

FOR 1st CYCLE OF ACCREDITATION

ST JOSEPH ENGINEERING COLLEGE

ST JOSEPH ENGINEERING COLLEGE, VAMANJOOR, MANGALURU, KARNATAKA.

575028

www.sjec.ac.in

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL BANGALORE

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

St Joseph Engineering College (SJEC) is affiliated to Visvesvaraya Technological University, Belagavi, Karnataka State, and is recognized by the All India Council for Technical Education (AICTE), New Delhi. SJEC is registered under the trust "Diocese of Mangalore, Social Action Department".

Established in 2002, the College offers top class education in Engineering, Business Administration and Computer Applications at UG, PG and Research levels. It has well qualified staff, state of the art laboratories and all facilities. Presently about 2324 students are studying in the College.

The College provides for a wide variety of co-curricular and extra-curricular activities which give a head-start to students, developing their personality and imparting skills of decision- making and leadership. Campus Placement Department assists student's secure good jobs.

Objectives:

- Provide Quality Technical Education facilities to every student admitted to the College and facilitate the development of all-round personality of the students.
- Provide most competent staff and excellent support facilities like laboratory, library and internet required for good education on a continuous basis.
- Encourage organizing and participation of staff and students in in-house and outside Training programmes, seminars, conferences and workshops on continuous basis.
- Provide incentives and encouragement to motivate staff and students to actively involve in research-innovative projects in collaboration with industry and R &D centres on continuous basis
- Invite more and more number of persons from industry from India and abroad for collaboration and promote Industry-Institute Partnership.
- Encourage consultancy and testing and respond to the needs of the immediate neighbourhood

The Motto of St Joseph Engineering College is

"SERVICE & EXCELLENCE"

Vision

"To be a global premier Institution of professional education and research."

Mission

- Provide opportunities to deserving students of all communities, the Christian students in particular for quality professional education.
- Design and deliver curricula to meet the national and global changing needs through student-centric learning methodologies.

- Attract, nurture and retain the best faculty and technical manpower.
- Consolidate the state-of-art infrastructure and equipment for teaching and research activities.
- Promote all round personality development of the students through interaction with alumni, academia and industry.
- Strengthen the Educational Social Responsibilities (ESR) of the institution.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- The first affiliated college in Coastal Karnataka region to implement OBE. This has resulted in the institution to being accredited by NBA for two consecutive cycles from 2013 to 2022.
- Attention is paid to ensure that students attain all the Program Outcomes (POs) as prescribed by NBA, in a balanced format across the semesters.
- Integrating feedback of stakeholders in curriculum development for OBE.
- A Teaching Learning Centre (TLC) has been established to propagate new pedagogies of engagement and assist the faculty in OBE deployment.
- The ongoing teaching methodologies are supported through the well-established Course Webpages which are hosted on Google-Classroom, work dairy and feedback by the Head of the Department/Principal.
- Fully functional CBCS curriculum across programmes with interdisciplinary Open-Electives.
- Courses relevant to Gender sensitivity, Professional ethics, Human Values and Community Outreach
 are integrated in all programmes. Environment and sustainability course are compulsory in UG
 programmes.
- Availability of financial assistance for research, professional development programmes and publication of papers.
- More than 50 faculty members have completed IUCEE-International Engineering Education Certification Program (IIEECP) and are certified Engineering Educators.
- Holistic development of students beyond classroom activities, social work and community engagement.
- Frequently conducted guest lectures and interaction with eminent personalities.
- State—of—the-art infrastructure/facilities for teaching-learning and research.
- Tinkering and Innovation Laboratory has been introduced for First Year UG engineering students in order to inculcate critical thinking, self-learning, professional ethics, experiential learning, and to attain higher levels in Bloom's Taxonomy in learning.
- Effective use of ICT facility to impart quality education.
- Environmental initiatives like use of renewable energy, rain water harvesting, use of waste management system etc.

Institutional Weakness

- Only 16% of the total faculty strength is Ph.D. qualified.
- Difficulty to attract sizeable research funds from the Government funding agencies being an affiliated college.

- Exposure to faculty through joint research with foreign universities and participation in conferences.
- Students' engagement in research studies leading to publications/patents/design-based projects and entrepreneurial ventures.
- Less financial contribution from alumni.
- Not having fully residential campus.
- Insufficient linkages with industry for industry-led courses, industry funded labs, internship and placement.
- Very less freedom in curriculum aspects as an affiliated college.
- E-governance is not implemented completely on campus.

Institutional Opportunity

- Acquiring Autonomous status under VTU.
- Influence on strong alumni and corporate network to enhance quality of placements and internships.
- More international MoUs for enhancing joint and collaborative research.
- Collaboration with Government of India by providing expertise for different national Missions such as Start-up India, Digital India, Make in India, Zero Effect Zero Defect, Swachh Bharat, Accessible India campaign etc.
- Providing international exposure to faculty and students through collaborations with international universities.
- Enhancement of research impact for rural upliftment and societal development through innovative technologies.
- Contributing to green energy initiatives for sustainable development of nation and society.

Institutional Challenge

- Fast changing technology and pedagogical innovations.
- Keeping pace with global developments in higher education and research.
- The current stagnation in the job market has reduced placement opportunities for students. However, the Entrepreneurship Development and Incubation Centre continue to network with potential employers for recruitment opportunities and schemes for incubation of business ideas.
- Attracting competent faculty at Associate Professor and Professor level and to achieve desirable faculty cadre structure in some areas.
- Active national/international collaborations/MoUs for quality research and academic outcomes.
- Robust grievance redressal mechanism, student support system, mentoring programme, counselling and guidance services.
- 100% paper less working in the entire campus of SJEC.
- Creating awareness among the admission aspirants and the parents about the wide opportunities of academic programmes available at SJEC.
- Matching international standards while maintaining the requirements/norms of national statutory/regulatory bodies.
- To expand on campus residential accommodation to cater to all hostel applicants and faculty.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

St. Joseph Engineering College (SJEC) is affiliated to the Visvesvaraya Technological University (VTU), Belagavi, Karnataka. The institute follows the curriculum designed by the respective Board of Studies (BoS) of VTU, with inputs from various stakeholder. Further, the institution communicates the curriculum gaps and technical glitches, if any, to the university before the implementation of the same.

However, it is pertinent to mention that the college is supposed to teach the curricula designed by the affiliating university and the institute makes efforts for curriculum improvement through its representatives participating in boards of studies meetings and various other Academic councils who provide suggestions and inputs for revision of the syllabi.

To provide better chances for distributing available educational opportunities, the college has made efforts to diversify the courses in tune with the diversifying interests and career opportunities. The college has introduced about 10 certificate programs and acquaint with more than 400 new courses.

Students are provided with flexible Choice Based Credit system (CBCS) having access to excellent curricular and co-curricular opportunities for enhancing academic acumen, employability and entrepreneurial skills.

Courses relevant to Gender sensitivity, Professional ethics, Human Values and Community Outreach are integrated in all programmes. Environment and sustainability course are compulsory in UG programmes.

The college provides opportunities for better exposure to the students by conducting field trips, technical training programs for students and conducts training workshops by inviting resource persons from various institutes, inside and outside the state.

The college in future would like to design its curriculum in such a way that it offers diversity and flexibility to learners to a greater extent. It would also like to design courses as per the regional and national needs. However, to realize such goals, the college needs academic autonomy, for which efforts are being made.

Institution has strong focus on OBE in all programmes and courses having well-defined objectives and learning outcomes aligned with institutional mission. Programmes are relevant to local/regional/national and global developments. Results of outcome assessment and stakeholders feedback serve as input for continuous improvement in curriculum.

Teaching-learning and Evaluation

The most significant part of teaching learning process in SJEC is ability of its teachers to create enthusiasm, ignite passion and generate curiosity among the students. The teachers are deputed off and on to participate in conferences, seminars and symposia, orientation courses to boost their teaching skills and make their teaching more innovative and effective. College guarantees adequately qualified and experienced faculty, many of whom win awards and have received fellowships at Government and other recognized bodies.

College has student and faculty community from diverse geographical regions and ethnicity and provides adequate support to cater to their varied teaching-learning needs. To cater to the diverse needs of the student's various specializations are offered so that the students can choose based on their liking and competence.

College conducts proficiency assessments and offers bridge courses, remedial courses, guided self-study courses to support slow learners. Advanced learners are encouraged to engage in department specific student associations. Student-faculty ratio is optimally maintained to facilitate student centric learning environment. High demand ratio indicates popularity of the college in terms of its state of art infrastructure, research focus, innovative programmes, quality of teaching-learning, linkages, and resources.

To make the teaching and learning more innovative and interactive the college has been equipped with the modern gadgets like LCD projectors and other ICT tools. Faculty use ICT to make teaching effective.

Mentorship has the power to impact the course of students' academic and personal life trajectories. So, for every 13 students one faculty is assigned as mentor.

The institution has always embraced modern pedagogies of engagement to create conducive environment for teaching- learning. IQAC of the College monitors all the curricular, co-curricular and extra-curricular activities in the college and ensures to provide all the necessary support to teachers and students for better teaching and learning processes. Programme Outcomes are assessed using direct/indirect methods to identify educational and operational gaps to propose action plan for further integration in the strategic planning. Teaching learning processes are continually improved based on students' results and students' feedback. Examinations are conducted as per the academic calendar and student grievances are addressed timely.

Research, Innovations and Extension

The college management encourages its teachers to submit research proposals and conduct research for which a research committee has been in place to facilitate the research and extension activities. SJEC creates an enabling environment to foster research culture providing required research infrastructure and support. Some faculty members at individual have got research projects sanctioned, some of which have been successfully completed and a few in progress. Seed money is provided to young faculty enabling them to formulate research proposal for funding. College has 63 research projects funded by recognized organizations at National/International level.

Many teachers in the College have published their research papers in reputed National and international journals with good impact factors. College promotes faculty engagement in authoring books, publications, newsletters, organizing seminars, conferences, workshops, consultancy and training.

A dedicated IPR cell is established to support research and innovation, protect intellectual property rights, promote filing of patents and advocate consultancy by experts. The cell organizes workshops and sensitization programs to create research spirit among teachers and students.

SJEC follows policy Guidelines for Plagiarism prevention using "Turnitin plagiarism software".

The New Age Incubation Network – NAIN was established at SJEC in the year 2019. It is primarily by the Department of IT BT and S&T, Govt of Karnataka. Incubation Centre has incubated several projects by the engineering students.

The institution is also actively involved in extension activities to help society by its services. One of the mission statements of the college is "Strengthen the Educational Social Responsibilities (ESR) of the institution". The college has units of AICUF, NSS and Youth Red Cross through which college renders social and community

services. Besides organizing blood donation camps, environmental awareness programs and helping in disaster management, visits to different primary and high schools, retreat homes, old age homes, hospitals etc. to serve the people, the college has adopted five villages and another village is under survey for adoption.

SJEC has signed 59 MoUs with national/international institutions/universities/ industries, corporate houses for academic and research collaborations.

Infrastructure and Learning Resources

The Institution is spread over 35 acres of luxurious green campus. The college is highly appreciated for the sheer beauty and cleanliness of its campus. Development with Eco-Consciousness and Sustainability is resulting in a truly Green Campus. The institution has a clear-cut policy for improving the infrastructural facilities which would facilitate teaching learning processes. Institution has state of the art infrastructure, learning resources including ICT enabled classrooms with proper lighting-seating and ventilation, technology enabled smart classrooms equipped with modern audio and visual instruments, seminar halls, fully equipped laboratories and computer labs, library and other support facilities etc. The college has also provided safe drinking water facility through installation of aqua guards at various places in the campus and in the hostels and staff quarters. Uninterrupted electricity supply is ensured in the campus with the help of inverters and UPS systems.

SJEC has substantial infrastructure for sports and other extracurricular activities including athletics, basketball, cricket, volleyball, football, hockey, Table tennis, badminton.

The college has a fully automated library which houses enough books of all disciplines, collection of rare books, manuscripts, special reports and large number of e-journals and e-books. Learning Resources like e-Journals, e-books, Shodh Ganga, databases like Scopus, Web of science are available to faculty and students and can be accessed remotely also.

All administrative offices of the Institution are computerized, and the offices have LAN and entire campus is equipped with Wi-Fi connectivity. SJEC maintains adequate student computer ratio with over 400 MBPS bandwidth for internet connection.

Budget for infrastructure, library and other learning resources is earmarked annually based on the recommendations of respective committees constituted for the purpose.

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

SJEC has well established student support system for financial assistance, capability enhancement/development, progression, alumni engagement. etc. Once admitted in the college, the students are taken care of by providing various facilities in the form of indoor and outdoor sports facilities, encouragement for participation in co-curricular activities, besides supporting deserving students with financial assistance from

the college and assisting them to benefit from the State Govt. and Central Govt. sponsored scholarship schemes. More than Rs 20,00,000 have been sanctioned through various schemes to about more than 5000 deserving students in the last five years, to support the education of poor students.

College has a robust system to provide support to students for skill development, grooming, career counselling for higher education, competitive exams, placements and entrepreneurship and for guiding students towards a better career and providing job opportunities through campus interviews with the support of prospective employers visiting this institution for placement of students in various employment sectors. Placement cell maintains strong relationship with industry and support students in placement

Student grievances are addressed at various levels both in person and through online suggestion/complaint system with multiple level escalation matrix helping in resolving the students' issues at faster speed. For the support and care of students the college has framed various cells like Grievance and Redressal Cell, Jagruti Cell and Anti-ragging and Disciplinary Cell.

Students are active members of cultural and sports committee at both institutional and University level and encouraged to participate in intra and inter-institutional sports competitions and cultural activities.

In addition, the institute has granted membership of students in various administrative bodies of the college such as Outcome Based Education system, Students Associations such as IEEE, ISTE, CSI, IE, SAE, etc. Cultural Committee, Grievance Cell, Anti-ragging Committee, Sports Committee, NSS, YRC, AICUF and Jagruti Cell etc. All departments have a minimum of two students as representatives from each section to bring academic matters to the forum initially at the department level and at the Institution level.

Institution regularly engages with its alumni through alumni meets, admission boards, IQAC meetings, alumni mentors/career counselling of students, curriculum review, etc.

Governance, Leadership and Management

SJEC has qualified and competent administrators to provide effective governance and leadership at all levels. The Institution is managed by the Diocese of Mangalore, which is known for its service to mankind across the globe. To enhance and sustain quality professional education on par with the best in its class institution, a robust structure has been established. The Governing Board is the chief policy framing body of the College. The Director of the College is the secretary of the governing board. The administration of the College is decentralized, and this responsibility is to three committees like Management Committee (MC), College Council and Department Level Committees, including Hostels. Other than this College has another 12 Groups to methodically plan and organize the mission of the College. MC is chaired by the Director of the Institute, which meets every week to execute the directives of the Governing Bodies, plan events, and decide on all academic and administrative issues. Institution 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 communicated and maintained.

SJEC has well-structured Service rules, Performance Based Appraisal System, promotion systems. The Institution provides adequate support to the faculty for professional development for attending conferences and workshops. Professional Development Programmes for teaching and non-teaching staff are also organised by the institution.

The Governing Board has authorized the Director of the College to deal with the financial aspects. The financial management is assisted by the Accountant deputed for this purpose. The budget allocation is disbursed to different departments/committees for purchasing books, equipment's and other necessary expenditure.

The compliance of academic and administrative procedures and their continual improvement is ensured through systematic audit by IQAC. IQAC has both internal and external members to review the academic and support systems. The IQAC is involved in planning, auditing performance, vetting strategic issues and in maintaining quality parameters. All processes and functions to ensure transparent governance.

Institutional Values and Best Practices

SJEC is sensitive to gender equity and parity. Sensitisation programmes are organised regularly. Safety and security, common room, counselling facilities are provided to females. The Institution considers 'Safety and Security' as paramount to the system. Some of the major initiatives are 24x7 CCTV surveillance across the campus including college corridors, enough number of security guards, highly intensive illumination at all prominent places, full-time hostel wardens, etc.

Institution has 20KW solar rooftop plant and moving towards 100% LED bulbs in the entire campus. Energy consumption is continuously monitored for improvement.

Waste management is effectively executed in the campus. All solid wastes are properly segregated by the workers, and every day, external agency dispose as per the statutory regulations. Liquid wastes are segregated and processed in centralized sewage water treatment tank and used for gardening and flushing. To manage the e-wastes The Management has adopted the various policies which is effectively implemented in campus.

For rainwater harvesting institution has prepared a pit which has a capacity to collect 10,000 litres of water. Other than this there are wells and bore wells are used to manage the water in campus.

SJEC has eco-friendly Green and Clean campus with "Go Green Innovation". The Institution maintains a lush green and clean campus, and cultivates coconuts, pepper, etc. for internal use. The Institution encourages a plastic-free campus. Awareness programmes are arranged, and sign boards are displayed in prominent places towards this end.

SJEC has strong commitment to differently abled people and provides facilities like ramps, lifts.

Code of conduct is specified in student handbook and employee's handbook. Institutes core values are available on website and lay significant emphasis on ethics, values and community engagement.

SJEC celebrates all important days of national/international importance and conducts large number of activities to promote universal values.

SJEC maintains complete transparency by involvement of all stakeholders in financial, academic, administrative and auxiliary functions.

The institution has introduced various best practices during the last five years like Performance Based Appraisal System (PBAS), V-ACT, Tinkering and Exploration Lab.

Page 10/130

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College		
Name	ST JOSEPH ENGINEERING COLLEGE	
Address	St Joseph Engineering College, Vamanjoor, Mangaluru, Karnataka.	
City	Mangaluru	
State	Karnataka	
Pin	575028	
Website	www.sjec.ac.in	

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	Rio Dsouza	0824-2263753	9663380761	0824-226375 1	iqac@sjec.ac.in
IQAC / CIQA coordinator	Shreeranga Bhat	0824-2263758	9480047532	0824-226375 2	shreerangab@sjec. ac.in

Status of the Institution	
Institution Status	Private and Self Financing

Type of Institution		
By Gender	Co-education	
By Shift	Regular Day	

Page 11/130 21-03-2020 07:26:43

Recognized Minority institution		
If it is a recognized minroity institution	Yes Minority Approval-2017-18 compressed.pdf	
If Yes, Specify minority status		
Religious	Christian	
Linguistic		
Any Other		

Establishment Details	
Date of establishment of the college	27-05-2002

University to which the college is affiliated/ or which governs the college (if it is a constituent college)		
State	University name	Document
Karnataka	Visvesvaraya Technological University	View Document

Details of UGC recognition		
Under Section	Date	View Document
2f of UGC	26-06-2019	View Document
12B of UGC		

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)				
Statutory Regulatory Authority Recognition/App roval details Inst itution/Departme nt programme Recognition/App pay,Month and year(dd-mm- yyyy) Remarks months				
AICTE	View Document	30-04-2019	12	

Details of autonomy		
Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?	Yes autonomydoc 1579248441.pdf	
If yes, has the College applied for availing the autonomous status?	Yes	

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	St Joseph Engineering College, Vamanjoor, Mangaluru, Karnataka.	Rural	35	43145

2.2 ACADEMIC INFORMATION

Details of Pro	ogrammes Offe	red by the Col	lege (Give Data	a for Current A	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	BE,Electroni cs And Com munication Engineering	48	PUC	English	120	109
UG	BE,Electrical And Electronics Engineering	48	PUC	English	60	48
UG	BE,Mechani cal Engineering	48	PUC	English	180	110
UG	BE,Civil Engineering	48	PUC	English	60	40
UG	BE,Compute r Science And Engineering	48	PUC	English	180	180
PG	Mtech,Electr onics And C ommunicatio n Engineering	24	BACHELO R OF ENGI NEERING	English	18	1
PG	MBA,Busine ss Administr ation	24	BACHELO RS DEGREE	English	60	55
PG	MCA,Comp uter Application	36	BACHELO RS DEGREE	English	60	2
PG	Mtech,Comp uter Science And Engineering	24	BACHELO R OF ENGI NEERING	English	18	1
Doctoral (Ph.D)	PhD or DPhi l,Electronics And Commu nication	72	POST GRA DUATION	English	8	0

