



SELF STUDY REPORT

FOR

1st CYCLE OF ACCREDITATION

**ST. JOSEPH'S COLLEGE OF ENGINEERING AND
TECHNOLOGY, PALAI**

CHOONDACHERRY P O, PALAI, KOTTAYAM, KERALA.

686579

www.sjcetpalai.ac.in

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

October 2023

1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

St. Joseph's College of Engineering and Technology (SJCET) stands as a beacon of excellence in the realm of technical education in Kerala. Established in 2002 by the Catholic Diocese of Pala, SJCET has consistently set high benchmarks for its peer institutions to aspire to achieve. The college's primary objective has been to contribute positively to national development by imparting top-tier technical education and training to aspiring individuals. Nestled amidst the serene foothills of the Eastern High ranges, SJCET enjoys a picturesque location that provides an ideal backdrop for learning. Its tranquil and ethereal environment fosters an atmosphere conducive to academic growth and excellence.

SJCET firmly believes that technical education becomes truly meaningful and fruitful when it leads to the holistic and systemic development of students. The torchbearers of this institution have always looked beyond the esoteric domain of knowledge into the broader vistas of social and cultural progress. Guided by this vision, SJCET has experienced phenomenal growth over the past two decades. With its visionary management, dedicated faculty, and efficient administrative machinery, the college has propelled itself to the forefront of technical education in the region.

The college boasts a plethora of diverse facilities, considered the best in the field, which includes a welldeveloped infrastructure along with many others. The SJCET campus comprises of impressive buildings, spacious classrooms, well-equipped laboratories, and a modern library that has been commended by the NBA (AICTE) accreditation team as one of the finest libraries they have come across during recent years, even surpassing those of prestigious institutions such as IITs and NITs. SJCET offers NBA-accredited programs in the undergraduate level, postgraduate programs in Engineering, MBA and MCA and PhD programs. SJCET also holds both ISO 9001:2015 and ISO 14001:2015 certifications.

Operating within a Christian environment, SJCET invites its stakeholders to embrace Christian values of unwavering faith in God and love for humanity. The institution has been granted minority status since 2006, reflecting its commitment to providing quality education and inclusivity.

Vision

Developing into a world-class, pace-setting Institute of Engineering and Technology with distinct identity and character, meeting the goals and aspirations of the society.

Mission

- To maintain a conducive infrastructure and learning environment for world class education.
- To nurture a team of dedicated, competent and research oriented faculty.
- To develop students with moral & ethical values, for their successful career by offering variety of programmes and services.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- Strong Leadership
- Qualified and Experienced Faculty Members
- Good Infrastructure and Learning Environment
- Discipline and Professionalism
- Impressive Alumni Strength
- Mentoring
- Good Placements
- Well Equipped Engineering Laboratories
- Accredited Courses
- Teamwork

Institutional Weakness

- Remote Location

Institutional Opportunity

- Industry Collaborations
- Research / Consultancy
- Alumni Connect
- Innovative Programs / Courses
- Getting External Funds
- Infrastructure Utilization for Startups
- Accreditation / Autonomy / Deemed University
- Contribute to Society

Institutional Challenge

- Competition
- Improving Academic Results
- Placement in Core Companies
- Quality Admission
- Accreditation of Courses
- Getting Funding of Agencies / Institution
- Building Research Culture
- Industry Collaborations
- Attrition
- Building Positive Publicity
- Global Economy
- NEP

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

St. Joseph's College of Engineering & Technology (SJCET), affiliated with APJ Abdul Kalam Technological University, is dedicated to providing world-class technical education to young individuals, equipping them to lead in a rapidly evolving technological landscape. Guided by a well-defined mission and a carefully planned implementation methodology, SJCET aligns all activities with the university's framework.

The college prioritizes education and research, adhering to the university's curriculum and employing effective delivery methods to enhance the teaching and learning experience. SJCET begins each academic year with a specially designed Induction Program, fostering a connection between students and faculty, promoting self-awareness, and creating a professional environment. A well-documented mission implementation strategy ensures adherence to the university's Academic Calendar, proper Subject/Course Allocation, Timetable formulation, Course Plan development by faculty, and meticulous documentation through Course Files and Diaries. Content is delivered using pedagogical and ICT-enabled methods, while assessments include Continuous Internal Evaluations and End Semester University Examinations. Remedial Classes are offered for students requiring additional support, and personal mentoring is provided to nurture their growth. Regular Academic Audits validate the processes, while Co-Curricular & Extracurricular Activities are organized for holistic student development. Results analysis guides future implementation strategies, and Course Attainments are computed.

