International Day of Yoga every year and yoga sessions are also organized every day for faculty members. Expert talks, guest visits, health checkups using Bio-Well GDV, Karadascan, Glucometer, and Blood Pressure Monitor are also organized regularly.

#### **Brief description of events:**

#### • International Day of Yoga

Yoga is an invaluable gift of India's ancient tradition. It embodies unity of mind and body; thought and action; restraint and fulfillment; harmony between man and nature; a holistic approach to health and wellbeing. It is not about exercise but to discover the sense of oneness with yourself, the world and the nature. International Day of Yoga is celebrated every year in college campus to revitalize the energy within and create awareness of its importance.

#### Renaissance Enlightenment

Enlightenment is Spiritual workshop organized during annual fest Renaissance. This workshop invites participants across India. This workshop gives an idea about the importance and need of adopting Spirituality in youth age. Interesting activities and guided meditation on self-discovery is major attraction of the event.

#### • Regular Yoga, Counseling and Visitors

Yoga Sessions for a healthy mind and body are organized on daily basis for the faculty members of college. Students with various emotional issues have a difficulty to concentrate and study, so spiritual cell offers counseling for such students so that they can overcome these issues and rejuvenate.

#### • Self-Empowerment through Meditation

This is a seven days event in which one hour session per day is conducted. It is a regular event organized to empower individuals at mental, emotional and spiritual level. Meditation practice allows mind to get calm and create positive, powerful and purposeful thoughts. Once the participants learn to meditate, and practice meditation regularly in meditation room.

#### Thought Management and leadership

Three days online Faculty Development Program on 'Thought Management and Leadership' was organized during 28th - 30th September, 2020. The event was focused on empowering the stream of thoughts and clarifying the importance of thought management in leadership. The major takeaways of the event were:

- Power of positive thoughts
- Transforming challenges into opportunities
- Meditation & Stress Management

There were a total of nine different sessions with three session every day. The journey of learning began from an engaging session of BK EV Girish in which he facilitated a wonderful discussion on the topic 'Teachers as Leaders '. The inauguration session in which, many dignitaries like R. A Gupta Vice Chancellor RTU praised the event and pointed out the importance of emotional and spiritual knowledge along with the technical knowledge for stress free living. Inaugural Keynote speaker Dr. Girish Patel shared the knowledge of 8 different types of thoughts. After it all the others speakers turned the people into good listeners by sharing number of eye-opening points throughout the three days event. Whether it was 'Digital Wellness' by Mr. Bala Kishore or 'Healthy and Happy Life', 'Thought Management' and 'Meditation for Self-Healing' by Dr. EV Swaminathan or 'Mastering the Self' by BK EV Girish all of them created a long lasting impression on the participants.

#### Stress and anger management

Five days online Faculty Development Program on 'Stress and Anger Management' was organized during 15th - 19th December, 2020. More than 2700 participants from various institutions across the country registered for the event including 200 participants from 40 countries. Major take away of this event:

- Let go inner pain
- Work life balance
- Learn meditation
- Experience peace

This way this cell is working for the holistic development of students and staff was well.

File Description	Document
Appropriate web in the Institutional website	View Document
Any other relevant information	View Document



### 5. CONCLUSION

### **Additional Information:**

Placement section is another pillar of the institute where 79 number of companies visited in the year 2015 with 563 placements has increased to 1161 placements in the year 2019-2020. The placement section is further divided into two sections:

a. Placement of eligible student's

b. Placement of non-eligible students (IInd division in Xth, XIIth, otherwise including backs, who do not qualify for eligibility criteria of reputed company, named as outset group).

The outset group was established in the year 2015 with 10 companies visited and provided placement to 50 numbers of students. Over the years this section has shown remarkable growth with 33 numbers of companies visited with 209 numbers of placement offers in the year 2019-20. A dedicated team thus provides at least 200 Hrs of pre-placement training to the students that includes computer based test, company specific test, communication skills, technical knowledge enhancement and interview skills to all the students of JECRC in seventh semester.

Social enrichment is the key for overall development of the students and faculty members. Various regular activities

- 1. Teaching to under-privilege students in the evening is a regular exercise by the students. The initiative was started in the year 2011 with 15 under-privilege students from nearby area has grown to 230 under-privilege students from nearby area. This activity becomes the bridge between them and main stream.
- 2. Single Donor Platelet (SDP) is a regular activity that the students carry-out throughout the year and become life savior for the people in need. 1390 number of lives has been saved by these life saviors over the last six years. A regular activity of blood donation is also a part of their life style where 190 number of units donated in the 2005 year has now increased to 737 units in the year 2019.
- 3. Sanitizing girl students for education and hygiene is also a regular activity by the girl students of the institute on regular basis is performed in the nearby schools and village.
- 4. Organizing Nukkad nataks on various issues of the society at prominent places of Jaipur is also appreciated by people.

### **Concluding Remarks:**

The institute has implemented incubation and startup policy wherein students are encouraged to start their startup with the help of funding provided by the institute. The institute has some startups who have signed MOUs with the institute on equity sharing basis and setup Rural Technology Business Incubator (RTBI) with help of Rajasthan Government.

Looking into the geographical location of the institute where some students belong to a low income group family and to support them, institute has given fees relaxation in last two years to all the students and also has

taken initiative to provide education loan @ 0% interest rate. The Institute has signed an MOU with a company EdCred where interest on the education loan will be provided by the institute.

The institute is also aware about the atmospheric pollution and looking into it, institute has taken initiative to install 400 kW rooftop solar power plants, water harvesting and waste treatment plant and thus contributing a little towards green initiative.

The institute has implemented welfare policy for faculty members and students. Various MOUs are signed with the companies who provide skill trainings and the same is provided to students at a subsidized costs. Financial assistance for R&D is also provided to faculty members and students. The two government hospitals and super specialty hospitals are within the 5 KMs vicinity from the institute, even then an MOU is also signed with the Apex Hospital that provides regular checkups facility to the students, faculty members and staff members.

The responsibility of the institute is to groom students through an outcome based education scheme (OBE) wherein Course Outcomes (CO) and Program Outcomes (PO) are mapped against defined targets and the gaps are filled through various activities. Students are encouraged to participate and organized activities within and outside the institute. The institute has facility of sports and games, Boys and Girls hostels in the Institute campus, Wi-Fi facility for streaming e-resources, YouTube channels of various faculty members are available. A regular feedback is also taken from the stakeholders on teaching-learning methodologies, facilities and action taken reports are shared with the stakeholders for their satisfaction.