	Engineering					
Doctoral (Ph.D)	PhD or DPhi 1,Mechanical Engineering	72	POST GRA DUATION	English	16	0
Doctoral (Ph.D)	PhD or DPhil,Civil Engineering	72	POST GRA DUATION	English	2	1
Doctoral (Ph.D)	PhD or DPhi 1,Business A dministration	72	POST GRA DUATION	English	8	1
Doctoral (Ph.D)	PhD or DPhi 1,Computer Science And Engineering	72	POST GRA DUATION	English	10	0
Doctoral (Ph.D)	PhD or DPhil,Basic Science	72	POST GRA DUATION	English	4	0
Doctoral (Ph.D)	PhD or DPhil,Basic Science	72	POST GRA DUATION	English	4	0
Doctoral (Ph.D)	PhD or DPhil,Basic Science	72	POST GRA DUATION	English	2	0

Position Details of Faculty & Staff in the College

	Teaching Faculty											
	Profe	essor			Asso	Associate Professor			Assis	Assistant Professor		
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				0				0				0
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit				0				0				0
Sanctioned by the Management/Soci ety or Other Authorized Bodies				13				14	J			127
Recruited	9	4	0	13	8	6	0	14	59	68	0	127
Yet to Recruit				0				0				0

	Non-Teaching Staff									
	Male	Female	Others	Total						
Sanctioned by the UGC /University State Government		2,		0						
Recruited	0	0	0	0						
Yet to Recruit				0						
Sanctioned by the Management/Society or Other Authorized Bodies				85						
Recruited	49	36	0	85						
Yet to Recruit				0						

	Technical Staff									
	Male	Female	Others	Total						
Sanctioned by the UGC /University State Government				0						
Recruited	0	0	0	0						
Yet to Recruit				0						
Sanctioned by the Management/Society or Other Authorized Bodies				53						
Recruited	26	27	0	53						
Yet to Recruit				0						

Qualification Details of the Teaching Staff

	Permanent 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.	8	4	0	4	3	0	0	2	0	21
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	46	53	0	99

	Temporary 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.	1	0	0	4	3	0	0	0	0	8	
M.Phil.	0	0	0	0	0	0	0	0	0	0	
PG	0	0	0	0	0	0	12	8	0	20	

Part Time Teachers											
Highest Qualificatio n	Professor atio			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	1	5	0	6	

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
Doctoral (Ph.D)	Male	23	1	0	0	24
	Female	17	0	0	0	17
	Others	0	0	0	0	0
UG	Male	1304	119	26	0	1449
	Female	617	27	18	0	662
	Others	0	0	0	0	0
PG	Male	94	2	0	0	96
	Female	133	1	0	0	134
	Others	0	0	0	0	0

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

Programme		Year 1	Year 2	Year 3	Year 4	
SC	Male	13	13	20	19	
	Female	13	7	10	7	
	Others	0	0	0	0	
ST	Male	7	4	4	4	
	Female	5	7	1	2	
	Others	0	0	0	0	
OBC	Male	229	244	199	177	
	Female	139	150	110	98	
	Others	0	0	0	0	
General	Male	102	90	129	173	
	Female	43	55	77	130	
	Others	0	0	0	0	
Others	Male	0	0	0	0	
	Female	0	1	1	0	
	Others	0	0	0	0	
Total		551	571	551	610	

3. Extended Profile

3.1 Program

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

Response: 2336

5	File Description	Document
	Institutional Data in Prescribed Format	View Document

Number of programs offered year-wise for last five years

2018-19	2017-18	2016-17	2015-16	2014-15
17	17	16	16	15

3.2 Students

Number of students year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
2363	2373	2496	2438	2449

File Description	Document
Institutional Data in Prescribed Format	<u>View Document</u>

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

2018-19	2017-18	2016-17	2015-16	2014-15	
92	121	89	197	183	

File Description	Document
Institutional data in prescribed format	View Document

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

2018-19	2017-18	2016-17	2015-16	2014-15
612	612	712	557	530

File Description	Document
Institutional Data in Prescribed Format	<u>View Document</u>

3.3 Teachers

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

2018-19	2017-18	2016-17	2015-16	2014-15
176	180	153	175	175

File Description	Document
Institutional Data in Prescribed Format	View Document

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

2018-19	2017-18	2016-17	2015-16	2014-15
176	180	153	175	175

File Description	Document
Institutional data in prescribed format	View Document

3.4 Institution

Total number of classrooms and seminar halls

Response: 73

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

2018-19	2017-18	2016-17	2015-16	2014-15
1745.60	1109.15	1205.66	1218.48	1303.57

Number of computers

Response: 1066

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:

St. Joseph Engineering College (SJEC) is affiliated to the Visvesvaraya Technological University (VTU), Belagavi, Karnataka. The College meticulously plans and develops action plans for effective implementation of the curriculum prescribed by the VTU, which is in line with the institution's mission to empower society through quality education.

The institute follows the curriculum designed by the respective Board of Studies (BoS) of the affiliating university, with inputs from various stakeholders. Further, the institution communicates the curriculum gaps and technical glitches, if any, to the university before the implementation of the same by conducting meeting at departmental levels. In addition, every department has established Programme Assessment Committee (PAC), and Departmental Advisory Board (DAB) to overview the implementation of curriculum as per the set standards of the Institution. At the outset, the course coordinator in consultation with the module coordinator along with the PAC determines the Course Outcomes (COs). The COs are established based on Higher Order Thinking (HOT) skills of Bloom's Taxonomy. Further, the COs are mapped with Programme Outcomes (POs) and Programme Specific Outcomes (PSOs) to impart the graduate attributes. In addition, attention is paid to ensure that students attain all the POs in a balanced format across the semester.

Based on the VTU academic calendar, the institution establishes its own academic calendar, which is disseminated among the departments. The departments in turn, develop department calendars to assist the course coordinators to plan outcome-based pedagogy for effective implementation of the curriculum. Further, meticulous care is taken during subject distribution. Moreover, all COs and the justification for mapping it with POs are verified by the module coordinators before the implementation of the course content. The faculty has to adopt the innovative teaching practices and need to submit a comprehensive course plan as per the established institutional format. Further, the ongoing teaching methodologies are ascertained through the well-established Google-Classrooms, work dairy and feedback by the Head of the Department/Principal. In addition, course plan and notes, if any, are shared in advance with students provide first-hand information about the subject.

Formative assessments are conducted on a regular basis to understand the leaning levels of the students, and to take measures to uplift the same. The implementation of the curriculum is monitored through various means that include meeting with Student Representatives, Heads of the Departments, and the

Page 23/130 21-03-2020 07:26:59

Principal at regular intervals. Apart from this, attainment of all the POs, PSOs and COs are discussed during the PAC, DAB and IQAC Meeting to frame action items for the continual improvement of the elements of Outcome Based Education (OBE).

File Description	Document
Any additional information	<u>View Document</u>
Link for Additional Information	<u>View Document</u>

1.1.2 Number of certificate/diploma program introduced during the last five years

Response: 13

1.1.2.1 Number of certificate/diploma programs introduced year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
4	2	3	2	2

File Description	Document
Minutes of relevant Academic Council/BOS meetings	View Document
Details of the certificate/Diploma programs	<u>View Document</u>
Any additional information	View Document

1.1.3 Percentage of participation of full time teachers in various bodies of the Universities/ Autonomous Colleges/ Other Colleges, such as BoS and Academic Council during the last five years

Response: 8.73

1.1.3.1 Number of teachers participating in various bodies of the Institution, such as BoS and Academic Council year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
2	2	4	4	3

File Description	Document
Details of participation of teachers in various bodies	View Document
Any additional information	View Document

1.2 Academic Flexibility

1.2.1 Percentage of new Courses introduced out of the total number of courses across all Programs offered during last five years

Response: 34.08

1.2.1.1 How many new courses are introduced within the last five years

Response: 796

File Description	Document
Details of the new courses introduced	View Document
Any additional information	View Document

1.2.2 Percentage of programs in which Choice Based Credit System (CBCS)/Elective course system has been implemented

Response: 100

1.2.2.1 Number of programmes in which CBCS/ Elective course system implemented.

Response: 17

File Description	Document
Name of the programs in which CBCS is implemented	View Document
Any additional information	View Document

1.2.3 Average percentage of students enrolled in subject related Certificate/ Diploma programs/Addon programs as against the total number of students during the last five years

Response: 16.41

1.2.3.1 Number of students enrolled in subject related Certificate or Diploma or Add-on programs yearwise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
503	309	339	325	511

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

1.3 Curriculum Enrichment

1.3.1 Institution integrates cross- cutting issues relevant to Gender, Environment and Sustainability, Human Values and Professional Ethics into the Curriculum

Response:

The following activities are conducted in the institution for the holistic development of students:

Gender Sensitization, Human Values, and Professional Ethics: To sensitize the students towards gender issues, human values, and professional ethics, a V-ACT (Value, Aptitude, Career Guidance and Technical Training) course is conducted in the first year of their study. The primary objective of this programme is to foster positive thinking, proactive approach, and emotional stability. Further, various events are conducted to encourage the students to participate and understand the role of a citizen in nation building. Being the co-education institute, a good male to female ratio 1.94:1 is maintained to promote respect and equality among the students. Also, provision is made for the disposal of sanitary napkins. In addition, self-defense activities are conducted to prepare the students for the all the conditions.

Environment and Sustainability, and Professional Ethics: 'Environment and Sustainability' and 'Professional Ethics' are POs adopted by the institution to address these issues in a structured manner. To deploy these essential traits, every semester at least two courses address these POs by mapping the COs and assess through course elements. These courses ensure a better understanding of the impact of professional engineering solutions in societal and environmental contexts and demonstrate knowledge and the need for sustainable development. In addition, these help the students to practice ethical principles, commit to professional ethics, and practice the norms of engineering practice.

The college has a committee for community engagement and an Eco Club through which various programs are conducted to expose students to concepts related to environment, sustainability and professional ethics. Also, Eco friendly green campus, Bio composite, Recycling of water, Solar panels, Use of LED bulbs, Rainwater harvesting are promoted in the campus to demonstrate the environmental consciousness of the Institution.

Further, Professional Ethics are promoted by conducting various exhibitions and debate competitions. Apart from this, university offers core courses, which address issues relevant to gender, environment and sustainability, human values, and professional ethics. The list of these courses is given below:

Sl. No.	Course Code	Name of the Subject	Semester
1	18CIV59	Environmental Studies	V
2	18CPC39/49	Constitution of India, Professional Ethics and Cybe	rIII/IV
		Law	

Moreover, college ensures co-curricular activities pertaining to the gender, environment and sustainability, human values, and professional ethics are conducted at regular intervals through NSS, Red Cross, Jagruti Cell (Prevention of Sexual Harassment), Placement Cell, AICUF (All India Catholic University Federation) etc. Also, college has adopted "Educational Social Responsibility (ESR)" as one of its mission statements, and all the departments are striving to achieve the same by organizing events through their departmental students' association/chapter.

Every year Student Induction Program is conducted for a period of 21 days for all the freshers during which the Universal Human Values are discussed in various sessions.

File Description	Document
Any Additional Information	<u>View Document</u>
Link for Additional Information	View Document

1.3.2 Number of value added courses imparting transferable and life skills offered during the last five years

Response: 26

1.3.2.1 Number of value-added courses imparting transferable and life skills offered during the last five years

Response: 26

File Description	Document
Details of the value-added courses imparting transferable and life skills	View Document
Brochure or any other document relating to value added courses.	View Document
Any additional information	View Document

1.3.3 Percentage of students undertaking field projects / internships

Response: 26.41

1.3.3.1 Number of students undertaking field projects or internships

Response: 624

File Description	Document
List of students enrolled	View Document
Institutional data in prescribed format	<u>View Document</u>
Any additional information	<u>View Document</u>

1.4 Feedback System

1.4.1 Structured feedback received from 1) Students, 2) Teachers, 3) Employers, 4) Alumni and 5) Parents for design and review of syllabus-Semester wise/year-wise

A.Any 4 of the above

B.Any 3 of the above

C. Any 2 of the above

D. Any 1 of the above

Response: A.Any 4 of the above

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

- 1.4.2 Feedback processes of the institution may be classified as follows:
- A. Feedback collected, analysed and action taken and feedback available on website
- B. Feedback collected, analysed and action has been taken
- C. Feedback collected and analysed
- D. Feedback collected

Response: D. Feedback collected

File Description	Document	
Any additional information	<u>View Document</u>	
URL for feedback report	<u>View Document</u>	

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Average percentage of students from other States and Countries during the last five years

Response: 0.66

2.1.1.1 Number of students from other states and countries year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
31	16	12	00	20

File Description	Document
List of students (other states and countries)	<u>View Document</u>
Institutional data in prescribed format	View Document
Any additional information	View Document

2.1.2 Average Enrollment percentage (Average of last five years)

Response: 64.14

2.1.2.1 Number of students admitted year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
475	479	451	494	933

2.1.2.2 Number of sanctioned seats year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
890	888	885	893	871

File Description	Document
Institutional data in prescribed format	<u>View Document</u>
Any additional information	View Document

2.1.3 Average percentage of seats filled against seats reserved for various categories as per applicable reservation policy during the last five years

Response: 100

2.1.3.1 Number of actual students admitted from the reserved categories year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
92	121	89	197	183

File Description	Document
Institutional data in prescribed format	<u>View Document</u>
Any additional information	View Document

2.2 Catering to Student Diversity

2.2.1 The institution assesses the learning levels of the students, after admission and organises special programs for advanced learners and slow learners

Response:

The institution has a system enshrined in place at every departmental level wherein all the data about students is available. All students and their parents are given updates about after every internal test to keep updated about their child/ward's performance. The institution conducts awareness/induction programmes for the students and parents after enrolment to the courses. During the programme, the basics of the system are discussed along with soliciting the expectations of the stakeholders. Moreover, 'Bridge Courses' are conducted to ensure students' synchronization with the system. Further, to continuously monitor and evaluate the students learning levels, the institute has a robust mentoring mechanism as follows:

- A separate First Year Coordinator (of HOD Cadre) to overview the entire process of enhancing students learning levels.
- A faculty advisor for every class, and a mentor for every 15 to 20 students of a class.
- An exclusive professional counsellor to address issues which are beyond classroom.
- Regular meetings with class advisors and mentors to ascertain the learning levels of the students and to follow-up the actions taken.
- Organizing Parent-Teacher meeting to address the academic related matters.

Every core engineering department has adopted a separate metric to categorize the students based on their learning levels to take further measure to enhance their knowledge, skill and attitude. After admission,

looking at the performance in day to day, along with 1st test and 12th Class Marks, and interest shown for completing the assigned task institution try to identify penitential of students to classify them in different categories. Further, a Mentor-Mentee system in place where every faculty member is allotted 15-20 students to enhance the student's abilities. Also, mentors are maintaining a comprehensive 'Student Portfolio' and

Slow Learners: Slow learners are rigorously counselled by mentors and receive feedback regarding their studies and personal issues so that, they can enhance their academic performance. In addition, a separate first- year academic coordinator keeps track of the students' performance. The coordinator ensures class committee meetings and identifies learning abilities. Tutorials are conducted for slow learners in the identified subjects. Language laboratory and communication skill classes are conducted to enhance soft skills. Additional Bridge Course (Lateral Entry) in Mathematics concepts are taught to lateral entry students to help them cope with the subject.

Advanced Learners: To foster advanced learners, department specific student associations are developed. These associations aid in further development in the field, enhance leadership qualities, and nurture interpersonal skills. Also, advanced learners are encouraged to participate in symposiums, paper presentations, poster presentations, and quiz contests. They are encouraged to register and participate in events organized by professional bodies like IEEE (Institute of Electrical and Electronics Engineers), ISTE (Indian Society for Technical Education), SAE (Society for Automotive Engineers), India, and IE (Institution of Engineers).

File Description	Document	
Any additional information	<u>View Document</u>	
Link for Additional Information	View Document	

2.2.2 Student - Full time teacher ratio Response: 13.43 File Description Document

File Description	Document
Any additional information	View Document

2.2.3 Percentage of differently abled students (Divyangjan) on rolls

Response: 0

2.2.3.1 Number of differently abled students on rolls

File Description	Document
List of students(differently abled)	<u>View Document</u>
Institutional data in prescribed format	<u>View Document</u>
Any other document submitted by the Institution to a Government agency giving this 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:

Experiential Learning: In addition to the laboratory practice / experiments specified by the affiliated university in connection with the theory taught in the classroom, students are also taught/demonstrated content beyond the experiments. This enhances their practical knowledge as well as tests the concepts acquired by them. Further, 'Virtual Laboratories' have been introduced to provide clarity to the concepts taught in the class. Industrial visits are conducted for the students to provide hands- on field experience and to update them with the current technology. Also, impact analysis of these site visits is performed to ascertain the level of understanding of the practicality and implementation of the concepts studied by them. Students are also encouraged to undergo internship during academic semesters. This allows them to gain first-hand experience of the domain, get updated on current industrial practices, and helps them gain a perspective of their career. ICT teaching aids like animated videos, demo videos, and PPTs are incorporated in the day-to-day teaching process to enhance the students' understanding of the subject.

Participatory Learning: Every faculty practice active learning and inductive teaching-learning methodologies to ensure effective dissemination of knowledge. Outcome based pedagogies such as Cooperative Learning, Collaborative Learning, and Project- and Problem- based learning are introduced to foster the learning process. These are planned to address community issues through the concepts learnt in the courses. In addition, talks by experts, whereby knowledge and experience are shared encompassing different perceptions of determining and solving community issues. More than 50 MOUs have been established with to ensure participatory learning. Interactive teaching tools like Blogs, Google Group, and Google classroom are extensively used by the faculty to share notes with their group members, to discuss and debate topics of choice based on the uploaded content, and to assess the learning levels of the students. In addition, major and mini projects are chosen from the viewpoint of social and community requirements. Further, management provide funds to selected capstone projects to persuade the pupil towards invention and innovation. In most of the subjects, emphasis are given on 'Team and group activity', 'Teacher guided student seminars', 'Subject quiz', 'Debates', and 'Assignments' to ensure the attainment of graduate attributes.

Problem Solving Methodologies: The college has introduced 'Engineering Exploration' course and

Page 33/130 21-03-2020 07:27:08

'Tinkering Laboratory' across all the UG engineering courses to trigger critical thinking, lifelong learning, social innovation through identifying social and environmental related problems, solution to the same through structured scientific methodologies, and align the solution through modern technology. Moreover, V-ACT (Value, Aptitude, Career Guidance and Technical Training) classes are introduced to strengthen the problem-solving ability of individual student. Further, external agencies are also called during the vacation to enhance the problem-solving ability for the prospective placement and competitive examinations. All the departments have adopted compulsory internship as a credit course to ensure students comprehend corporate problem-solving techniques on the job.

Moreover, the institution has set up NAIN (New Age Incubation Network) to support stat-ups and regularly conducts 'Ideathon' and 'Hackathon' to foster the critical thinking among the students.

File Description	Document	
Any additional information	View Document	
Link for Additional Information	<u>View Document</u>	

2.3.2 Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources etc.

Response: 100

2.3.2.1 Number of teachers using ICT

Response: 176

File Description	Document	
List of teachers (using ICT for teaching)	View Document	
Any additional information	View Document	
Provide link for webpage describing the "LMS/ Academic management system"	View Document	

2.3.3 Ratio of students to mentor for academic and stress related issues

Response: 14.68

2.3.3.1 Number of mentors

Response: 161

File Description	Document
Any additional information	<u>View Document</u>

2.3.4 Innovation and creativity in teaching-learning

Response:

The institution has always embraced modern pedagogies of engagement to create conducive environment for teaching-learning. To foster innovation and creativity in the teaching-learning practices, a series of workshops known as the "Integra" is conducted every semester to bring out awareness among the faculty. Further, a structured course file has been established to assure the implementation of imbibed modern methodologies. Moreover, every department publishes "Benchmark Documents of Teaching-Learning" to pervade and share the best practices across the departments. Following are the inductive teaching-learning practices towards a student- centric approach at the institution:

Flipped Classroom: Every faculty has a personal webpage, in addition to the official profile page, in the college website. The faculty share their learning material and home work/assignments with the students through different e-platforms. This enhances productivity and performance in the classroom as the faculty can trigger critical thinking and address complex engineering problems by optimizing the discussion on self-explanatory topics. Moreover, formative assessments can also be performed through the e-platforms to quickly assess the learning levels of the students and to offer constructive suggestions. In addition, virtual discussions on the subjects ensures "Keep it flowing around" model of pedagogy of engagement.

Collaborative Learning: To negotiate with team dynamics, to cultivate team spirit and to strengthen leadership qualities, collaborative learning methodology is deployed in the form of mini projects. Also, rubrics are developed to ensure effective assessments of traits expected from this methodology.