In addition to systematic planning, SJCET offers Add-on and Value-added courses to broaden students' knowledge and overall development. Annually, an average of 50 such courses are provided through various means, with over 90% of students attending. To cultivate ethical and holistic development, SJCET integrates cross-cutting issues such as professional ethics, gender equality, and environmental sustainability into the curriculum. Experiential learning through projects, fieldwork, internships (involving around 50% of students), and engagement in co-curricular and extracurricular activities reinforce these in-class learnings. These measures, relevant to the real world, promote diversity, inclusion, and employability among SJCET students.

SJCET continually evaluates and revises its approaches based on feedback from stakeholders including students, alumni, faculty, and employers. Through periodic questionnaires (physical or online), timely feedback is collected, analyzed for insights, and utilized to drive appropriate actions for overall improvement, aligned with the college's vision.

Teaching-learning and Evaluation

The institution follows a transparent admission policy in line with the Admission Guidelines of AICTE, Government of Kerala and APJ Abdul Kalam Technological University (KTU), Kerala.

The teaching schedule is planned in accordance with the University calendar. The institution has a team of well-

qualified, experienced, and dedicated faculty.

Our institute identifies various methods of teaching and learning to create the optimum learning environment for students. Student centric methods like experiential learning, participative learning and problem-solving methods are employed for enhancing the learning experience with ICT for effective knowledge transfer to students. Information & Communications Technology (ICT) enabled teaching methodologies and advanced technology are being adopted by the faculty members of all departments. 32 faculty members are doctorate holders.

Our institute strictly follows the evaluation procedure prescribed by the affiliating University. Student performance is evaluated through continuous assessment and end semester examinations. The process is transparent and ensures effective student evaluation. The Internal Assessment tests are conducted in a fair and transparent manner by the Examination Cell, invigilators, and squad along with seating arrangement. The students are informed about the portion of the syllabus well in advance and the Internal Assessment question paper is prepared by indicating CO's and Bloom's taxonomy.

The program outcome & program specific outcomes are displayed on the website. Attainment of program outcomes, program-specific outcomes, and course outcomes and program outcomes are evaluated by the institution. The assessment gives us essential information about what the students are learning and the extent to which teaching goals are met.

Attainment of course outcomes are measured by conducting two internal examinations, seminars, assignments and quizzes. Each program includes course objectives and course outcomes, which are mapped with the program outcomes. Both direct and indirect assessment methods, at the end of each course, help in ensuring attainment of stated course outcomes.

Average pass percentage is 90.66%.

Research, Innovations and Extension

The institution has a strong focus on research activities and encourages faculty members to engage in research works both on a part-time and full-time basis, leading to a Ph.D. degree. The institution has 15 recognized research supervisors approved by APJ Abdul Kalam Technological University, Thiruvananthapuram, and five departments approved as research centers, which are indicative of the importance the institution places on research. Currently, 16 Ph.D. scholars are pursuing doctoral studies under the supervision of the institution's research supervisors. Faculty members are actively engaged in research activities and contribute as resource persons and delegates in conferences and workshops. They are also involved in funded research projects by the university and other funding agencies such as AICTE, SERB, ANERT, IEEE, and many others.

The institution regularly organizes international and state-level conferences to update the recent developments in the technical field and promote research activities on campus. The research initiatives have helped attract substantial funding from a wide spectrum of state, national, and international agencies, amounting to 109+ lakhs rupees during the assessment period. Additionally, these initiatives have facilitated collaborations with prestigious research institutions, fostered academy-industry interaction, addressed social and national issues, extended services to social organizations, and most importantly, added value for faculty and students in the academic world.

The institution has created a platform to facilitate active interaction between faculty, students, and eminent researchers through expert talks and conferences. Faculty members have published textbooks, book chapters, patents, and research articles. The institution has an IEDC Cell to encourage the development of new ideas, products, and services that benefit society. The Bootcamp at the institution promotes creativity and innovation, provides practical experience, and fosters entrepreneurship. The NSS student cell of the institution carries out extension activities, including blood donation, awareness programs on cybercrime and drug abuse among youth, participation in the Rebuild Kerala flood rehabilitation efforts, and involvement in immunization programs, among others. The institution has established numerous collaborations with industries, training institutions, and research institutions for research collaborations and training purposes.

Infrastructure and Learning Resources

St. Joseph's College of Engineering and Technology (SJCET) Palai has a campus that spans **46.5 acres** and has a total built-up area of **66,498 m²**. The pristine campus is well-equipped to deliver high-quality Engineering and Management education. The infrastructure includes five academic buildings, five laboratory blocks, 15 Computer laboratories, classrooms with ICT facilities, a Multipurpose building for cultural activities and indoor games, Seminar halls, Boot-camp, Maker space, Heritage Museum, Solar power plants, Canteens, well-equipped gymnasiums and waiting rooms for Ladies' and Gents'.