Cooperative Learning: In order to develop positive interdependency and individual and group accountability, cooperative learning has been adopted in the system. More specifically, Engineering Exploration course along with Tinkering lab has been established in order to fill the lacuna of the affiliated system. Structured templates and assessment techniques have been developed for the effective deployment of the methodology. This concept helps in team development.

Problem Based Learning: To develop critical thinking and problem-solving ability, problem- based learning has been introduced in the system. In this methodology, small groups are formed and presented with problems to get multiple optimal solutions. It encourages students to be active and innovative.

Project Based Learning: Students are allowed to work in multidisciplinary projects, funded projects, field projects, research projects, and projects with social impact. This promotes their engagement through deep investigation of complex problems. Also, it helps them to cultivate traits of lifelong learning and social responsibilities. Further, management provides funds for selected capstone projects to foster the innovation among the students.

Apart from these pedagogies of student engagement, every faculty practice active learning methodology with a group of 4 to 5 students such as "Think-Pair-Share" and "Think-Aloud-Pair" Problem Solving, check the notes in team, ask Reciprocal Peer Questions, Summarize the concepts, Analyse the case studies and finally write assignment.

File Description	Document
Any additional information	<u>View Document</u>

2.4 Teacher Profile and Quality

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

Response: 100

File Description	Document	
Year wise full time teachers and sanctioned posts for 5 years	<u>View Document</u>	
List of the faculty members authenticated by the Head of HEI	View Document	
Any additional information	View Document	

2.4.2 Average percentage of full time teachers with Ph.D. during the last five years

Response: 12.12

2.4.2.1 Number of full time teachers with Ph.D. year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
29	19	19	20	17

21-03-2020 07:27:11

File Description	Document
List of number of full time teachers with PhD and number of full time teachers for 5 years	View Document
Any additional information	View Document

2.4.3 Teaching experience per full time teacher in number of years

Response: 11.06

2.4.3.1 Total experience of full-time teachers

Response: 1946

File Description	Document
Any additional information	<u>View Document</u>

2.4.4 Percentage of full time teachers who received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the last five years

Response: 5.82

2.4.4.1 Number of full time teachers receiving awards from state /national /international level from Government recognised bodies year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
6	1	3	0	0

File Description	Document
Institutional data in prescribed format	<u>View Document</u>
e-copies of award letters (scanned or soft copy)	View Document
Any additional information	View Document

2.4.5 Average percentage of full time teachers from other States against sanctioned posts during the last five years

Response: 7.72

2.4.5.1 Number of full time teachers from other states year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
10	10	13	18	15

File Description	Document
List of full time teachers from other state and state from which qualifying degree was obtained	View Document
Any additional information	View Document

2.5 Evaluation Process and Reforms

2.5.1 Reforms in Continuous Internal Evaluation(CIE) system at the institutional level

Response:

The Institution is affiliated to the VTU, adheres to its syllabus and regulations with regard to CIE and Semester End Examination. The university has adopted the Choice Based Credit System (CBCS) to address the Outcome Based Engineering Education (OBEE). The CIE is performed for 40 marks in UG engineering programmes as per the prescription of the university. The CIE includes a spectrum of tools and techniques such as Internal Test, Assignment, One Minute paper, Quiz, Seminar, Group Discussion, etc. to ascertain the learning levels of individual students. Laboratory CIE is conducted for 20 marks, which includes Internal exams, Viva Voce, Quiz, Discussion, etc. to close the gap between the theory and practice.

Moreover, CIE is conducted in line with the Course Outcomes (COs) and respective Topic Level Outcomes (TLOs). A robust system has been established to ensure that all the test items undergo critical evaluation to ensure Higher Order Thinking Skills (HOTS) of Blooms Taxonomy level and to foster critical thinking among the students. Further, all the COs that have been mapped to the four POs (Engineering knowledge, Problem analysis, Design/development of solutions, conduct investigations of complex problems) address complex engineering problems to inculcate the culture of lifelong learning. In addition, rubrics are developed to bring more clarity in evaluation, while addressing soft POs (POs 6-12 of NBA). Moreover, the system is developed to ensure that all the 12 POs as per NBA are addressed every semester/year in a balanced form to cultivate the graduate traits among the students.

Every month, departmental meetings are conducted to review the students' progress by involving all the stakeholders. A separate First Year (FY) Undergraduate (UG) coordinator has been appointed to emphasize the culture of proactive involvement in studies among the students, who also conducts regular meetings to facilitate the students to adopt the outcome-based culture.

The details of the students' progress are made available at every departmental level and shared with all the stakeholders such as the Management, Student Mentors, Class Advisor, parents, etc. Moreover, a copy of progress report is sent to the parents by post, so that they remain aware of learning status of their ward.

File Description	Document
Any additional information	View Document
Link for Additional Information	<u>View Document</u>

2.5.2 Mechanism of internal assessment is transparent and robust in terms of frequency and variety

Response:

During the orientation programme, all the stakeholders are informed in advance about the mechanisms, rules, and regulations pertaining to the Continuous Internal Examination (CIE) and Semester End Examination (SEE) not only from the perspective of the University, but also regarding the OBE practices enshrined in the system. In addition, an 'Academic and Examination Group' has been established to contemplate on continual improvement aspects in the CIE system and to provide constructive suggestions regarding examination reforms. Moreover, a 'Flying Squad' has been established at the college and departmental level to prevent malpractice, and to bring transparency during examinations. The 'Flying Squad' team visits the rooms during the Internal Examinations and reports to the respective department. Also, these examinations are conducted in line with the regulations provided for external exams to help create a beneficial environment, which will facilitate the students face the external examinations without any apprehension.

At the departmental level, Course coordinators and Module coordinators oversee the quality of the internal assessment question paper as per the OBE requirement. The Internal Question Paper Assurance Committee at the departmental level ensures that the HOTS of Blooms taxonomy along with TLOs/COs are addressed and that the same is displayed in the question papers to bring awareness among the students. Along with the question paper, a comprehensive scheme of evaluation and answers are submitted to the committee, which is shared and discussed among the students after the examination to bring clarity and transparency in the system. The same procedures are adopted for the scrutiny of other tools of continual assessment such as assignment, quiz, one-minute paper, seminar, group discussion, etc.

Three internal examinations are conducted per subject, and the average of three examinations along with the other assessment grades are considered for the final internal marks. In the laboratory, only 2 examinations are conducted, and the best one of examination is selected along with other continuous assessment tools. All the assessment tools are prepared in advance prior to the commencement of the semester, and the same is documented in the course file. The entire course plan consisting of tools and techniques for CIE is shared with the students along with the rubrics of evaluation to provide clarity and transparency among all the stakeholders.

The three internal class tests are spread across the semester at intervals of five weeks each. In between the students face class quizzes, one-minute paper and other assessment tools during each class session. Moreover, assignments which address HOTS of Blooms Taxonomy are given which involve teamwork and group problem solving. The assessments received by students are displayed on the notice boards, the scheme and solution is discussed in the class room and explanatory notes are added in the blue books during evaluation so that students perceive the evaluation to be transparent.

File Description	Document
Any additional information	<u>View Document</u>

2.5.3 Mechanism to deal with examination related grievances is transparent, time-bound and efficient

Response:

Departmental Level

- Every class consists of one 'Faculty Advisor' and 3 Mentors who will seek feedback after every Internal Examination and counsel students to better performance.
- Students can put forth their grievance at the department level not only about the examinations, but also to other aspects such as teaching-learning, gender-equality, etc. which will be sorted out within the stipulated time bound to the satisfaction of the students, if it is within the purview of the department.
- Every department consist of one departmental EMS (Examination Management System) coordinator and a Chief coordinator at college level to assist the students in examination related matters.
- Each class has two class representatives. At the end of each Internal Examinations, the HOD will convene a meeting with the class advisors and the class student representative to solicit their feedback and to address grievances, if any.
- At the end of each Internal Assessment test, the students can discuss the evaluation of his/her blue books with the subject teacher and get redressal for any of his/her grievance.
- The students can also approach HOD or Principal, if the need arises.
- Re-tests are conducted for students, who have received prior permission for their absence due to genuine reasons.
- The faculty member should upload and share the internal examination marks with the students and parents within a week from the date of the examination.
- Progress report is sent to the parents/wards within 15 days of Internal examination by post.

College Level

• The Institution has a centralized Grievance Readdressed Cell comprising of the Management,

Principal, and a Representative from each department.

- A suggestion and grievances box are kept near the Principal's chamber.
- Feedback and idea to enhance the system are solicited at the end of every semester, and the same is tabled for discussion during a meeting with the student class representative and management.

University Level

- Grievances related to SEE such as "Out of syllabus", error in question paper, etc. related to the subject can be informed to the course coordinator, who will bring the matter to the notice of the HOD, Principal, and Registrar Evaluation of the University in written form. The University will do the needful as per the rules and regulations.
- Students can apply for revaluation of their semester examination answer paper in a theory course within two weeks from the declaration of the results, if they are not satisfied with the first evaluation
- Students can also apply for a photocopy of their answer scripts and discuss with their respective course faculty member.
- If the answer script deserves more marks than the marks awarded in the first evaluation, the student can apply for a review with the recommendation of HOD of the respective department.
- As per university norms, revaluation is not permitted for practical courses and project work.
- Since the affiliated university is situated around 400kms away from the college, if there is any delay in addressing the grievance by the University, faculty/office staff provides personal assistance by approaching the concerned authority in the university.

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

2.5.4 The institution adheres to the academic calendar for the conduct of CIE

Response:

The affiliated university provides an academic calendar for both odd and even semesters separately. The college in turn, prepares a college level calendar and each department will put forth a departmental calendar, which is in line with the college calendar to ensure timely execution of micro level activities. A sperate IQAC calendar is prepared to assist the departments to keep the track of quality assurance activities.

The college calendar includes details such as internal examinations, students' feedback, SEEs, Internal academic and administrative audits, vacation, etc. The Internal theory and practical examinations are

conducted as per the college/departmental calendar. The SEEs must be as per the affiliated university calendar. The faculty should upload and share the internal examination marks with the students and parents within a week from the date of the examination. Further, the department will inform the students' parents about the students' progress within 15 days from the date of the internal examinations. The College will upload the internal marks of theory subjects, laboratory work, mini project, technical seminar, comprehensive viva, and main project in the stipulated time given by the University. Being an affiliated institution, we strictly adhere to the academic calendar of the University.

The Institution has established a system, which consists of 'Work Dairy' and Google-Sheet platform to ensure strict adherence to the academic calendar. The faculty must provide the information regarding teaching-learning of his/her subject in the 'Work Dairy' to validate the same by the HOD of the respective department. Further, the faculty will submit Macro- and Micro- level teaching plans and a comprehensive course plan before the commencement of the semester. This activity will help the system to follow the academic calendar meticulously. This strategy will allow the students to complete the given syllabus in enough time. The students are also given plenty of time before the examinations to prepare and practice their concepts.

File Description	Document
Any additional information	<u>View Document</u>

2.6 Student Performance and Learning Outcomes

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

Response:

The Institution has adopted Programme Outcomes (POs) which are in line with the graduate attributes. We have 12 POs, which are common across all technical education programmes.

Programme Outcomes are:

- 1. Engineering knowledge
- 2. Problem analysis
- 3. Design/development of solutions
- 4. Conduct investigations of complex problems
- 5. Modern tool usage
- 6. The engineer and society
- 7. Environment and sustainability
- 8. Ethics
- 9. Individual and teamwork
- 10. Communication
- 11. Project management and finance

12. Life-long learning

The POs for Business Administration are:

- 1. Apply knowledge of management theories and practices to solve business problems,
- 2. Foster analytical and critical thinking abilities for data-based decision making,
- 3. Ability to develop value- based leadership,
- 4. Ability to understand, analyse and communicate global, economic, legal, and ethical aspects of business.
- 5. Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to a team environment.

The POs for Computer Applications are:

- 1. Computational Knowledge
- 2. Problem Analysis
- 3. Design / Development of Solutions
- 4. Conduct Investigations of Complex Computing Problems
- 5. Modern Tool Usage
- 6. Professional Ethics
- 7. Life-long Learning
- 8. Project Management and Finance
- 9. Communication Efficacy
- 10. Societal and Environmental Concern
- 11. Individual and Teamwork
- 12. Innovation and Entrepreneurship

Further, each department has minimum 2 and maximum 4 Program Specific Outcomes (PSOs) depending on the requirement at the departmental level. Every course has 4-6 Course Outcomes (COs). The COs are defined as per the balanced CO-PO matrix provided by the departmental accreditation coordinators who is also the member of IQAC. Further, the COs are framed as per the well- defined and developed checklist by the course coordinator including the CO-PO/PSO mapping, levels of mapping, and the rationale behind each mapping. Moreover, the assessment tools are also mentioned by the course coordinator, and all these are validated by the module coordinator. These COs are finally verified by the Program Assessment Committee of each department in order to maintain consistency of purpose.

The POs and PSOs are published at -

- Department webpage in the Institute website: http://www.sjec.ac.in/
- Display boards at different locations (Department Library, HOD room, Department Office, Student

Notice Board).

- Departmental Magazine, Departmental Calendar, and Lab Manuals.
- Apart from this, the POs and PSOs are made available to all the stakeholders of the programme through meetings, student awareness classes, and student orientation programmes.

The COs are published at -

- Course webpage, course plan, class notice boards, and departmental bench marking document.
- In addition, the faculty discuss the COs during the class session in every semester of their respective subject emphasizing the OBE practices adopted and CO-PO Mapping and assessment methodology to bring more clarity and to ensure proactive participation of the students in learning.

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

2.6.2 Attainment of program outcomes, program specific outcomes and course outcomes are evaluated by the institution

Response:

The Institution has adopted a robust system for the attainment calculation of the POs, PSOs, and COs. The details are as follows:

- The Program Coordinator along with the Module Coordinator prepares a balanced CO-PO matrix ensuring that each PO/PSO is addressed in every semester. The notion behind this methodology is to certify that the students imbibe the expected trait in a steady way throughout the academic year. Further, each course contributes 2 to 6 POs/PSOs. This matrix is further shared with the course coordinators to frame the COs for their respective subject.
- The course coordinator establishes the COs such that a minimum of two POs is mapped to ensure robustness in the assessment of each PO and to extract the potential of the subject. Moreover, every mapping is documented with appropriate levels and rationale. The Blooms Taxonomy levels and the details / basics of the CO are carefully considered, while framing the COs. All these are meticulously documented in the course file.
- Later, the course coordinator along with the course instructor frames the Topic Learning Outcomes (TLOs), pedagogy of engagement, and assessment tools to be used with Blooms Taxonomy at every stage. These are highlighted in the course plan, to be prepared prior to the commencement of each semester.
- Each TLO is mapped to the COs and the attainment levels are fixed as per the following metric of measurement:

Level 1: 50% students scored/rated more than or equal to 60% of maximum marks

Level 2: 60% students scored/rated more than or equal to 60% of maximum marks

Level 3: 70% students scored/rated more than or equal to 60% of maximum marks

- The assessment of the COs involves formative assessment tools (Internal Examination, Assignment, Quiz, Seminar, etc.) and summative assessment tool (Semester End Examination). The weightage adopted by the Institution is 40% for formative assessment and 60% for summative assessment.
- Further, surveys are conducted to solicit students' opinions about the attainment of COs and POs and referred as Indirect assessment. All the other tools are termed as Direct attainment.
- Each course consists of 'Direct CO-PO matrix' and 'Indirect CO-PO matrix'. In Direct CO-PO matrix at course level, maximum value of CO attainment for a particular PO is selected as an attainment of the respective PO. The same is carried forward to include in the Course-PO/PSO matrix of the entire programme. The same procedure is followed for the calculation of the Indirect PO/PSO attainment.
- At the end, in the Direct Course-PO/PSO matrix of the programme, average attainment of each POs/PSOs is considered and the same procedure is followed for Indirect Course-PO/PSO matrix. A weightage of 80% is allotted for Direct attainment and 20% is allotted for Indirect attainment to calculate the ultimate attainment of each of the POs and PSOs.
- Based on the attainment, the Program Assessment Committee (PAC) and Department Advisory Board (DAB) suggest action items for continual improvement, and the same is implemented by the course coordinators of the respective subject in the next academic year.

File Description	Document
Any additional information	<u>View Document</u>
Link for Additional Information	View Document

2.6.3 Average pass percentage of Students

Response: 99.35

2.6.3.1 Total number of final year students who passed the examination conducted by Institution.

Response: 608

2.6.3.2 Total number of final year students who appeared for the examination conducted by the institution

Response: 612

File Description	Document	
Institutional data in prescribed format	<u>View Document</u>	
Any additional information	View Document	

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Response: 3.43

Criterion 3 - Research, Innovations and Extension

3.1 Resource Mobilization for Research

3.1.1 Grants for research projects sponsored by government/non government sources such as industry ,corporate houses, international bodies, endowment, chairs in the institution during the last five years (INR in Lakhs)

Response: 129.01

3.1.1.1 Total Grants for research projects sponsored by the non-government sources such as industry, corporate houses, international bodies, endowments, Chairs in the institution year-wise during the last five years(INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
17.73	29.74	26.51	34.04	20.99

File Description	Document
List of project and grant details	View Document
e-copies of the grant award letters for research projects sponsored by non-government	View Document
Any additional information	View Document

3.1.2 Percentage of teachers recognised as research guides at present

Response: 10.23

3.1.2.1 Number of teachers recognised as research guides

Response: 18

File Description	Document
Any additional information	View Document

3.1.3 Number of research projects per teacher funded, by government and non-government agencies, during the last five year

Response: 0.98

3.1.3.1 Number of research projects funded by government and non-government agencies during the last five years

Response: 63

Page 47/130 21-03-2020 07:27:16

3.1.3.2 Number of full time teachers worked in the institution during the last 5 years

Response: 322

File Description	Document
Supporting document from Funding Agency	View Document
Any additional information	View Document
Funding agency website URL	View Document

3.2 Innovation Ecosystem

3.2.1 Institution has created an ecosystem for innovations including incubation centre and other initiatives for creation and transfer of knowledge

Response:

The New Age Incubation Network – NAIN was established at SJEC in the year 2019. It is sanctioned by the Department of Information Technology/Biotechnology and S&T, Govt of Karnataka with the objective:

- To Promote ICT sector
- To encourage students, research scholars and alumni to share their ideas to solve chosen problems which are local centric and to Validate, Refine and Nurture ideas.
- To provide an ecosystem to convert ideas into proofs of concept and upgrade them to a level of commercial value.
- To encourage and lead the teams towards setting up a business enterprise.

This Incubation Centre will facilitate in getting a grant of Rs 3 lakhs/year for each selected novel project from the Govt. of Karnataka. The SJEC Incubation Centre with working space of 4000 sqft facility can accommodate up to 15 start-ups simultaneously. This state-of-the-art facility includes well-furnished seating arrangements, high configuration computers, independent high-speed dedicated internet connection, uninterrupted power back up and discussion & meeting rooms. The IPR cell established in collaboration with Karnataka Science Council for Science and Technology (KSCST) helps in bringing awareness about IPR, enables patent searches, guides inventors in respect of patenting searches, facilitates filing of patents etc. Two Ideation events under the "Anveshan" banner have already been conducted which assisted in generation of around 48 ideas. Students of all departments took active part in this event thereby contributing to the idea-base at the college. Through Anveshan, 15 best ideas have been shortlisted and would be considered for incubation under NAIN. The 15 Ideas have already been submitted to NAIN portal and results will be announced in a short time.

The facilities include a Laser cutting machine, High quality 3-D printer to assist the students to prepare better quality prototypes. Also other machineries like drilling machine, wood cutter, tool sets, CNC lathe and CNC milling machine will be coming in the near future.

File Description	Document	
Any additional information	<u>View Document</u>	
Link for Additional Information	View Document	

3.2.2 Number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the last five years

Response: 298

3.2.2.1 Number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
55	75	81	56	31

File Description	Document	
Report of the event	<u>View Document</u>	
List of workshops/seminars during the last 5 years	View Document	
Any additional information	View Document	

3.3 Research Publications and Awards

3.3.1 The institution has a stated Code of Ethics to check malpractices and plagiarism in Research

Response: Yes

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

3.3.2 The institution provides incentives to teachers who receive state, national and international recognition/awards

Response: Yes

File Description Document	
e- copies of the letters of awards	View Document
Any additional information	<u>View Document</u>

3.3.3 Number of Ph.D.s awarded per teacher during the last five years

Response: 0.28

3.3.3.1 How many Ph.Ds awarded within last five years

Response: 08

3.3.3.2 Number of teachers recognized as guides during the last five years

Response: 29

File Description	Document
URL to the research page on HEI web site	<u>View Document</u>
List of PhD scholars and their details like name of the guide, title of thesis, year of award etc	View Document
Any additional information	View Document

3.3.4 Number of research papers per teacher in the Journals notified on UGC website during the last five years

Response: 2.05

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

2018-19	2017-18	2016-17	2015-16	2014-15
82	132	54	50	34

File Description	Document
List of research papers by title, author, department, name and year of publication	View Document
Any additional information	View Document

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

Response: 1.95

3.3.5.1 Total number of books and chapters in edited volumes / books published, and papers in national/international conference-proceedings year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
63	50	64	80	78

File Description	Document
List books and chapters in edited volumes / books published	View Document
Any additional information	View Document

3.4 Extension Activities

3.4.1 Extension activities in the neighbourhood community in terms of impact and sensitising students to social issues and holistic development during the last five years

Response:

One of the mission statements of the college is "Strengthen the Educational Social Responsibilities (ESR) of the institution". The Institution considers service to the community as paramount and ensures the mission is attained by active participation of the students, staff and management. The institution has exclusively established different committees such as AICUF, and NSS to accomplish this mission. In addition to these, each department conducts several activities through its student association.

AICUF (All India Catholic University Federation): This association deeply involved in social service through the student community. Also, instils the spirituality among the students. It conducts visits to different primary and high schools, retreat homes, old age homes, hospitals etc. serve the people and to sensitize the civil culture and responsibility among the students.

NSS and Youth Red Cross: This cell organizes and promotes government initiatives such as Swacch Bharath, Save Water, Abolish Plastics, Tree Plantation, AIDS Awareness campaigns/ programmes/ Rallies, Road Safety week etc. to adapt the graduate attributes such as Engineering and Society, Environment and Sustainability, and Lifelong learning. Moreover, it organizes blood donation camps every year and conducts charity programmes for the neighbourhood.

Every department conducts ESR activities and students are encouraged to take up mini and capstone projects during their course to align the engineering knowledge along with the society and mankind. Moreover, management arranges events of commemoration and observance of all-important days and occasions, Special technical programmes for the school children, Personality development training activities, Digital literacy campaigns, Adult Education- Physical, Spiritual and Psychological Counselling

for the students. Further, cultural committee organizes 'Milan' an event to pervade the cultural and religious diversity, and to inculcate the habit of healthy culture by celebrating the festivals of all the community during the time of September every year.

File Description	Document	
Any additional information	<u>View Document</u>	
Link for Additional Information	View Document	

3.4.2 Number of awards and recognition received for extension activities from Government /recognised bodies during the last five years

Response: 0

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

2018-19	2017-18	2016-17	2015-16	2014-15
0	0	0	0	0

File Description	Document
Number of awards for extension activities in last 5 years	View Document
e-copy of the award letters	View Document
Any additional information	View Document

3.4.3 Number of extension and outreach Programs conducted in collaboration with Industry, Community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the last five years

Response: 51

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

2018-19	2017-18	2016-17	2015-16	2014-15
23	11	7	9	1

File Description	Document
Reports of the event organized	<u>View Document</u>
Number of extension and outreach programs conducted with industry, community etc for the last five years	View Document
Any additional information	View Document

3.4.4 Average percentage of students participating in extension activities with Government Organisations, Non-Government Organisations and programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the last five years

Response: 33.9

3.4.4.1 Total number of students participating in extension activities with Government Organisations, Non-Government Organisations and programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. yearwise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
2285	585	400	385	400

File Description	Document
Report of the event	View Document
Average percentage of students participating in extension activities with Govt or NGO etc	View Document
Any additional information	View Document

3.5 Collaboration

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

Response: 255

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

2018-19	2017-18	2016-17	2015-16	2014-15
108	54	45	29	19

File Description	Document
Number of Collaborative activities for research, faculty etc	View Document
Copies of collaboration	View Document
Any additional information	View Document

3.5.2 Number of functional MoUs with institutions of National/ International importance, Other Institutions, Industries, Corporate houses etc., during the last five years (only functional MoUs with ongoing activities to be considered)

Response: 54

3.5.2.1 Number of functional MoUs with institutions of national, international importance, other universities, industries, corporate houses etc. year-wise during the last five years (only functional MoUs with ongoing activities to be considered)

2018-19	2017-18	2016-17	2015-16	2014-15
29	11	08	4	2

File Description	Document
e-copies of the MoUs with institution/ industry/ corporate house	View Document
Details of functional MoUs with institutions of national, international importance, other universities etc during the last five years	View Document
Any additional information	View Document

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1 The institution has adequate facilities for teaching- learning. viz., classrooms, laboratories, computing equipment, etc.

Response:

The Institution is spread over 35 acres of lush green land. Its well-defined organization structure ensures frequent constructive feedback to embrace the changing trends and requirements of the facilities to foster the teaching-learning process. Emphasis is placed on optimal utilization of the available resources in nation building. Apart from physical facilities, the Institution heavily invests on continual and incremental upgradation of the teaching-learning practices of the faculty through a series of related workshops/courses. The Institution is a member of the Indo-Universal Collaboration for Engineering Education (IUCEE), a consortium dedicated to the enhancement of quality of engineering education since 2015 to imbibe the best practices in teaching-learning across the globe. Further, the faculty is persuaded to undergo various OBE courses by providing financial and moral support. The following are state-of-art infrastructure developed to create conducive environment for teaching-learning:

- All the classrooms, laboratories, and other amenities are as prescribed by the norms of the AICTE and the affiliated university.
- Almost every classroom is equipped with ICT facilities to enhance the teaching-learning experience.
- The Institution has a well- developed and maintained library and separate hostel facility for boys' and girls' students on the campus, canteen, transport facility, auditorium, and playgrounds.
- To foster lifelong learning and encourage e-learning, Wi-Fi facility of 400 Mbps is provided within the campus.
- All the classrooms and the campus are under CCTV surveillance.
- Every department, including basic science departments, has a student association to carry out cocurricular activities to build team spirit and create awareness about upgradation in their domain.
- A good number of books are available to the faculty and students in the Central Library. In addition to this, several journals are subscribed to and made available. A separate Digital Library is also available to access Online Lectures/Videos/e-Journals, etc.
- The NPTEL Local Chapter is available for the students/faculty to get training and certification in different courses.
- Every staff member has a personal web page/blog and course web page to disseminate material, assignments, and webinars among the students. This also facilitates e-assessment to know the learning level of the students.
- A well- established audio-visual room "Sophia Chamber" facilitates recording of lectures, webinars, Skype talks, etc.
- All departments are equipped with separate tutorial rooms and seminar hall with required audiovisual equipment to conduct seminars/workshops.
- All departments have adequate computer facility with latest configuration and required software.

Virtual labs are effectively used enhance the learning experience of the students.

File Description	Document	
Any additional information	<u>View Document</u>	
Link for Additional Information	View Document	

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

Response:

The Institution has established a robust structure to facilitate extracurricular activities to nurture the traits of teamwork, values, environment, and social sensitivity through sports, games and cultural activities. The Physical Education Department has two well- qualified and trained staff to help both boys and girls. Apart from this, a Sports Advisory Committee has been established to provide constructive suggestions and to monitor the activities. The department provides all the facilities as per the AICTE and VTU norms. The college has well-developed facilities for a wide spectrum of sports such as cricket, football, basketball, badminton, hockey, volleyball etc. and separate multi gym facility are provided for boys and girls in their hostels. Students, who participate in sports activities or other extracurricular activities, are provided attendance and additional classes on demand, so that the time they spared for various activities can be compensated. The students have consistently bagged several prizes at individual/team events at intercollegiate, zonal, and university sports meet. The Institution provides TA/DA to the players for participation at different sports events. To unveil the talents of the students and staff, annual inter/intra class sports meet are organized every year. Moreover, during the college day, the Institution recognizes and provides cash prize/certificates/mementos, etc. to deserving sports persons to motivate them to achieve excellence.

The college has a dedicated cultural committee to execute cultural activities at the institute level. A national- level technical Fest "TIARA" is organized every year to provide a platform for the students' performance in extracurricular and co-curricular arenas. Attention is paid not only to cultural activities such as folk dances, classical singing, group singing, theatrical items, traditional heritage items, and fine arts, but also literary activities such as technical paper presentation, debates, robowars, etc. College Day, Freshers Day, Farewell programme, Onam celebration, and other national festival celebrations provide a forum to showcase the talents of the students. To facilitate all cultural/extra-curricular activities of the institute, seminar halls and open auditorium, and state of the art auditorium are made available. Talented students/faculty acts as mentors to support the aspirants and encourage them to participate in these cultural/extracurricular activities. The students are also encouraged to participate in different competitions held in various institutions at local/national levels.

Further, cultural committee organizes 'Milan' an event to pervade the cultural and religious diversity, and to inculcate the habit of healthy cultural by celebrating the festivals of all the community during the time of September every year.

21-03-2020 07:27:23

File Description	Document	
Any additional information	<u>View Document</u>	
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

Response: 43.84

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 32

File Description	Document
Number of classrooms and seminar halls with ICT enabled facilities	<u>View Document</u>
any additional information	View Document

4.1.4 Average percentage of budget allocation, excluding salary for infrastructure augmentation during the last five years.

Response: 40.06

4.1.4.1 Budget allocation for infrastructure augmentation, excluding salary year-wise during the last five years (INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
583.16	456.81	513.79	516.87	530.37

File Description	Document
Details of budget allocation, excluding salary during the last five years	View Document
Audited utilization statements	View Document
Any additional information	View Document

4.2 Library as a Learning Resource

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

Response:

BOOKS

Titles : 9992

Volumes : 43424

Book Bank : 2752

Project Reports : 2533

Journals (print) : 91

Journals (Online) : 3000+

Magazines : 26

News Papers : 9 (18 copies)

Back Volumes : 1668

Theses/dissertations : 10

Conference Proceedings : 157

CD/DVD ROMS : 2047

Addition in Last Five Years

Particulars	Year				
	2018-19	2017-18	2016-17	2015-16	2014-15
Books	1528	1019	1921	1268	2281
E-Books	30000+	22000+	11000+	11000+	4500+
Journals (Print)	91	88	89	102	100
Journals (Online)	6500+	6331+	6331+	6331+	1906+
Back Volumes	104	161	88	110	170
Project Reports	223	280	249	237	256
Magazines	26	26	26	20	19
News Papers	9	9	9	9	9

Name of the Software: - EASYLIB(Entire Automation System for Libraries)

Nature of Automation: - Fully automated

Version: - 4.4.2

Year of Automation: 2003

- 1.EASYLIB Library Management System Software has been deployed for automating the entire library operations.
- 2. Barcode technology is employed for the library housekeeping transactions.

EASYLIB stands for Entire Automation System for Libraries is an integrated system with all the necessary modules needed for running a library very professionally and efficiently. It runs on GUI (Graphical user Interface) environment giving ease of data entry and operation. It has web component that enables to share library data across the campus. It also has built in email and web publication support. Library members are able to access the library resources through campus network. As it follows internationally accepted Library Science standards like MARC, AACR2, ISO 2709, Dublin Core etc. it is easy to interconnect the library with other libraries with Easylib.

File Description	Document	
Any additional information	<u>View Document</u>	
Link for Additional Information	View Document	

4.2.2 Collection of rare books, manuscripts, special reports or any other knowledge resources for library enrichment

Response:

The Institution has the practice of collecting and maintaining rare books, special reports or any other knowledge resources to benefit students and faculty for their knowledge enhancement, research and exploring new things beyond syllabus books. The details of collection of rare books in the Library in different form are as below:

Rare Books (Print):810 volumes (Encyclopedias+ Dictionaries+handbooks+communication skills and development+ GATE & competitive examination books+ career guidance+books for startups etc)

Compendium of Research Publications (Print+Online): Library compiles the faculty research publications published in the peer-review publications and publish it in the form of Compendium of Research Publications annually and a copy is made available for reference in the Library. Further, online access to the same is provided through the library portal.

Old Question Papers (Print+Online): Library has made provision for students and faculty to refer/access University examination old question papers in the Library in print & online form.

Rare Books Collection (Online): Due to the cost and non-availability of rare books, we are making

provision for our users to access rare books through consortium based subscription and open source repositories through the library portalunder the head e-resources of which the link is provided herewith.

Self & E-Learning Resources: Access provided to the self and e-learning resources through NPTEL, VTU E-learning videos, great audio books open source repository etc in the Campus through Library Portal

File Description	Document
Link for Additional Information	<u>View Document</u>

4.2.3 Does the institution have the following:

- 1.e-journals
- 2.e-ShodhSindhu
- 3. Shodhganga Membership
- 4.e-books
- 5. Databases
- A. Any 4 of the above
- B. Any 3 of the above
- C. Any 2 of the above
- D. Any 1 of the above

Response: A. Any 4 of the above

File Description	Document
Details of subscriptions like e-journals,e- ShodhSindhu,Shodhganga Membership etc	View Document
Any additional information	View Document

4.2.4 Average annual expenditure for purchase of books and journals during the last five years (INR in Lakhs)

Response: 19.84

4.2.4.1 Annual expenditure for purchase of books and journals year-wise during the last five years (INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
26.97	23.83	18.83	16.73	12.85

File Description	Document	
Details of annual expenditure for purchase of books and journals during the last five years	View Document	
Audited statements of accounts	View Document	
Any additional information	View Document	

4.2.5 Availability of remote access to e-resources of the library			
Response: Yes			
File Description Document			
Any additional information	View Document		

4.2.6 Percentage per day usage of library by teachers and students

Response: 5.55

4.2.6.1 Average number of teachers and students using library per day over last one year

Response: 141

File Description	Document	
Any additional information	View Document	

4.3 IT Infrastructure

4.3.1 Institution frequently updates its IT facilities including Wi-Fi

Response:

The Institution has permanent IT facility along with Wi-Fi connectivity. The institutional IT facility is efficiently managed by the Department of Central Computer Centre (CCC). It consists of laboratories for Internet Browsing and a workspace for students' projects along with two meeting rooms. The Institution provides system administration and technical support, which includes software installation, configuration of servers and desktops/laptops, network monitoring (both wired & wireless), and internet sharing through CCC. For this, it also conducts in-house training for the technical staff and students.

The institution possesses a 400 Mbps BSNL internet leased line with a contention ratio of 1:1 through a Cisco 3925 high end router to facilitate the faculty and students in enhancing their academic and research activities. This is uplinked to all the departments, laboratories, hostels, office premises, and other locations through a fibre optic line with the help of a well-configured stacking switch.

SI. No.	Year	Wifi-Upgradation (Mbps)	
1	2019	400Mbps	
2	2016	280Mbps	
3	2013	100Mpbs	

To ensure a secured network connectivity and efficient bandwidth management at the central source, both for wired and wireless access, the Institution deploys a SonicWall firewall and a Wi-Fi Controller at the CCC. The Institution uses the SonicWall analyser software as per government rules and regulations. The Institution strongly supports skill upgrading through NPTEL, IUCEE, and other online courses through advanced Wi-Fi devices and computer resources throughout the college. Around 1100 LAN connections and 104 Wi-Fi devices are connected to the backbone network.

The Institution offers a good number of central software services like MATLAB, Microsoft Campus Packages etc. to the faculty and students.

The Institution fosters English training activity through language lab with Writeright software. This software provides practical experience to in-house and international students.

The Institution hosts University- related evaluation work to its constituent colleges by using the strong IT facilities available in the campus. It also extends its support by conducting various competitive examinations as a service to the society with the help of the central facilities.

The entire campus is well- monitored by 233 high definition CCTV cameras via the campus network links.

The Institution is well- equipped with electronic equipment, which include two IBM servers (IBMX 3100 and Dell PowerEdge T440 Tower Server), one bulk data storage unit (Netgear NAS Storage J4200), one Cisco router, NetGear core switch, network switches, wireless access devices (RUCKUS and ARUBA), desktops, laptops, printers and scanners, etc., which are managed by the CCC Department.

The E-Shikshana streaming server was sponsored by the VTU streams high-quality lecture sessions

(videos) to the local storage. The sessions are uploaded to CCC Google drive and can be accessible for students and staff. Moreover, the institution has supported VTU digital valuation from 2017-2018.

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

4.3.2 Student - Computer ratio

Response: 2.22

File Description	Document
Any additional information	<u>View Document</u>

4.3.3 Available bandwidth of internet connection in the Institution (Lease line)

>=50 MBPS

35-50 MBPS

20-35 MBPS

5-20 MBPS

Response: >=50 MBPS

File Description	Document	
Any additional information	View Document	

4.3.4 Facilities for e-content development such as Media Centre, Recording facility, Lecture **Capturing System (LCS)**

Response: Yes

File Description	Document
Facilities for e-content development such as Media Centre, Recording facility,LCS	View Document
Any additional information	<u>View Document</u>
Link to photographs	View Document

4.4 Maintenance of Campus Infrastructure

4.4.1 Average Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, as a percentage during the last five years

Response: 14.09

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

2018-19	2017-18	2016-17	2015-16	2014-15
350.98	113.90	170.06	189.86	135.58

File Description	Document
Details about assigned budget and expenditure on physical facilities and academic facilities	View Document
Audited statements of accounts.	View Document
Any additional information	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:

The Institution has established a robust system to enhance and sustain the physical, academic, and support facilities. It has advisory committees/groups to make sure the effectiveness of each of the supporting facilities. These committees have frequent meetings with the management to give their feedback to strengthen the system. Apart from these, the Library, Sports, and the Central Computer Centre (CCC) have been given the status of departments with exclusive faculty/staff to address their day- to- day activities. Moreover, these departments have meetings to intensify the services to the student community.

The Institution has the policy of replacing or upgrading the existing equipment to meet the changes in syllabus made by the University from time to time and is tracked through ledgers and stock registers. The utilization reports and the status quo of the departments are brought to the notice of the Management through the Audit.

All the classrooms are as per the AICTE and University norms and equipped with ICT facilities. The classrooms are well- ventilated and furnished. All the classrooms are cleaned every day by the

housekeeping staff and supervised by the housekeeper- in-charge. The furniture is well-maintained.

The laboratories are also maintained as per the standards set by the statutory bodies. Each department has a supervisor for the laboratory. Further, each laboratory has a faculty in charge to address and maintain technical glitches, if any. Every department computer laboratory is equipped with computers with modern configuration and licensed software in 1:1 ratio. Students can request for additional laboratory hours, whenever they find free time depending upon the availability of the computer laboratories. The college has provided exclusive place within the campus for the computer service provided for the timely readdressed of issues.

The CCC provides internet facilities through LAN and Wi-Fi for the staff and students. The entire college is Wi-Fi enabled and the students/staff must register for the facility at the CCC. In addition, students are provided internet access through computers at the CCC.

The Central Library is well-stocked with volumes on each title related to different subjects. Sufficient copies are maintained to cater to the needs of the students and faculty. Moreover, well- qualified and dedicated staffs are appointed to assist the students and to enhance the quality of the library experience. All the books are accessioned according to serial number and stacked using Dewey Decimal Classification Scheme. Obsolete books are removed from the stack and maintained separately in the weed-out section after stock verification annually. Books that are defaced or torn are regularly sent for book binding.

The Sports Advisory Committee advises and monitors the sports activities. Day- to- day sports activities are managed and monitored by the faculty of the Physical Education Department. Re-soiling of the ground with good quality red soil and marking as and when needed is done to conduct various events for students (both boys and girls) and staff members. The purchase of new equipment is done as and when required. The Department takes care of the maintenance of the above facilities. The college has a separate Maintenance and housekeeping department.

File Description	Document
Link for Additional Information	View Document

Criterion 5 - Student Support and Progression

5.1 Student Support

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

Response: 20.55

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

2018-19	2017-18	2016-17	2015-16	2014-15
622	595	541	483	242

File Description	Document
Upload self attested letter with the list of students sanctioned scholarships	View Document
Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years	View Document
Any additional information	View Document

5.1.2 Average percentage of students benefited by scholarships, freeships, etc. provided by the institution besides government schemes during the last five years

Response: 23.36

5.1.2.1 Total number of students benefited by scholarships, freeships, etc provided by the institution besides government schemes year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
483	507	548	604	693

File Description	Document
Any additional information	View Document

5.1.3 Number of capability enhancement and development schemes –

- 1. For competitive examinations
- 2. Career counselling
- 3. Soft skill development
- 4. Remedial coaching
- 5. Language lab
- 6. Bridge courses
- 7. Yoga and meditation
- 8. Personal Counselling
- A. 7 or more of the above
- B. Any 6 of the above
- C. Any 5 of the above
- D. Any 4 of the above

Response: A. 7 or more of the above

File Description	Document
Details of capability enhancement and development schemes	View Document
Any additional information	View Document
Link to Institutional website	View Document

5.1.4 Average percentage of student benefited by guidance for competitive examinations and career counselling offered by the institution during the last five years

Response: 20.28

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

2018-19	2017-18	2016-17	2015-16	2014-15
95	343	33	0	1998

File Description	Document
Number of students benefited by guidance for competitive examinations and career counselling during the last five years	View Document
Any additional information	View Document

5.1.5 Average percentage of students benefited by Vocational Education and Training (VET) during the last five years

Response: 8.61

5.1.5.1 Number of students attending VET year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
509	165	103	111	144

File Description	Document
Details of the students benifitted by VET	<u>View Document</u>
Any additional information	View Document

5.1.6 The institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases

Response: Yes

File Description	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
Any additional information	View Document

5.2 Student Progression

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

Response: 65.85

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

2018-19	2017-18	2016-17	2015-16	2014-15
382	434	492	409	283

File Description	Document
Self attested list of students placed	<u>View Document</u>
Details of student placement during the last five years	View Document
Any additional information	View Document

5.2.2 Percentage of student progression to higher education (previous graduating batch)

Response: 1.59

5.2.2.1 Number of outgoing students progressing to higher education

Response: 10

File Description	Document
Upload supporting data for student/alumni	<u>View Document</u>
Details of student progression to higher education	View Document

5.2.3 Average percentage of students qualifying in State/ National/ International level examinations during the last five years (eg: NET/ SLET/ GATE/ GMAT/ CAT/ GRE/ TOEFL/ Civil Services/State government examinations)

Response: 58.97

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

2018-19	2017-18	2016-17	2015-16	2014-15
42	25	27	19	6

5.2.3.2 Number of students who have appeared for the exams year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
50	50	40	30	20

File Description	Document
Upload supporting data for the same	<u>View Document</u>
Number of students qualifying in state/ national/ international level examinations during the last five years	View Document
Any additional information	View Document

5.3 Student Participation and Activities

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

Response: 114

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

2018-19	2017-18	2016-17	2015-16	2014-15
28	36	22	15	13

File Description	Document
Number of awards/medals for outstanding performance in sports/cultural activities at national/international level during the last five years	View Document
e-copies of award letters and certificates	View Document
Any additional information	View Document

5.3.2 Presence of an active Student Council & representation of students on academic & administrative bodies/committees of the institution

Response:

The Institute strongly believes in the Outcome Based Education methodology and paves the way forward for students in experiencing the authority and responsibilities and to ensure that the students imbibe graduate attributes adopted by the college. Since as per the affiliated university norms, students union is banned, all the students are provided a fair opportunity in all the affairs of the Institute, viz., curricular, co-curricular, and extracurricular activities.

All departments have a minimum of two students as representatives from each section to bring academic matters to the forum initially at the department level and at the Institution level. All the departments conduct meetings with the student class representatives after every internal test to address academic related matters. Apart from this, the Management conducts a yearly meeting with class representatives to solicit their opinion regarding academic and institutional facilities. All the departments have a department student chapter/society, professional associations, and various social clubs. The Head of the Department, staff, and students of the respective departments in consultation with the Principal choose the office bearers.

In addition, the students are actively involved in the Outcome Based Education system to strengthen and sustain the teaching-learning process. Student representatives are also involved in the Programme Assessment Committee (PAC), Departmental Advisory Boards (DAB), and Internal Quality Assurance Cell (IQAC). Further, the institution ensures students' involvement in various college-level academic and administrative committees to create conducive environment for the overall development of the students and to understand ground reality from the students' perspective. Moreover, their association in these committees ensures improvement in the POs such as team building, professional ethic, and role of an engineer in the society, and environment and sustainability.

The Students (chapter/forum) Associations such as IEEE, ISTE, CSI, IE, SAE, etc. Cultural Committee, Grievance Cell, Anti-ragging Committee, Sports Committee, NSS, YRC, AICUF and Jagruti Cell etc. have student representatives to create proactive pupils. Moreover, basic science departments have established students' associations related to a respective area to initiate teamwork at the very early stage of professional education.

File Description	Document	
Any additional information	View Document	
Link for Additional Information	<u>View Document</u>	

5.3.3 Average number of sports and cultural activities/ competitions organised at the institution level per year

Response: 44.2

5.3.3.1 Number of sports and cultural activities / competitions organised at the institution level year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
51	52	44	34	40

File Description	Document
Report of the event	View Document
Number of sports and cultural activities / competitions organised per year	View Document
Any additional information	View Document

5.4 Alumni Engagement

5.4.1 The Alumni Association/Chapters (registered and functional) contributes significantly to the development of the institution through financial and non financial means during the last five years

Response:

St. Joseph Engineering College has come a long way with 13 batches of proud alumni, guided by its motto "Service and Excellence", and climbed great heights, in a short time since its inception. Having some of the best infrastructural facilities, brilliant faculty members, and an organized administration, SJEC is now the Alma Mater to more than 8000 engineers and post- graduates across the globe. The SJEC alumni association strives to

- 1. Improve the prominence of the SJEC Alumni Association,
- 2. Elevate Alumni recognition and engagement,
- 3. Maintain an up-to-date Alumni database, and
- 4. Build a strong working relationship between the Alumni and the students.

The SJEC Alumni Association is not a registered body, but it has chapters in Mangaluru and Bengaluru, and there are talks of setting one up in the UAE as well. Its activities are coordinated by the Chairperson of the alumni relations along with a core committee with representatives from each department of the Institution. From offering feedback on courses and curriculum, to promoting campus placements, the SJEC alumni are truly the off-campus brand ambassadors. The Institution has also received excellent feedback from the employers of the alumni. The association provides a bridge for the alumni to connect with the students and interact with them. The alumni often visit their Alma Mater, deliver talks to the students, and share their experiences with students and faculty members, and inspire and enlighten them. They also hold a variety of training programmes and hands- on workshops for both students and faculty of the Institution. The alumni association hosts NOSTOS – an annual conclave where alumni who have graduated over the years and are serving in various sectors of the industry, academia, and government bodies come together to take part in a variety of events, including cultural, sports, and moderated discussions.

An online portal, alumni.sjec.ac.in offers a platform for the alumni to interact with their peers and maintain a good relationship with the Institution. Along with this, the association can also be contacted via

Email: alumni@sjec.ac.in

LinkedIn: www.linkedin.com/in/alumni-sjec-mangalore

Twitter: www.twitter.com/AlumniSjec

Facebook: www.facebook.com/sjecalumni

Instagram: www.instagram.com/alumni_sjec

The portal and other handles are regularly updated. All major activities and events of the college, and alumni achievements are posted regularly on these pages and the portal provides a window for both the students and the alumni to have up- to-date information about their alumni body and the Institution, respectively. The portal is also used to generate awareness and raise funds for social causes. The alumni even come forward to offer guidance to students on project selection, to judge the projects in the project exhibition, and provide funds wherever deserving. The alumni representative is even included in the advisory boards at the departmental- and institutional- levels to provide insight and valuable feedback in the development of the Institution and the quality of education imparted to its students.

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

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

? 5 Lakhs

4 Lakhs - 5 Lakhs

3 Lakhs - 4 Lakhs

1 Lakh - 3 Lakhs

Response: ? 5 Lakhs

File Description	Document
Any additional information	<u>View Document</u>
Alumni association audited statements	<u>View Document</u>

5.4.3 Number of Alumni Association / Chapters meetings held during the last five years

Response: 19

5.4.3.1 Number of Alumni Association /Chapters meetings held year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
2	7	1	3	6

File Description	Document
Number of Alumni Association / Chapters meetings conducted during the last five years	View Document
Any additional information	View Document
Report of the event	View Document

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1 The governance of the institution is reflective of an effective leadership in tune with the vision and mission of the institution

Response:

Vision: 'To be a global premier Institution of professional education and research'

Mission

- Provide opportunities to deserving students of all communities, the Christian students in particular, for quality professional education.
- Design and deliver curricula to meet the national and global changing needs through student-centric learning methodologies.
- Attract, nurture, and retain the best faculty and technical manpower.
- Consolidate the state- of-the- art infrastructure and equipment for teaching and research activities.
- Promote all- round personality development of the students through interaction with alumni, academia, and industry.
- Strengthen the Educational Social Responsibilities of the Institution.

The college is established to serve the society by imparting quality education and to ensure excellence in its field. The Institution is managed by the Diocese of Mangalore, which is known for its service to mankind across the globe. To enhance and sustain quality professional education on par with the best in its class institution, a robust structure has been established.

The Governing Board is the chief policy framing body of the College. The Director of the College is the secretary of the governing board, which holds meeting at least twice a year and takes all policy decisions for the College. The college trust has appointed a Governing Council to deal with specific policies of the College. The Principal is the Secretary of the Governing Council, which holds regular meetings once in every six months to mainly discuss the policies and academic matters of the College.

There is a Management Committee (MC) chaired by the Director of the Institute, which meets every week to execute the directives of the Governing Bodies, plan events, and decide on all academic and administrative issues. Apart from this, the College has Departmental Development Committees to address departmental needs, a College Council (All HODs and the MC), and a Department Committee (at the departmental level). Along with this, the College has another 12 Groups such as 'Cultural and Media Group', 'Library and Learning Group', 'Sports and Community Group', 'Discipline and Equity Group',

'Academics and Examination Group', 'Professional Societies Group', 'Placement and Training Group', 'Development and Planning Group', 'Research and Facilities Group', 'Industry and Innovation Group', 'Quality and Governance Group', and 'Student Welfare and Alumni Group' to meticulously plan and deploy the mission of the College.

Every year management provides scholarship/fee concession to the deserving students and distributes various scholarships of different statutory/public/private bodies. It has adopted Outcome Based Education (OBE) since 2011, which is refined to address the socio-technical requirements of the present society. Moreover, the Institution is a member of the Indo-Universal Collaboration for Engineering Education (IUCEE) since 2015 to adopt student- centric teaching-learning methodology. The Institution consistently provides sponsorship to the faculty to pursue higher education and has adopted the Performance Based Appraisal System (PBAS) to ensure productivity and performance of its faculty. It consistently upgrades the college facility based on the feedback of all the stakeholders and involves industry experts and alumni, more specifically in OBE and ESR activities.

File Description	Document
Link for Additional Information	View Document

6.1.2 The institution practices decentralization and participative management

Response:

The administration of the College is decentralized, and this responsibility is given to three committees.

Management Committee (MC): The Management Committee comprising of a Director, Assistant Directors, Principal, and HR Manager conducts a meeting every Wednesday. It has the authority to plan and execute the administrative needs and takes major administrative decisions of the College. It is also responsible for the purchase of equipment/services.

College Council: The College Committee consists of MC members, Deans, and Heads of all the Departments (the Chairman/Coordinators of College Association & Committees are its special invitees when specific issues related to association activities are to be discussed). It meets at least twice in a semester. It shoulders the responsibilities of planning the academic and other supporting activities.

Department Level Committees, including Hostels: This Committee involves MC members, respective HOD, and the department staff, and meets once in a month. It is responsible for preparing the department budget, planning manpower requirement, and arranging department level activities, including academics.

The Head of the Department puts forth policies pertaining to departmental academic activities such as subject allocation, timetable, recommending the faculty for FDPs consumables, organizing guest lectures and workshops, recommending necessary industrial visits and implanting training to achieve the goals, vision and mission of the department, etc.

Decentralization of Financial Powers

- The Governing Board has authorized the Director of the College to deal with the financial aspects.
- Investment on infrastructure and facilities, and purchase of equipment and services to various departments are placed before the Management Committee. This committee takes the decision on investment on facilities and purchases. The Chairman of this Committee, who is also the Director of the College, will approve the purchase and investment on infrastructure and facilities.
- The Principal can depute the faculty to various training programmes, FDPs, and other value-added programmes on the approval of the Director.
- The departments can also propose various activities for the benefit of faculty and students. The Director approves based on the relevance of the programmes.
- The HODs and section heads are permitted to purchase the immediate requirements of the department without the approval of the Director. However, the discretionary power to spend maximum amount of Rs. 1,00,000/-.

Participative Management

Students are involved in PAC, DAB, and IQAC to solicit ideas and opinions to strengthen the system. Moreover, the alumni, academicians, and industry experts are actively involved in DAB and IQAC to suggest and frame deployment plans to enhance the system.

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

6.2 Strategy Development and Deployment

6.2.1 Perspective/Strategic plan and Deployment documents are available in the institution

Response:

The Institutional development Strategies are framed with both top down and bottom up approach by taking feedback from all the stakeholders and are in line with the vision and mission of the College. Moreover, all departmental missions reflect the college mission to ensure smooth deployment of the strategic plans.

At every level, extreme care is taken for proper documentation of the strategic plans to aid hassle free deployment and meticulous follow-up. Each committee has well- established roles and responsibilities to define the purview for every activity. The system was generated to ensure that every committee provides action plans for each academic year along with the budget. This allows the management for optimal utilization of all the available resources. In addition, every faculty must give an action plan to enhance the department and Institution every year and the same is reviewed and refined for overall development.

Each department performs SWOC analysis and it is tabled for discussion with the management to frame the strategies. Through the SWOC analysis, the team can utilize the strengths of their group, understand their weaknesses, grab the opportunities, and overcome the threats. Also, Academic and Administrative Audits (AAA) are performed to ascertain the SWOC of the department and to facilitate it to fall in line with the college objectives.

Each department/programme has established the Programme Educational Objectives (PEOs), Programme Outcomes (POs), Course Outcomes (COs), and Topic Learning Outcomes (TLOs) towards ensuring graduate attributes as defined by the statutory bodies. A comprehensive AAA and course files are established to track the implementation.

Short- term Plans

- Attain NAAC accreditation,
- Obtain autonomy for the institution,
- Strengthen industry-institution interaction through industrial training programmes,
- Upgrade 20% of faculty qualifications to PhD,
- Provide consultancy services in the field of -
 - Emission Characteristics Measurement,
 - Water Quality Testing,
 - Industry Specific R&D, and
 - Testing / calibration services.
- Start PG programmes in the advanced areas of Engineering & Technology,
- Seek funds for Research & Development from AICTE, DST and other GO and NGOs,
- Generate intellectual property through research,
- Enter MOU with institutions of National importance like IIT, NIT, IIIT, and other research and development organizations in the country, and
- Introduce Engineering Exploration course and Tinkering Laboratory.

Long-term Plans

- Establish centres of excellence in all major departments,
- Upgrade the qualification of all faculty to PhD,
- Develop an indoor sports facility,
- Attain Deemed University status,
- Create a state-of-the-art Knowledge Centre, and
- Establish tie-ups with reputed international universities for staff and student-exchange programmes.

File Description	Document	
Any additional information	View Document	
Strategic Plan and deployment documents on the website	View Document	

6.2.2 Organizational structure of the institution including governing body, administrative setup, and functions of various bodies, service rules, procedures, recruitment, promotional policies as well as grievance redressal mechanism

Response:

Follow the link below to see the organization structure.

https://drive.google.com/file/d/1M-Z_tGn5ICOgVp8HGh4CncXlYnXdPyuo/view?usp=sharing

The roles and responsibilities of the major elements of the organizational structure are annexed as supporting document.

Service Rules

Service rules are prepared and approved by the Governing Board. The procedure of requirements, promotion policy, leave rules, etc. are explained in the service rules. The same is disseminated to all the faculty and staff. Printed books are made available to all the staff of the college. Any changes made to the service rule are made known through circulars.

Procedures

- Conduct, valuation, and documentation of internal examinations are organized by the Principal.
- Norms are established for student etiquette, behavior, and campus/hostel discipline.
- Appointment of staff is done by the Selection Committee, after ascertaining the qualifications, interview, and demonstration lectures.
- Training, probation, and confirmation are generally followed for selected appointees.
- Financial/Administrative issues are routed through proper channels (HOD & Principal) for approval

by the Director.

- The Principal has full autonomy over academic matters.
- The HOD has autonomy over departmental matters and reports to the Principal.
- Discussion on Inter-departmental/College matters take place in the College Council.
- The College Council appoints persons to carry out different student activities.

Policies

- All faculty allocations are approved by the Governing Board and all appointments are ratified by the Governing Board.
- Appointments are instituted only after due advertisement, interview, and demonstration lectures to ensure fairness and transparency in the selection process.
- The roles of the Director and the Principal in financial, administrative, and academic matters are well-defined.
- The ensures autonomy and administrative ease, post of deans are created as and when need arises.
- The Assistant Directors are in-charge of the Hostels, Maintenance, Housekeeping, Amenities, Transport, Security, Dispensary, and College Properties.
- There is periodic revision in pay scale as per the government norms.
- The designation and promotion of faculty is strictly as per AICTE norms, and
- The College has a promotion policy as follows:
 - Depending on the performance appraisal, the staff employed under training is absorbed into probation and permanent employment,
 - The period of training/probation may be extended, if necessary, and promotions are according to AICTE regulations.
 - The College has implemented a Performance Based Appraisal System (PBAS) for assessing the performance of the faculty with a view to promotion where necessary, and incentives are provided for good performers.
 - The College extends support to any faculty member pursuing doctoral degree.
 - Progressive approach of staffing, slightly more than the requirement

Grievance Redressal Mechanism

The College has well- established procedures to address grievances related to academic and other matters. The Grievance Redressal Committee has faculty representatives across departments with defined roles and responsibilities. Awareness is created among the students and faculty to approach the committee with their grievances and further information pertaining to the same is attached with this criterion.

File Description	Document	
Any additional information	<u>View Document</u>	
Link for Additional Information	View Document	

6.2.3 Implementation of e-governance in areas of operation

- 1. Planning and Development
- 2. Administration
- 3. Finance and Accounts
- 4. Student Admission and Support
- 5. Examination
- A. All 5 of the above
- B. Any 4 of the above
- C. Any 3 of the above
- D. Any 2 of the above

Response: A. All 5 of the above

File Description	Document
Screen shots of user interfaces	View Document
ERP Document	View Document
Details of implementation of e-governance in areas of operation Planning and Development, Administration etc	View Document
Any additional information	View Document

6.2.4 Effectiveness of various bodies/cells/committees is evident through minutes of meetings and implementation of their resolutions

Response:

The College has a Governing Board, Governing Council, Management Committee, and different bodies at departmental levels to assist in the attainment of the institutional mission. Apart from these, the College has set-up 12 groups at the college level to shoulder the responsibilities and to deploy the strategic plans established by the Institution. The structure, responsibilities, and other information are annexed with this criterion.

The Director, Assistant Director, Principal, and the Heads of Departments monitor the academic, administrative, and student- related matters in the College. Various committee's co-ordinate the routine activities and work related to the smooth functioning and development of the College.

Moreover, the College has a standard format for recording the minutes of the meetings and action taken reports across the departments for clarity and follow-up. All information, before and after the meetings, are communicated to the members of the committees on time. A sample of the same is attached with this criterion.

In addition, to ascertain the attainment of POs and to incorporate continual improvement of the same at each departmental level, PAC and DAB committees have been framed. These committees categorically present their insight regarding the enhancement of each of the POs, and the same is documented in a structured format. A sample format to collect the suggestions and deployment plans is annexed with this criterion. Later, this is brought to the notice of the faculty for implementation.

File Description	Document	
Any additional information	View Document	
Link for 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:

The College is a charitable institution with its motto of 'Service & Excellence'. It rightly provides every opportunity to the teaching and non-teaching staff to grow through the Institution.

Welfare policies are as follows:

- The pay scale of the Teaching faculty is as per AICTE norms i.e. VI Pay norms.
- At the time of appointment, advance increments are given based on experience and research for the staff.
- The teaching staff is supported in pursuing higher education, attending conferences, seminars, and to present papers.
- Teaching faculty are paid Basic pay + DA @ 40% and HRA @ 10% of Basic Pay in the case of Non-Ph.Ds and for the Ph.D holders DA paid @ 50% and HRA @ 10% of Basic Pay. The non-teaching staff are provided 30% DA & 10% HRA.
- Both Teaching & Non-Teaching staff are entitled for Annual increments, Provident Fund, Gratuity, Paternity leave, Maternity Leave (paid leave for 6 months) and ESI benefits as per norms.

- Additional monthly allowance is paid for HODs, Deans, and others who contribute additionally to the system.
- The Staff quarters, transportation and "Crèche" facility is provided at subsidized rates.
- On duty leaves are provided to the staff to attend or participate as a resource person in interactions with the outside world.
- Fair and Transparent Recruitment & Selection Process, structured monitoring process during initial training and probation period.
- Progressive approach of staffing slightly more than the requirement.
- A systematic Performance Based Appraisal System (PBAS), customized from UGC Regulations 2010, implemented since 2012, is in place for the teaching staff which entitles them to get promotion, monthly incentives.
- Annual Faculty Review: API Self-Assessment, Annual Action Plan, Result Analysis, Student Feedback and Minutes of Last Year's Review.
- The teaching staff is provided 45-day vacation in an academic year for rejuvenation and contribute to the system in a better way. In addition, College provides 15 Casual Leaves and 30 Special Casual Leaves.
- Marriage leave facility is provided i.e. 7 days.
- The non-teaching staff is provided 15 Casual Leaves and Earned Leaves (30 days). Encashment of Earned Lave facility is given by paying one-month salary as per norms.
- Policy on incentives payable to those who seek grants for research projects is in place.
- A systematic Orientation program are conducted for newly recruited staff members
- Every semester, internal FDPs are conducted across the departments both on domain related and on personality development aspects to enhance the knowledge of the staff. Annual get together (family day/Picnic) are conducted to create belongingness towards the Institution.
- CLHRD training programs are conducted for all stake holders and financial support was provided to the selected staff members to pursue this course such as Master Facilitator, Feel Administrator and Feel Teacher.
- IUCEE Engineering Educator certification course is offered for the teaching staff at subsidized rate.
- A dispensary is established in the campus along with a duty Doctor and 24x7 Staff nurses to attend medical needs of staff members and students free of cost.
- College is having tie-up with Fr Muller Hospital, Mangalore for medical care.

File Description	Document	
Any additional information	View Document	
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: 54.29

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

Page 83/130 21-03-2020 07:27:41

2018-19	2017-18	2016-17	2015-16	2014-15
135	99	101	65	64

File Description	Document
Details of teachers provided with financial support to attend conferences, workshops etc during the last five years	View Document
Any additional information	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: 20.8

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

2018-19	2017-18	2016-17	2015-16	2014-15
39	15	34	09	07

File Description	Document
Reports of the Human Resource Development Centres (UGC ASC or other relevant centres).	View Document
Reports of Academic Staff College or similar centers	View Document
Details of professional development / administrative training programs organized by the Institution for teaching and non teaching staff	View Document
Any additional information	View Document

6.3.4 Average percentage of teachers attending professional development programs viz., Orientation Program, Refresher Course, Short Term Course, Faculty Development Program during the last five years

Response: 11.91

6.3.4.1 Total number of teachers attending professional development programs, viz., Orientation Program,

Refresher Course, Short Term Course, Faculty Development Programs year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
06	09	31	43	11

File Description	Document
IQAC report summary	View Document
Details of teachers attending professional development programs during the last five years	View Document
Any additional information	<u>View Document</u>

6.3.5 Institution has Performance Appraisal System for teaching and non-teaching staff

Response:

The College has implemented a Performance Based Appraisal System (PBAS) for assessing the performance of the faculty with a view to promotion, where necessary, and to give incentives to good performers. The PBAS was customized from the UGC Regulations 2010 and has been implemented since 2012. The Annual Faculty Review is conducted by the HODs and the Management Committee Members. Every year, in the month of November, faculty members are required to submit their annual performance as per the Annual Performance Index (API) Self-Assessment format, wherein they are required to evaluate themselves on the basis of contribution to teaching, participation in professional development related activities, research work, etc. with supporting documents. Also, they need to provide an Annual Action Plan and Result Analysis prior to review with the Management. Student Feedback and Minutes of Last Year's meeting along with performance is reviewed by the Management to provide constructive feedback. Faculty members are given the opportunity to share their views about the feedback, action plans, grievance, if any, and support required from the Management during this review. The members also give suggestions for improvement. Each faculty member should get a minimum score in the API assessment (minimum score for an Assistant Professor, Associate Professor, and Professor is 150, 180, and 180 points, respectively out of maximum 300 points). If the score is below the minimum prescribed score, then a corrective action is recommended to such faculty member. If the score is above the prescribed minimum, then that faculty member will receive an appreciation letter from the Management. If the API score is above 225 points out of 300, then the Management sanctions an incentive of Rs. 12000/- (at the rate of Rs.1000/- per month for twelve months). The review meetings are documented, and the minutes are shared with the faculty. Moreover, the departmental HODs also undergo a similar appraisal process to facilitate the department to reach greater heights and to appreciate their efforts.

The College has adopted a well-organized feedback collection process through an online system using the Google apps. The students do not reveal their identity in the feedback process. The Principal initiates and collects the feedback through his office. This is done twice in a semester, once in the middle of the

semester and the second at the end of the semester (twice in every six months). A summary of the feedback is sent to the faculty members through their respective HODs. All the comments written by the students are shared with the faculty members. This helps the faculty members to understand their strengths and weaknesses. A copy of the feedback summary is also sent to the Management and the HR Department. Based on the summary, the HOD discusses with individual faculty members and give suggestions for improvement.

File Description	Document
Any additional information	View Document

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

Every financial year, budget proposals are prepared by the Finance Committee and submitted to the Governing Board for its consideration and approval. The Management notifies to all the departments at the end of the financial year to prepare budgets for their respective departments. The departments get involved in the budget preparation and the pre-budget exercises to ensure adequate funds for each department. Institutional requirements such as facilities, equipment, consumables, services, faculty and staff requirements, etc. are included in the budget. Non-budgeted/ Unforeseen expenditures are met out of the allotted institutional budget. Additional expenditures, if any, are sanctioned during the college development meetings held from time- to- time. The College borrows funds whenever the capital expenditure overshoots due to cost escalation and other similar reasons. The Management approves almost 100% of the budget proposed.

Internal

All the Collections are verified on daily basis and maintained transparency in the process. Budget proposals, Payments of bills and vouchers, and supporting documents of every event and of the entire financial year are scrutinized by the Internal Financial Committee, which may advise the concerned departments to any possible improvement.

External

Every year, Government recognized Chartered Accountants audit the accounts and prepare a balance sheet under the Income Tax Act. Also, audited statements are made available via the college website.

The budget allocation and utilization for the last five years has been satisfactory.

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

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

Response: 0

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

2018-19	2017-18	2016-17	2015-16	2014-15
0	0	0	0	0

File Description	Document
Details of Funds / Grants received from non- government bodies during the last five years	View Document
Any additional information	<u>View Document</u>
Annual statements of accounts	View Document

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

Response:

The main source of income to the College is in the form of tuition fees and charity. The Institution treats each department as a separate cost centre and all expenses incurred as debits. The budgets are prepared prior to the new financial year by each department, and the same is reviewed by the Management/Financial Committee. If any anomaly is noticed, the concerned bill is approved by the Management after due explanation or justification. This helps to avoid unnecessary purchases and optimal utilization of the available resources. The tuition fees is maintained in the current account and used towards salary and maintenance of the College.

The Alumni Association is requested to contribute monetarily for the development of the system through various activities. The College also generates funds for R&D through sponsored research projects from

government and non-governmental agencies. In addition, a small amount is also generated through consultancy projects. For maintaining transport and hostel facilities, a separate fee is collected.

Since the Institution is a charitable organization, the Management provides funds through its own sources or avails loans from banks, whenever there is a shortage of funds.

File Description	Document
Any additional information	<u>View Document</u>

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:

The Internal Quality Assurance Cell (IQAC) was established in the year 16th November 2018. Prior to this, quality assurance activities were initiated and sustained by the Institute Alumni Advisory Board (IAAB) and the Accreditation Cell. Presently, the IQAC has been revised as per the regulations put forth by NAAC. The cell has adopted a well-established quality policy for comprehensive quality assurance in the system as follows:

Quality Policy

- SJEC believes that all sections of students, no matter what their academic strengths and weaknesses are, have the right to quality education and therefore, their claim for sustained teaching on the part of the faculty, focused individual support in their laboratory work on the part of technical staff, and easy accessibility to infrastructural facilities will always be respected.
- Efforts put in by the College constituents is monitored, assessed, and shortcomings addressed appropriately and quickly through appraisals by students, staff, College Council, and the Management.
- It is recognized that in order to attract and sustain full student participation, it is necessary to further expand and bring in new courses, fresh thinking, and encourage creativity through extension, consultancy, and research in socially relevant and economically feasible areas.

The Cell has contributed significantly in creating a beneficial / favourable learner-centric environment for quality profession education by adopting the Outcome Based Education (OBE) philosophy since 2011. It has been fine-tuned and institutionalized through focused policy formation and training. At the end of every semester, IQAC conducts FDPs related to quality assurance, accreditation, and OBE under various

themes such as 'Integra' (FDPs aimed at promoting OBE and Accreditation objectives), 'Spandana' (FDPs aimed at development of Technical Staff of SJEC), 'Spoorthi' (FDPs with focus on Motivational and Inspirational aspects), 'Cornea' (FDPs with focus on building the skill level of faculty), to ensure continual quality improvement in the system.

To guide and monitor the implementation of OBE in the College, various committees such as the Industry Alumni Advisory Board (IAAB), Department Advisory Board (DAB), and Programme Assessment Committee (PAC) have been formed by attracting members from the Industry, Alumni, Parents, Management, Faculty, Staff, and Students. These efforts have been recognized by the Indo-Universal Collaboration for Engineering Education (IUCEE) with the award "Transformational Leader in Engineering Education - 2017".

To strengthen and sustain the quality initiatives, the Cell has framed Standard Operating Procedures (SOP) at every level of the organization. Further, it has developed quality metrics for internal Academic and Administrative Audits (AAA) by synchronizing the requirements of both the NBA and NAAC and the institutional mission. Further, it ensures documentation of all the committees as per the standard format prescribed by the Institution. The IQAC releases a Quality calendar every year to streamline the quality assurance activities across the departments.

File Description	Document
Any additional information	<u>View Document</u>
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

Response:

The IQAC of the College takes proactive measures in enhancing the quality of the teaching-learning across departments. At the end of every semester, FDPs/Workshops/Seminars/Activities under the banner "Integra" to adopt new pedagogies of engagement and to ensure continual improvement in the teaching-learning process. During the programmes, accreditation, teaching-learning, course design, harnessing technology in teaching, course web page development, engineering education research, etc. are discussed. Further, the Cell facilitates in implementing the learning of these programme in the coming semester with a structured postimplementation analysis. Moreover, IQAC proposes to the management to send the faculty to engineering education conferences, workshops, seminars, certification programmes, etc.

The Cell has developed and deployed comprehensive Standard Operating Procedures (SOPs) to assist and streamline the OBE implementation at the Institution. The course files are designed based on Deming's PDCA (Plan-Do-Check-Act) Cycle to ensure continual and incremental improvements in the system for the sustainment of quality initiatives. Further, extreme care is taken to confirm Course Outcome (COs) and Topic Level Outcomes (TLOs) as per Bloom's Taxonomy through a well-framed checklist. Moreover, the Cell ensures that all departments develop, verify, and share course plan with the stakeholders prior to the commencement of the semester. In addition, it facilitates in scientifically mapping the COs to POs with proper justification, identifying the right assessment tools and Balancing the Course-PO matrix of the programme. Apart from this, it aids in determining the right strategy to enhance the attainment of POs through PAC, DAB, and IQAC meetings by documenting the action plans categorically and following it up structurally.

The IQAC also streamlines the process of question paper preparation and other assessment tools' utilization to guarantee Higher- Order Thinking Skills (HOTS) of Bloom's Taxonomy, TLOs, COs are reflective in system. Moreover, it has developed a holistic assessment technique to ascertain the attainment of COs and POs through scientific methodology.

File Description	Document
Any additional information	View Document

6.5.3 Average number of quality initiatives by IQAC for promoting quality culture per year

Response: 1.2

6.5.3.1 Number of quality initiatives by IQAC for promoting quality year-wise for the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
1	2	3	0	0

File Description	Document	
Number of quality initiatives by IQAC per year for promoting quality culture	View Document	
Any additional information	<u>View Document</u>	
IQAC link	View Document	

6.5.4 Quality assurance initiatives of the institution include:

1. Regular meeting of Internal Quality Assurance Cell (IQAC); timely submission of Annual

Page 90/130 21-03-2020 07:27:45

Quality Assurance Report (AQAR) to NAAC; Feedback collected, analysed and used for improvements

- 2. Academic Administrative Audit (AAA) and initiation of follow up action
- 3. Participation in NIRF
- 4. ISO Certification
- 5.NBA or any other quality audit
- A. Any 4 of the above
- B. Any 3 of the above
- C. Any 2 of the above
- D. Any 1 of the above

Response: A. Any 4 of the above

File Description	Document	
e-copies of the accreditations and certifications	<u>View Document</u>	
Details of Quality assurance initiatives of the institution	View Document	
Any additional information	View Document	
Annual reports of institution	View Document	

6.5.5 Incremental improvements made during the preceding five years (in case of first cycle) Post accreditation quality initiatives (second and subsequent cycles)

Response:

The proactive Management ensures continual and incremental improvements through a strategic plan and meticulous follow-up. Following are the some of the major milestones achieved by the Institution in the last five years:

- Provisional accreditation by NBA for four of the UG Engineering Programmes (Computer Science and Engineering, Electronics and Communication Engineering, Electrical and Electronics Engineering, and Mechanical Engineering);
- Adopted Performance Based Appraisal System (PBAS) to nurture and enhance the productivity of the faculty;
- Refined and adopted OBE across the departments;
- Policy and reward for funded research projects, quality journal publications, and assistance to the faculty to peruse Ph.D.;
- Research Centres in Mathematics (2014), Electronics and Communication Engineering (2015), and Civil Engineering (2017);
- Add- on courses such as Lab View academy for skill development;

- In -house Start-ups to cater to the needs of entrepreneurship among the students;
- Tinkering Lab and Engineering Exploration Course to meet the need of the hour such as critical thinking, design thinking, inter-disciplinary approach, etc.;
- Policy to foster students' co-curricular activities such as SAE-BAJA, SAE-India ARC, etc.;
- Audio-Visual Facility and e-Learning to harness the power of technology in teaching-learning;
- ICT -enabled and state- of-the- art classrooms to create conducive environment for learner-centric approach;
- More than 30 active MOUs with industry and academia to create awareness and training with updated technology;
- Virtual Labs to facilitate designing of experiments and critical thinking;
- V-ACT (Value Education-Aptitude-Counselling-Technical) programme to ensure overall development of the students;
- Soft Skill training and Pre- Assessment methodology (CoCubes) to strengthen the placement;
- Notice Boards in every classroom and white board in every faculty cabin to strengthen the teaching-learning process;
- Enhanced internet connectivity (400 Mbps) and free Wi-Fi facility across the campus;
- In-House FDPs on Technical and Non-Technical aspects fully funded by the Management at the end of every semester;
- Skill enhancement programmes for the non-teaching and supportive staff every year to learn, unlearn, and relearn concepts;
- Improved students' project selection and execution methodology to address the grand challenges of society;

File Description	Document
Any additional information	View Document

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1 Number of gender equity promotion programs organized by the institution during the last five years

Response: 11

7.1.1.1 Number of gender equity promotion programs organized by the institution year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
6	2	0	1	2

File Description	Document
Report of the event	View Document
List of gender equity promotion programs organized by the institution	View Document
Any additional information	View Document

7.1.2

- 1. Institution shows gender sensitivity in providing facilities such as:
 - 1. Safety and Security
 - 2. Counselling
 - 3. Common Room

Response:

1. Safety and Security

The Institution considers 'Safety and Security' as paramount to the system. Thus, it has invested all its available resources to safeguard its stakeholders within the campus. Some of the major initiatives are 24x7 CCTV surveillance across the campus including college corridors, classrooms, enough number of security guards, high intensive illumination at all prominent places, full- time hostel wardens, etc. Moreover, wearing college IDs and professional upkeep such as dress code/uniform is mandatory to enter the campus. Further, to cultivate the habit of road safety, students and employees are not allowed enter the campus without a helmet and seatbelts in their vehicles. The college dispensary takes care of the health of the staff and students. It operates free of cost from 8.30 am to 9.00 pm. A qualified doctor along with two nurses provide primary healthcare during normal working hours. One nurse is available 24 hours. In critical cases, the students are admitted to Fr. Muller's Medical College & Hospital, Mangaluru, which is a sister concern of the College. Constant care is provided for all students and staff members by providing all amenities.

Page 93/130 21-03-2020 07:27:47

2. Counselling

The counselling service at SJEC is a part of the academic activity. The Management has appointed qualified Rev. Fr. Alphonsus Cardoza as the Campus Counsellor. The counselling process is functioning well in the College with the following objectives:

- To enable students to get an insight into their potentialities, and to know their strengths and overcome the weakness for better learning,
- To identify creative and gifted learners and cater to their needs,
- To identify students who have problems in adjusting and help them resolve the same,
- To inculcate values, habits, attitude, and temperament for studies and work,
- To assist in developing interpersonal relationship among students, and
- To assist students in maintaining a sound and integrated health.

The College has adopted the following counselling mechanism:

General Counselling:

The College identifies a few staff members as mentors and a training programme is held during the semester vacation. In this programme, the campus counsellor and external agencies train the faculty members in mentoring the students. After admission to the first-year undergraduate courses, mentors are appointed for every 20-25 first-year students. They interact with the students regularly and monitor them along with their class performance and attendance. After the first internal test, a meeting of all the mentors is held to consolidate information about slow learners, and students with attitude and behavioural problems. This is followed by a Parent-Teacher meet, wherein the mentors discuss the performance and provide suggestions to the parents for the improvement of their ward / child. To inculcate human values and to improve the morality of the students, Value Education classes of at least two hours are conducted per week for the first- year students. Senior and interested young faculty members conduct these classes.

Behavioural Counselling:

Rev. Fr. Joseph Alphonsus Cardoza, the Campus Counsellor takes care of students with behavioural problems. He interacts with the students, conducts several counselling sessions, and helps students to overcome their behavioural issues. A separate counselling room (with privacy) is available in the dispensary. The Campus Counsellor resides within the campus and is always available to the students even after college working hours.

3. Common Room

Separate and well- maintained washrooms are provided on every floor of all the buildings for boys and girls. Separate common rooms are provided for boys and girls to meet their rest and for their personal requirements. In addition, separate common rooms are provided in the workshops/machine shops to cater to the needs of the students.

Apart from these gender sensitivity measures, the College assures 'Gender Equality' through its policies and the same is reflective in its employment (40% of the employees are female). Moreover, the College has elevated women to leadership positions and 30% of the HODs are females.

File Description	Document
Any additional information	View Document

7.1.3 Alternate Energy initiatives such as:

1.Percentage of annual power requirement of the Institution met by the renewable energy sources

Response: 9.13

7.1.3.1 Annual power requirement met by the renewable energy sources (in KWH)

Response: 87600

7.1.3.2 Total annual power requirement (in KWH)

Response: 960000

File Description	Document
Details of power requirement of the Institution met by renewable energy sources	View Document
Any additional information	View Document

7.1.4 Percentage of annual lighting power requirements met through LED bulbs

Response: 100

7.1.4.1 Annual lighting power requirement met through LED bulbs (in KWH)

Response: 83512

7.1.4.2 Annual lighting power requirement (in KWH)

Response: 83512

File Description	Document
Details of lighting power requirements met through LED bulbs	View Document
Any additional information	View Document

7.1.5 Waste Management steps including:

- Solid waste management
- Liquid waste management
- E-waste management

Response:

Solid waste management

Solid wastes are disposed through a private agency. Further, dustbins are kept in all prominent places to ensure cleanliness and hygiene. The house keeping staff collects the waste from the bins every day. All these solid wastes are properly segregated by the workers and external agency dispose as per the statutory regulations.

Liquid waste management

Liquid waste from different sources such as canteen, toilets, hostels, etc. are segregated and let out through a common drainage facility to a centralized sewage water treatment tank at the corner of the campus. This plant has 40,000-liter capacity four tanks as a single unit. The treated water is used for gardening and flushing. This helps to maintain and improve the ground water level.

E-waste management

The Management has adopted the following policies towards e-waste management:

- **Reduce** the utilization of e-materials: By providing high speed Wi-Fi throughout the College to help reduce the utilization of computers in College/Central facilities.
- **Reuse** e-materials: By donating old workable electronic items to the needy. These can be reused after slight modifications to the original functioning equipment. Apart from this e-materials are donated to the Tinkering Lab to explore the learning opportunities.
- **Recycle** e-waste: If both above strategies are not feasible, then the e-waste is disposed of as per the regulations of the statutory bodies.

7.1.6 Rain water harvesting structures and utilization in the campus

Response:

The Institution has taken the following measures for rainwater harvesting and to enhance ground water level:

- It has created a collection pit near a well to soak the rainwater by pooling the water towards the same. The pit size 24-meter diameter and height of 2 meter has the capacity to collect of 90000 litres of water.
- Also, in other parts of the campus, water is pooled towards two open wells and 3 bore wells.
- A lush green campus has been maintained with enough trees to enhance the ground water level throughout the year,
- Water for gardening, planting, trees, and flushing is provided from the sewage treatment plant and the ground water is used for the other works,
- In prominent places, awareness about water savings is placed to ensure its optimal utilization, and
- All the buildings are designed for rainwater harvesting by accumulating the rainwater through channels, rather than allowing it to run off.

7.1.7 Green Practices

- Students, staff using
- a) Bicycles
- b) Public Transport
- c) Pedestrian friendly roads
- Plastic-free campus
- Paperless office
- Green landscaping with trees and plants

Response:

The Institution maintains a lush green and clean campus, and cultivates coconuts, pepper, etc. for internal use. The College provides bus facilities for both staff and students to ensure optimum utilization of national resources and to reduce air pollution. Very few students and faculty use individual transportation. There is a separate parking lot for vehicles. Vehicle movement is restricted inside the campus to keep it pollution free. Black top and interlock roads are laid throughout the campus and can be used in all seasons.

The Institution encourages a plastic-free campus. Awareness programmes are arranged, and sign boards are displayed in prominent places towards this end.

The College has taken a major step towards a paperless office by adopting Google-Suite system, which allows sharing of data and major information such as attendance, marks, course updates, etc. In addition,

documents are shared using official emails, Google Groups, Google Classrooms, and online feedback. WhatsApp platform is also effectively used to send Circulars/Notices across the stakeholders. Most of the printing is done on both sides of the paper and circulars are printed on used papers to minimize its usage.

The College has maintained its status of being a lush green campus among engineering colleges in and around the costal belt of Karnataka by planting and nurturing an eco-friendly environment. There are several trees on the campus, which are taken care of by the Institution. To maintain and enhance the grandeur of the green campus, the Institution has established a separate housekeeping department, which takes care of the upkeep of the environment and ensures clean surroundings. It maintains the lawn and plantations by employing gardeners, and cleanliness is maintained by employing enough sweepers. The supervisor assigns work and maintains periodic checks of the same.

File Description	Document
Link for Additional Information	View Document

7.1.8 Average percentage expenditure on green initiatives and waste management excluding salary component during the last five years

Response: 1.13

7.1.8.1 Total expenditure on green initiatives and waste management excluding salary component yearwise during the last five years(INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
10.41	15.22	15.54	17.52	12.43

File Description	Document
Green audit report	View Document
Details of expenditure on green initiatives and waste management during the last five years	View Document
Any additional information	View Document

7.1.9 Differently abled (Divyangjan) Friendliness Resources available in the institution:

- 1. Physical facilities
- 2. Provision for lift
- 3. Ramp / Rails
- 4. Braille Software/facilities

- 5. Rest Rooms
- 6. Scribes for examination
- 7. Special skill development for differently abled students
- 8. Any other similar facility (Specify)
- A. 7 and more of the above
- B. At least 6 of the above
- C. At least 4 of the above
- D. At least 2 of the above

Response: C. At least 4 of the above

File Description	Document
Resources available in the institution for Divyangjan	View Document
Any additional information	View Document

7.1.10 Number of Specific initiatives to address locational advantages and disadvantages during the last five years

Response: 6

7.1.10.1 Number of specific initiatives to address locational advantages and disadvantages year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
2	1	1	1	1

File Description	Document
Number of Specific initiatives to address locational advantages and disadvantages	View Document
Any additional information	View Document

7.1.11 Number of initiatives taken to engage with and contribute to local community during the last five years (Not addressed elsewhere)

Response: 9

7.1.11.1 Number of initiatives taken to engage with and contribute to local community year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
3	3	2	1	0

File Description	Document
Report of the event	<u>View Document</u>
Any additional information	View Document

7.1.12

Code of conduct handbook exists for students, teachers, governing body, administration including Vice Chancellor / Director / Principal /Officials and support staff

Response: Yes

File Description	Document
Any additional information	View Document
URL to Handbook on code of conduct for students and teachers, manuals and brochures on human values and professional ethics	View Document

7.1.13 Display of core values in the institution and on its website

Response: Yes

File Description	Document	
Any additional information	<u>View Document</u>	
Provide URL of website that displays core values	View Document	

7.1.14 The institution plans and organizes appropriate activities to increase consciousness about national identities and symbols; Fundamental Duties and Rights of Indian citizens and other constitutional obligations

Response: Yes

File Description	Document
Details of activities organized to increase consciousness about national identities and symbols	View Document
Any additional information	View Document

7.1.15 The institution offers a course on Human Values and professional ethics	
Response: Yes	
File Description Document	
Any additional information View Document	

7.1.16 The institution functioning is as per professional code of prescribed / suggested by statutory bodies / regulatory authorities for different professions

Response: Yes

File Description	Document	
Any additional information	<u>View Document</u>	
Provide URL of supporting documents to prove institution functions as per professional code	View Document	

7.1.17 Number of activities conducted for promotion of universal values (Truth, Righteous conduct, Love, Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties during the last five years

Response: 32

7.1.17.1 Number of activities conducted for promotion of universal values (Truth, Righteous conduct, Love, Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
10	08	06	06	02

File Description	Document
List of activities conducted for promotion of universal values	View Document
Any additional information	View Document

7.1.18 Institution organizes national festivals and birth / death anniversaries of the great Indian personalities

Response:

The College organizes several national, religious, and state- level festivals to commemorate the contribution of national leaders and to instil patriotism among the stakeholders. It organizes Republic Day, Independence Day, Teachers' Day, Karnataka Rajyothsava, Engineer's Day, Onam, Moharam, and Nativity festival to ensure unity in diversity. It practices a pluralistic approach towards all religious functions and encourages the students and faculty to showcase the same. Death anniversaries of persons of national importance are marked by paying homage and recalling their contribution to the nation. Special prayers are arranged on all these occasions in the college chapel to honour the leaders by paying tributes to them.

File Description	Document	
Any additional information	<u>View Document</u>	

7.1.19 The institution maintains complete transparency in its financial, academic, administrative and auxiliary functions

Response:

Transparency in financial functions

- The Governing Board has authorized the Director of the College to deal with the financial aspects. The budget is prepared by each department prior to the commencement of each financial year, and the same is contemplated by the Management Committee (MC) before giving its approval;
- Investment on infrastructure and facilities, and the purchase of equipment and services to various departments is placed before the MC. This Committee takes the decision on investment on infrastructure and facilities. The Chairman of this Committee, who is also the Director of the College, will approve the purchase and investment on infrastructure and facilities;
- The salary is paid on the 5th day of every month and it is approved by the Director;
- The Principal can depute the faculty to various training programmes, FDPs, and other value -added programmes, and the Director will approve all such expenditure;
- The departments can also propose various activities for the benefit of the faculty and students. The Director will give approval for the budget of such programmes.

Transparency in academic functions

- The academic rules and regulations of the College are published in the College Calendar and Website. A copy of the hostel rules and regulations is given to each student at the time of admission and the same is displayed on the hostel notice board;
- Any changes to the rules and regulations are intimated to the staff and students through circulars displayed on notice boards and very important information are read out in the classrooms;
- The College strictly follows the rules and regulations of the University, which are available in the University website;
- The students' attendance in each subject, marks scored in the test, and end semester examination marks and grades are displayed on the notice board;
- The students are permitted to go through their assessment books and inform of any discrepancies to the concerned teacher. If it is disregarded by the faculty, they can approach the HOD and the Principal;

Transparency in administration and auxiliary functions

- All administrative decisions are taken by the MC of the College, and administrative decisions related to the functioning of the College are communicated to the HODs and sections;
- Administrative decisions related to staff members are communicated to them during general staff meetings, which are held twice in a semester;
- Change in pay scale and allowance patterns are declared in general staff meetings and are strictly followed by the Management;
- Service registers are maintained for each faculty member and a copy of the letter issued to a staff member is kept in an individual file, which is maintained by the HR department;
- The audited balance sheet of the College is available in its website;
- The admission policies are made clear in the website, and are also displayed at the entrance of the administrative block;
- The College has provided email facility to all faculty and staff. The concerned authorities will share administration information through e-mail, if the need arises.

7.2 Best Practices

7.2.1 De	escribe at leas	t two institutional	best practices (as per l	NAAC Format)
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Response:

Best Practice I

1. Title of the Practice

Holistic personality development through V-ACT (Value Education-Aptitude-Counselling-Technical)

Program.

2. Objectives of the Practice

- To provide right module of training to students that meets the industry needs and improve their employability skills.
- To recognize the core competencies.
- To improve personal and professional effectiveness.
- To increase efficiency and leadership skills to improve team results.
- To create awareness regarding available career options and help them in identifying their career objectives and act as a bridge between students, alumni and employers.
- To build confidence and develop right attitude.

3. The Context

At present, the competition for employment is increasing every day and placement has become a challenging task. Training of students and equipping them with life skills has become an important responsibility of the institution. Along with technical expertise, development of overall personality of a student is also necessary. To meet these requirements V-ACT program has been introduced for all engineering and management students. The unique feature of this program is that the sessions are engaged by the in-house faculty members of different branches. Hence, the major challenge is to prepare the faculty members to engage value and soft skills sessions, though the considerable number of faculty members have undergone training in human resource development from the College of Leadership and Human Resource Development (CLHRD), Mangaluru. Further, the V-ACT timetable is need to be coordinated with the time table of each department.

4. The Practice.

V-ACT has been introduced for the first-year students across the departments and for the second-year students from engineering departments and computer application department. The sessions comprising Values, Aptitude and Soft Skills are integrated in the first year and second year timetable respectively and every week one session of two hours is engaged for each section of first year engineering. The following table shows the topics covered in Aptitude and Value for the first-year engineering students.

V-ACT Topics covered for I year BE Students 2018-19

I Sem BE		II Sem BE			
	Aptitude	Values	Aptitude	Values	
	Averages, Percentages, Ratios	Professionalism and Ethics	Probability	Honesty and Ir	itegrit
	& Proportions				

	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Permutations and Combinations	Technology Networking	and
Train, Timing & Distance	Time management.	Comomations	rectworking	
	Concentration, Study	Area, Surface area, Volume	Goal Setting	
	Management and Preparing for	rConversions, BODMAS		
Number Theory	Examination			
	Positive Attitude, Confidence	Profit and Loss	Problems You	ngster
	and Self Esteem		the Solutions.	
LCM & HCF				

V-ACT- Soft Skills for III Sem BE-2019-20

Sessions	Topics
1	Introduction to Soft Skills
2	Situation as Human Resource
3	Influencing Minds Through Communication
4	Feeling as Part of Communication
5	A Class of Students as A Society
6	Interest Patterns
7	Working in a Team
8	Core Value of Responsibility
9	Adaptability as Resource
10	Civil Relationships

The following topics Identified for V-ACT Soft Skills-IV Sem BE and MCA

- 1. Personal Effectiveness (The six key skills of personal effectiveness, Setting realistic goals, Write good plans, Handle conflict assertively but fairly and calmly, Self-inspire and develop self-confidence)
- 2. **Presentation Skills** (Plan the structure and format of your presentation, Plan the content, Questions, Visual Aids, Notes, Presentation)
- 3. **Communication** (Conservational English, Written communication, Email Writing, Public Speaking, Assertiveness)
- 4. **Cognition/Critical Thinking** (Cognition is a process of thinking, Thinking is processing information, Information Understanding, Manipulating, Generating)

During the year 2018-19 V-ACT -Soft Skills, Personality Development and Aptitude sessions were conducted for I year MBA students. The topics such as Positive Attitude & Adaptability, Teamwork &

Professional ethics, Time Management & Communication. V-ACT Aptitude sessions covered topics like under and Number Theory & HCF and LCM, Permutations and Combinations and Average, Ratio and Proportion were adressed.

5. Evidence of Success

At the end of Aptitude sessions, the students appear for online test where Multiple Choice Questions (MCQs) on topics covered during the sessions are uploaded in the Moodle Software. The students login the system and answer the test in the stipulated time. The students who score the minimum marks are eligible to receive the certificate. In order to assess the value sessions, the students are divided into teams of 6 members each. Each team chooses one topic of values that are covered during the sessions. Then, the students are asked to make a collage on the topic and make a presentation. The evaluation of collages are done by the faculty based on pre decided criteria.

In order to evaluate the soft skill sessions, the group discussions, platform speeches, and other activities are conducted on regular basis. In the final session the students are given a printed evaluation sheet consisting of MCQs on topics covered during the sessions. The students are required to answer the questions and evaluation is done by the faculty member. This evaluation method exhibits students learning and understanding of various soft skills concepts discussed during the sessions.

6. Problems Encountered and Resources Required

V-ACT is an in-house training program of the institute and the program aims to make a student job ready. However, attending the sessions and evaluation scores do not provide any subject credits to a student. As a result, a small percentage of students fail to understand the significance of the program and tend to miss the sessions at different intervals. This has been a critical point in engaging V-ACT sessions, though strict action is taken in this respect.

Best Practice II

1. Title of the Practice

Fostering critical thinking, self-learning and teamwork through Tinkering and Exploration Lab (TEL)

2. Objectives of the Practice

In today's world, where majority of the people are pursuing only self-interests relentlessly, the institution recognizes the need to inculcate new pedagogy 'Project Based Learning (PBL)' and create a syllabus for global challenging needs. The TEL focus to work towards the mission of our institution "Design and deliver curricula to meet the national and global changing needs through student-centric learning methodologies." The Objectives of program are

- 1. Explore beyond the curriculum
- 2. Find solutions for a given problem statement
- 3. Improve communication skills within the team
- 4. Use technology to analyze
- 5. Work within the time frame
- 6. Work with different team members
- 7. Motivate interdisciplinary project work

3. The Context

Education is the most powerful means off bringing about socio-economic development among students. Giving a proper direction to work as a group is a mandatory requirement in all company. This practice provides that environment by creating a space to work as a group. The normal classroom are changed to suite for 8 group with 4 members in each group. The project needs the knowledge from all the domains. Contributing faculty from all the engineering department helps to have co-teaching environment and give a direction towards interdisciplinary needs. Creating a curriculum that needs to address the areas for industrial needs is the primary focus for Tinkering Lab. Ability to improve problem solving skills by proving the PBL. Each session is planned to ensure all the student are able to explain and explore the concepts. The learned concepts need to be engaged in tinkering lab. Since it is interdisciplinary, each faculty has to know the other department concepts to guide the student. To complete a project, students need to learn many concepts. The project is broken down into smaller section. Each section is converted in each session.

4. The Practice

In the current education methods learning and practice are not going hand in hand. They don't have a practical exposure while learning despite of having lab sessions. This practice primed for each concept they have to learn, analyze and choose the appropriate methods to solve the given problem in that session. This builds the confidence to use different tools. Making mistakes in classroom and ask question if uncleared improves their knowledge. In each classroom only eight groups are allowed. The doubts are cleared by the team members before escalated to faculty. This practice makes the team stronger and improve communication skills. The peer learning pedagogy inherits in this session by default.

In the Exploration session most of the topics are covered with theory and a demonstration of the same. First each group is given with the day to day life devices such as Mixer, Television, Microwave Owen, LED lights etc. Each group has to open the devices, look the components used, Working Principle, Energy Flow, their suggestion to improve the device.

The reverse engineering concepts gives the student to visualize as a project. An Example project is taken and broken into small sections. Each sections of that project are given as a demo for each session. By taking this as the reference the student has to complete the given task.

5. Evidence of Success

The students were able to understand the practical problems they will encounter while design a project. The selection of appropriate tools for the project is also discussed in detail. The students are able to successfully complete the automation project using Arduino board. Nearly 25% of the groups were able to complete the project and created 3D models for the idea. The model is converted into a prototype and successfully demonstrated the problem statement and correlate the result with statement. The 50% of the groups initially struggled to find the sync with team members due to the slow start they struggled to integrate the blocks within specified duration. The rest of the groups has lower attainment due to improper planning despite of guidance. The value of organizing, planning and execution are the key skills that any industry in looking forward. Among this one group has applied for the NAIN innovation project. The communication skill among a team has improved. Students use social media to highlight their achievement.

6. Problems Encountered and Resources Required

This PBL needs intensive planning. For each session planning and testing take more time than anticipated. Each faculty needs to undergo training in across all domain. To overcome this, workshops are conducted during the semester end. There must be a credit for this course. Since there is no credit some students are not taking the sessions seriously. This intern affects their group performance.

Best Practice III

1. Title of the Practice

To Enrich and Enhance the Knowledge-Skill-Attitude (KSA) of the Faculty towards the Profession through Structured Performance Based Appraisal System (PBAS)

2. Objectives of the Practice

The basic tenet of this practice is to promote professionalism to attain one of the prominent missions of the College "Attract, nurture and retain the best faculty and technical manpower". It is also a mechanism for the assessment, promotion, and career advancement of all faculty members. The organization believes in ensuring quality service to all stakeholders through continual quality improvement and sustainment of faculty through a structured approach. This practice also supports one of the organization's objective, "Provide competent staff and excellent support facilities like laboratory, library, and internet for a good education on a continuous basis".

3. Context

An arduous task in the deployment of this practice is to create an eco-system that will bring in sociotechnical and socio-cultural changes in the organization. Moreover, resistance to change/adopt the system is another issue during implementation along with the need to address a spectrum of faculty requirements (strength-weakness-opportunity-challenges), and to establish a balanced framework which would not only persuade people, but also ensure a proactive approach towards the profession. The major challenge is in creating a platform for amicable discussion with faculty to provide constructive feedback and to solicit suggestions to reinforce the system, which will subsequently assist the growth of the faculty. Eventually, the toughest task is to ensure that the faculty contributes to the system every year as per the objectives of "Performance Based Appraisal System (PBAS)".

4. The Practice

The practice is unique as it addresses the needs of all the stakeholders through the following criteria.

Criterion	Particulars		Μi
1	Teaching- Learning and Evaluation Related Activities		12
2	Co-curricular, Extension, and Professional Development Related Activities		50
3	Profession Related Contribution		20
4	Research and Related Contribution	-	40

5	Research Projects (Funded) and Patents	20
6	Research Guidance	20
7	Conference/ Seminar/ Workshop/ FDP/ MDPs organized in the Institution	25
Total	<u> </u>	30

Every year, in the month of November, faculty members are required to submit their annual performance as per the Annual Performance Index (API) Assessment format, wherein they are required to evaluate themselves on the basis of the above criteria with supporting documents. They also need to provide an Annual Action Plan and Result Analysis prior to review with the Management. Student Feedback and Minutes of Last Year's meeting along with performance is reviewed by the Management to provide constructive feedback. Faculty members are given the opportunity to share their views about the feedback, action plans, grievance, if any, and support required from the Management during this review. The members also give suggestions for improvement. Each faculty member is given a minimum score in the API assessment (minimum score for an Assistant Professor, Associate Professor, and Professor is 150, 180, and 180, respectively, out of maximum 300 points). If the score is below the prescribed minimum score, then corrective action is recommended to such faculty member. If the score is above the prescribed minimum, then that faculty member receives a letter of appreciation from the Management. If the API score is above 225 points then the Management sanctions an incentive. The review meetings are documented, and the minutes are shared with the faculty.

5. Evidence of Success

The performance of faculty in the last five years is shown in the following table.

Year	2018	2017	2016	2015	2014	
#Received incentives	15	14	11	9	10	
#Attained	100	100	116	112	112	
Prescribed limit						
# Recommended	1 9	3	3	4	2	
corrective actions						

The above results indicate that substantial number of faculty members have contributed to the system by attaining the minimum prescribed points. It can also be ascertained that the system has assisted the faculty members to grow professionally by unearthing their strength-weakness-opportunity-challenges by providing resources from the Management to achieve the same. This has assisted the Management to strengthen and fine- tune its faculty development policy. Moreover, faculty members who have consistently performed well above the prescribed minimum limit for 5 consecutive years have received a rise as per the AGP pay scale. This has persuaded the Management to refine faculty friendly policies such as staff quarters, creche facility, special casual leave, financial assistance for attending workshops/seminars/conferences, and additional skill development training. These have directly impacted on NBA accreditation and helped in achieving accreditation for 4 of its UG engineering programs from

2013 until 2022 in two consecutive cycles.

6. Problems Encountered and Resources Required

The critical success factors in deploying this practice can be listed as 'Customization of the Framework', 'Transparency in Assessment', 'Listening to the Voice of the Faculty', 'Top Management Support', 'Categorical Sub-division of Criterion', 'Monetary and other Motivators', 'Time for Growth', 'Rubrics for Assessment', and 'Constructive Feedback'. The Management has envisaged potential causes of failure and implemented the above counter measures to deploy the practice. Further, it has created an eco-system to address every criteria and to streamline the process with an allocation of substantial resources.

File Description	Document
Any additional information	View Document

7.3 Institutional Distinctiveness

7.3.1 Describe/Explain the performance of the institution in one area distinctive to its vision, priority and thrust

Response:

SJEC believes that with the advent of new technology and accessibility to information at the fingertips, the responsibility of an institution has changed tremendously. Educational institutions no longer merely provide information. Their responsibility extends from information transmission to shaping, directing, and developing young minds. Since the inception of the institution, one of the thrust areas of the college is to provide quality education through contemporary Teaching-Learning Practices (TLP). The same is categorically reflected in one of the mission statements of the institution, "Design and deliver curricula to meet the national and global changing needs through student-centric learning methodologies". Ironically, most of the statutory bodies emphasize the need to revamp the engineering education and to adopt Outcome Based Education (OBE). In this direction, the Management has organized and supported several initiatives to fine tune the OBE system. It has motivated the faculty to adopt innovative TLP, and to report success stories to spread the benefits of OBE. A major step towards this was taken by becoming an active member of the Indo-Universal Collaboration for Engineering Education (IUCEE). SJEC has been associated with IUCEE for the past 12 years, initially by actively participating in the Faculty Learning Institutes (FLI), which were organized throughout the country, and in the last five years, as a consortium college. SJEC had participants in the first FLIs organized in the Infosys Campus in Mysuru, in 2007, and has never missed being a part of every ICTIEE conference organized by IUCEE. SJEC has been an active member in all the ventures of IUCEE be it ICTIEE (annual conference), IIEECP, teaching certification, Cluster for Collaborations, IUCEE courses, or the Virtual Academy. The Management of SJEC takes pride in attending IUCEE's Annual Leadership Summit and participates in all the discussions and deliberations that take place in the presence of IUCEE's global experts. In fact, the Principal of SJEC, Dr. Rio D'Souza has been recognized as one of IUCEE's global experts, which is a matter of great pride to the college. The College also values the scholarship of teaching and learning, and around 11 faculty members of the

institution are involved in the 15-month rigorous Engineering Education Research (EER) course offered by IUCEE. Further, the webinars and associated courses offered by different platforms such as NPTEL and SWAYAM have ensured a structured implementation of OBE among faculty and students. The elaborate resources disseminated through different platforms have facilitated in developing an OBE knowledge repository, which is shared with other engineering colleges in and around our region to enhance the quality of engineering education.

Moreover, OBE is enshrined in a system where all stakeholders such as students, parents, alumni, industrial experts, faculty, and management are involved through active participation at different levels. Each department has Program Coordinator/s, Module Coordinators, Program Assessment Committee (PAC), and a Department Advisory Board (DAB) to ensure continuous quality improvement, while the Industry Alumni Advisory Board (IAAB) ensures continuous quality improvement at the Institute level. Moreover, structured feedback is solicited through PAC, DAB, and IQAC meetings to strengthen the system.

Outcome

1.NBA Accreditation

Being the first affiliated college in Coastal Karnataka region to implement OBE has helped us to achieve accreditation by NBA for two consecutive cycles from 2013 to 2022. Currently, four of SJEC's UG programs, namely, Computer Science and Engineering, Mechanical Engineering, Electrical & Electronics Engineering, and Electronics & Communication Engineering are accredited by NBA.

1. Transformational Leader Award

In the year 2017, SJEC was recognized as a Transformational Leader in Engineering Education by IUCEE.

1. Institutional Leader Award to the Principal

In the year 2020, the Principal Dr. Rio D'Souza was honoured as Institutional Leader by IUCEE for deploying and sustaining OBE in the system.

1. University Funds to Conduct FDP on OBE

The Department of Mechanical Engineering has been selected to conduct the TEQIP 1.3 sponsored Five-Day FDP on the topic "Outcome Based Education and NBA Accreditation" from 30 December 2019 to 3 January 2020 by the Visvesvaraya Technological University (VTU), Belagavi.

1. IUCEE International Engineering Education Certification Program (IIEECP)

- About 28 faculty members have completed IIEECP and are certified Engineering Educators.
- Around 30 faculty members are currently in Phase II of the certification program.
- Nearly 32 faculty members have completed Phase I and are awaiting the commencement of Phase II of the certification program.

1. Engineering Education Research

More than 10 engineering education research articles have been presented / published in reputed conferences / journals.

1. TLP Documents

Every department has come up with a TLP documents to strengthen the OBE system.

1. Statement of Teaching Philosophy

The College has conducted a session to underline the importance and characteristics of "Statement of Teaching Philosophy (SOTP)" and unveiled the same during 'Teachers Day' celebration on 5th September 2018.

1. Integra Series FDP

During every semester break, FDP "Integra" series is conducted with special focus on OBE, accreditation, and TLP.

1.**TLC**

A Teaching-Learning Centre (TLC) has been established to bring new pedagogies of engagement and assist the faculty in OBE deployment.

1. Feedback on Active Learning Strategies

The impact of IIEECP and the related activities of the Institution are assessed through feedback received from students. The feedback questions focus on the Active Learning Components used by the faculty and the experiences of the students.

1. Tinkering and Innovation Laboratory

In order to inculcate critical thinking, self-learning, professional ethics, experiential learning, and to attain higher levels in Bloom's Taxonomy, a Tinkering and Innovation Laboratory has been introduced for First Year UG engineering students.

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

5. CONCLUSION

Additional Information:

- SJEC has been an active member in all the ventures of Indo Universal Collaboration for Engineering Education (IUCEE) be it ICTIEE (annual conference), IIEECP, teaching certification, Cluster for Collaborations, IUCEE courses, or the Virtual Academy. The Management of SJEC takes pride in attending IUCEE's Annual Leadership Summit and participates in all the discussions and deliberations that take place in the presence of IUCEE's global experts.
- In the year 2017, SJEC was recognized as a Transformational Leader in Engineering Education by IUCEE.
- The webinars and associated courses offered by different platforms such as NPTEL and SWAYAM have ensured a structured implementation of OBE among faculty and students.
- We acknowledge that technical education demands both: self-discipline and diligence, as well as emotional balance and well-being. Therefore, the college has a qualified, resident Campus Counsellor and Campus Minister to assist students.

Concluding Remarks:

We take pride in submitting the SSR for accreditation which was collectively prepared based on input from IQAC at all levels, keeping in mind to equip students with the best education and infrastructure, to help them achieve nothing but the best in life.

St Joseph Engineering College is a Christian Minority Institution that admits deserving students from all communities in order to support the aspirations and ambitions of young people, particularly those from disadvantaged backgrounds, who wish to secure a better future. In academics students will be guided by experienced and dedicated faculty. The institution is committed to the highest levels of excellence and quality assurance in all systems and processes, academic and non-academic. The Institutions quality aspect extends to ensuring and enhancing the quality of students through enriched curriculum by providing knowledge, wisdom, and character to the students.

St Joseph Engineering College always strives to remain at the forefront of cutting-edge technology and scientific research, applicable for betterment of Society. It has a strong infrastructure and laboratories with state-of-the-art equipment. Institution continues to leverage ICT to its fullest for continual improvement of quality and relevance of teaching, research, and academic administration.

The institution is aware of its social responsibility and is engaged with local communities and marginal sections of society for capacity building to bring into the mainstream.

Finally, we Josephites always uphold the motto "Service and Excellence". We expect and encourage students to imbibe these values during their stay in campus as this will play a pivotal role in helping them achieve success in their studies and thereafter in their career. St Joseph Engineering College is committed to nation building and aspires to engage in overall development of students through theoretical, experiential learning experiences, providing opportunities for research, innovation, and entrepreneurship, thereby contributing to the growth of nation and society.

6.ANNEXURE

1.Metrics Level Deviations

Metric ID Sub Questions and Answers before and after DVV Verification

1.1.2 Number of certificate/diploma program introduced during the last five years

1.1.2.1. Number of certificate/diploma programs introduced year-wise during the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
8	6	7	5	3

Answer After DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
4	2	3	2	2

Remark: Authenticated documents of NDT for 2016-17 2017-18, 2018-19 not provide by HEI.

- 1.1.3 Percentage of participation of full time teachers in various bodies of the Universities/ Autonomous Colleges/ Other Colleges, such as BoS and Academic Council during the last five years
 - 1.1.3.1. Number of teachers participating in various bodies of the Institution, such as BoS and Academic Council year-wise during the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
5	8	9	7	3

Answer After DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
2	2	4	4	3

Remark: DVV has counted one teacher during the last five years.

- 1.3.2 Number of value added courses imparting transferable and life skills offered during the last five years
 - 1.3.2.1. Number of value-added courses imparting transferable and life skills offered during the last five years

Answer before DVV Verification: 38 Answer after DVV Verification: 26

Remark: DVV has counted one value-added course once for a five year.

1.3.3 Percentage of students undertaking field projects / internships

1.3.3.1. Number of students undertaking field projects or internships

Answer before DVV Verification: 624 Answer after DVV Verification: 624

1.4.2 Feedback processes of the institution may be classified as follows:

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

Answer After DVV Verification: D. Feedback collected

Remark: Provided action taken report not designed on curriculum. Internal Quality Assurance Cell (IQAC) Meeting report for 2018-19 not considered.

- 2.1.1 Average percentage of students from other States and Countries during the last five years
 - 2.1.1.1. Number of students from other states and countries year-wise during the last five years Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
52	54	61	75	70

Answer After DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
31	16	12	00	20

Remark: DVV has made the changes as per pro-rata basis of provide domicile certificate of students by HEI. Domicile certificate of student for 2015-16 not provide by HEI.

2.1.2 Average Enrollment percentage

(Average of last five years)

2.1.2.1. Number of students admitted year-wise during the last five years Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
644	703	713	739	760

Answer After DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
475	479	451	494	933

2.1.2.2. Number of sanctioned seats year-wise during the last five years Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
890	888	885	893	871

2018-19	2017-18	2016-17	2015-16	2014-15
890	888	885	893	871

Remark: DVV has made the changes as per list of first year admitted student provided by HEI

- 2.1.3 Average percentage of seats filled against seats reserved for various categories as per applicable reservation policy during the last five years
 - 2.1.3.1. Number of actual students admitted from the reserved categories year-wise during the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
169	144	152	165	176

Answer After DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
92	121	89	197	183

Remark: DVV has made the change as per the report of number of actual students admitted from the reserved categories (SC, ST, PH, CAT-1) provided by HEI.

- 2.2.3 Percentage of differently abled students (Divyangjan) on rolls
 - 2.2.3.1. Number of differently abled students on rolls

Answer before DVV Verification: 1 Answer after DVV Verification: 0

- 2.3.3 Ratio of students to mentor for academic and stress related issues
 - 2.3.3.1. Number of mentors

Answer before DVV Verification: 162 Answer after DVV Verification: 161

Remark: DVV has made the changes as per provided mentor- mentee list for the year 2018-19.

- 2.4.3 Teaching experience per full time teacher in number of years
 - 2.4.3.1. Total experience of full-time teachers
 Answer before DVV Verification: 1946 years

Answer after DVV Verification: 1946 years 2.4.4 Percentage of full time teachers who received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the last five years 2.4.4.1. Number of full time teachers receiving awards from state /national /international level from Government recognised bodies year-wise during the last five years Answer before DVV Verification: 2018-19 2017-18 2016-17 2014-15 2015-16 42 20 17 10 4 Answer After DVV Verification: 2014-15 2018-19 2017-18 2016-17 2015-16 3 0 6 1 0 Remark: DVV has not consider Certificate of appreciation, Certificate of Best Paper, Certificate of Best Techno Faculty, Certificate of Google Educator, certificate of partner in success. 2.4.5 Average percentage of full time teachers from other States against sanctioned posts during the last five years 2.4.5.1. Number of full time teachers from other states year-wise during the last five years Answer before DVV Verification: 2018-19 2017-18 2016-17 2015-16 2014-15 14 19 11 11 16 Answer After DVV Verification: 2018-19 2017-18 2016-17 2015-16 2014-15 10 10 13 18 15 Remark: Domicile certificate of Mr. Chaco P. J. not provide by HEI. 3.1.2 Percentage of teachers recognised as research guides at present 3.1.2.1. Number of teachers recognised as research guides Answer before DVV Verification: 19 Answer after DVV Verification: 18 Remark: DVV has not consider screen shots provide by HEI. 3.2.2 Number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the last five years

3.2.2.1. Number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices year-wise during the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
55	75	81	56	31

Answer After DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
55	75	81	56	31

- Number of research papers per teacher in the Journals notified on UGC website during the last five years
 - 3.3.4.1. Number of research papers in the Journals notified on UGC website during the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
110	144	60	59	42

Answer After DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
82	132	54	50	34

- Number of books and chapters in edited volumes/books published and papers in national/international conference proceedings per teacher during the last five years
 - 3.3.5.1. Total number of books and chapters in edited volumes / books published, and papers in national/international conference-proceedings year-wise during the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
79	69	74	90	88

2018-19	2017-18	2016-17	2015-16	2014-15
63	50	64	80	78

- Number of awards and recognition received for extension activities from Government /recognised bodies during the last five years
 - 3.4.2.1. Total number of awards and recognition received for extension activities from

Government /recognised bodies year-wise during the last five years Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
14	11	13	7	1

Answer After DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
0	0	0	0	0

Remark: Supporting document not provided by HEI.

- Number of extension and outreach Programs conducted in collaboration with Industry, Community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the last five years
 - 3.4.3.1. 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

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
30	21	12	10	3

Answer After DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
23	11	7	9	1

- 3.4.4 Average percentage of students participating in extension activities with Government Organisations, Non-Government Organisations and programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the last five years
 - 3.4.4.1. Total number of students participating in extension activities with Government Organisations, Non-Government Organisations and programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. year-wise during the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
2285	585	400	385	400

2018-19	2017-18	2016-17	2015-16	2014-15
2285	585	400	385	400

- Number of functional MoUs with institutions of National/ International importance, Other Institutions, Industries, Corporate houses etc., during the last five years (only functional MoUs with ongoing activities to be considered)
 - 3.5.2.1. Number of functional MoUs with institutions of national, international importance, other universities, industries, corporate houses etc. year-wise during the last five years (only functional MoUs with ongoing activities to be considered)

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
30	12	09	5	3

Answer After DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
29	11	08	4	2

Remark: Supporting document not provide by HEI.

- 4.1.3 Percentage of classrooms and seminar halls with ICT enabled facilities such as smart class, LMS, etc
 - 4.1.3.1. Number of classrooms and seminar halls with ICT facilities

Answer before DVV Verification: 64 Answer after DVV Verification: 32

Remark: DVV has made the changes as per provided list and photos of ICT enabled classroom by HEI.

- 4.1.4 Average percentage of budget allocation, excluding salary for infrastructure augmentation during the last five years.
 - 4.1.4.1. Budget allocation for infrastructure augmentation, excluding salary year-wise during the last five years (INR in Lakhs)

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
590.064	463.15	521.19	526.72	537.87

Answer After DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
583.16	456.81	513.79	516.87	530.37

Remark: DVV has made the changes as per provided extract of infrastructure augmentation, excluding library Books duly signed by CA.

4.2.4 Average annual expenditure for purchase of books and journals during the last five years (INR in Lakhs)

4.2.4.1. Annual expenditure for purchase of books and journals year-wise during the last five years (INR in Lakhs)

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
26.97	23.83	18.83	16.73	12.85

Answer After DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
26.97	23.83	18.83	16.73	12.85

4.2.6 Percentage per day usage of library by teachers and students

4.2.6.1. Average number of teachers and students using library per day over last one year Answer before DVV Verification: 151

Answer after DVV Verification: 141

Remark: DVV has made the changes as per average of logbook entries of teachers and students in provided logbook.

- 4.4.1 Average Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, as a percentage during the last five years
 - 4.4.1.1. Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component year-wise during the last five years (INR in Lakhs)

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
511.33	269.45	283.14	302.11	232.95

Answer After DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
350.98	113.90	170.06	189.86	135.58

Remark: DVV has made the changes as per extract of expenditure incurred on maintenance of physical facilities duly signed by CA.

- Average percentage of student benefited by guidance for competitive examinations and career counselling offered by the institution during the last five years
 - 5.1.4.1. Number of students benefited by guidance for competitive examinations and career counselling offered by the institution year-wise during the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
2347	2256	2422	2420	2300

Answer After DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
95	343	33	0	1998

Remark: DVV has made the changes as per report of students benefited by guidance for competitive examinations and career counselling by HEI. Provided some report has not reflect the count of students.

- 5.1.5 Average percentage of students benefited by Vocational Education and Training (VET) during the last five years
 - 5.1.5.1. Number of students attending VET year-wise during the last five years Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
1037	464	673	639	332

Answer After DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
509	165	103	111	144

- 5.2.1 Average percentage of placement of outgoing students during the last five years
 - 5.2.1.1. Number of outgoing students placed year-wise during the last five years Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
382	434	492	409	283

2018-19	2017-18	2016-17	2015-16	2014-15
382	434	492	409	283

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

last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
28	36	22	15	13

Answer After DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
28	36	22	15	13

- Average number of sports and cultural activities/ competitions organised at the institution level per year
 - 5.3.3.1. Number of sports and cultural activities / competitions organised at the institution level year-wise during the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
51	52	44	34	40

Answer After DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
51	52	44	34	40

- 5.4.3 Number of Alumni Association / Chapters meetings held during the last five years
 - 5.4.3.1. Number of Alumni Association /Chapters meetings held year-wise during the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
2	7	1	3	4

2018-19	2017-18	2016-17	2015-16	2014-15
2	7	1	3	6

- Average number of professional development /administrative training programs organized by the institution for teaching and non teaching staff during the last five years
 - 6.3.3.1. Total number of professional development / administrative training programs organized by the Institution for teaching and non teaching staff year-wise during the last five years Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
51	26	39	12	20

2018-19	2017-18	2016-17	2015-16	2014-15
39	15	34	09	07

- Average percentage of teachers attending professional development programs viz., Orientation Program, Refresher Course, Short Term Course, Faculty Development Program during the last five years
 - 6.3.4.1. Total number of teachers attending professional development programs, viz., Orientation Program, Refresher Course, Short Term Course, Faculty Development Programs year-wise during the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
117	102	98	88	83

Answer After DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
06	09	31	43	11

- 6.5.3 Average number of quality initiatives by IQAC for promoting quality culture per year
 - 6.5.3.1. Number of quality initiatives by IQAC for promoting quality year-wise for the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
14	8	9	8	10

Answer After DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
1	2	3	0	0

- 7.1.1 Number of gender equity promotion programs organized by the institution during the last five years
 - 7.1.1.1. Number of gender equity promotion programs organized by the institution year-wise during the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
7	2	0	2	2

2018-19	2017-18	2016-17	2015-16	2014-15
6	2	0	1	2

7.1.10 Number of Specific initiatives to address locational advantages and disadvantages during the last five years 7.1.10.1. Number of specific initiatives to address locational advantages and disadvantages year-wise during the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
9	1	3	0	1

Answer After DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
2	1	1	1	1

7.1.11 Number of initiatives taken to engage with and contribute to local community during the last five years (Not addressed elsewhere)

7.1.11.1. Number of initiatives taken to engage with and contribute to local community year-wise during the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
6	5	2	2	2

Answer After DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
3	3	2	1	0

7.1.17 Number of activities conducted for promotion of universal values (Truth, Righteous conduct, Love, Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties during the last five years

7.1.17.1. Number of activities conducted for promotion of universal values (Truth, Righteous conduct, Love, Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties year-wise during the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
17	12	10	9	4

2018-19	2017-18	2016-17	2015-16	2014-15
10	08	06	06	02

2.Extended Profile Deviations

Questions
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1.1 Number of students year-wise during the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
2364	2372	2497	2439	2450

Answer After DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
2363	2373	2496	2438	2449

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

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
197	210	210	210	210

Answer After DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
92	121	89	197	183

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

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
630	634	725	550	466

2018-19	2017-18	2016-17	2015-16	2014-15
612	612	712	557	530