Notable features of our campus are:

- 350Mbps leased connection, Wi-Fi covered campus
- A Learning Management System (LMS) and E-Campus Management System
- In-campus Ladies' and Gents' Hostels.
- Solar powered green campus equipped with waste water treatment & recycling plant, Incinerator, Biogas plant, Nakshatra garden, Fish pond, Vermi-compost unit, Rainwater harvesting tanks, Meteorological Centre and Groundwater recharge ponds.
- 11 kV substation, 24/7 electric power supply with backup generators and additional 3-phase UPS-backup.
- 2 Canteens, Cafeteria, Store, 3 Reprographic Facilities, Guest-lounge.
- Faculty house with 24 rooms
- 2 ATMs, Post office, Bank, BSNL exchange.
- 20 college buses for both staff and students, with a 50 km range.
- Designated parking space for staff and students
- CCTV enabled campus with more than 232 HD IP cameras

Separate rooms for IQAC meetings, Board meetings, Examination control, University valuation camp, Yoga, Alumni, NCC, NSS, Music Club, Guidance and Counselling are provided in the campus.

The College has a spacious Central Library spanning a total floor area of 1088 m². The library has a vast collection of technical books, E-books, Full Text E-Resources, Bibliographic Data-bases, Journals (both print and on-line) and digital resources. The E-journal subscription includes IEEE ASPP, IEEE POP, Science Direct, J Gate-JSSH and DELNET. Library subscribes EBSCO Engineering Core collection having more than 6867 e-books and more than 115 printed journals and technical magazines. In addition to the central library, 8

department libraries are also functioning.

Adequate budgetary provision for infrastructure development, academic support facilities and maintenance of infrastructure.

Student Support and Progression

The institution disseminates the support systems available to the students through the college website, prospectus and student handbook. Students are benefitted by scholarships provided by the Government like merit-cum-means scholarships, post metric scholarships for minorities and SC/ST/OBC/OEC scholarships, AICTE tuition fee waiver schemes etc. The management of SJCET supports the needy students through students' scholarships under various schemes viz Merit Scholarships, Promotional Scholarships, Diocesan Scholarships, Scholarships to economically weaker category. 45% of students are benefitted from scholarships provided by the management of SJCET and the total amount of scholarships offered by the SJCET management over the last five years is 11.67 crores.

Numerous clubs, cells and student chapters of professional bodies like IEEE ASME ISTE etc., organises a variety of events periodically for the integral development of students. Soft skills, Language and communication skills, Life skills and ICT/Computing skills are provided for the overall development of the students. 66% of students are benefitted by competitive examination and career counselling training offered by the institution.

The institution has a transparent mechanism for timely Redressal of student grievances including sexual harassment and ragging, The menace of ragging is viewed very seriously and anti-ragging cell takes all necessary measures to curb the ragging with in the campus.

The placement cell is proactive and has organised several skill development, carrier guidance and campus drives to facilitate the placement of students. The average placement for the last five years is 50%.

SJCET has a registered Alumni Association SJCETPAAN since 2008, which organises annual alumni meetings and coordinates chapter meetings and executive committee meetings. Alumni have contributed financially and non-financially such as interacting with present students, arranging guest lectures campus placements and industrial visits

Governance, Leadership and Management

Effective functioning of an institution can be gauged by the policies and practices it has evolved in the matter of planning human resources, recruitment, training, performance appraisal, financial management and the overall role of leadership.

The focus of Criterion VI is captured in the following Key Indicators:

6.1 Institutional Vision and Leadership

6.2 Strategy Development and Deployment

6.3 Faculty Empowerment Strategies

6.4 Financial Management and Resource Mobilization

6.5 Internal Quality Assurance System (IQAS)

Governance, leadership, and management play crucial roles in ensuring the effective functioning and success of educational institutions. St. Joseph's College of Engineering & Technology (SJCET), Palai, is a self-financing Engineering College that operates according to a set of value-driven policies and procedures in line with its vision and mission statements. The institution's governance, led by the Governing Body, focuses on aligning the interests of all stakeholders and employs innovative practices to address the educational, social, cultural, and economic needs of society. The institute's vision is to become a world-class, trailblazing center for engineering and technology, with a unique identity and character that fulfills the goals and aspirations of society. Each academic department also maintains its own vision and mission statements to support this overarching vision.

Policies and procedures serve as a framework for the institution's operations, reducing the likelihood of undesired events. SJCET Palai has developed a range of policies to facilitate the achievement of its objectives. The administrative structure of SJCET Palai is well-defined, with the governing council at the highest level. The administrative hierarchy includes the Principal, Vice Principal, department heads, teaching staff, and non-teaching staff. SJCET aims to nurture future leaders who possess competence, innovation, ethics, and a commitment to societal improvement, following international standards. The institution has established a welfare mechanism for both teaching and non-teaching staff.

Performance appraisal is conducted annually for all employees after completing one year of service. The performance appraisal system includes key features that ensure fair assessment and feedback. As a self-financing engineering college, SJCET prioritizes resource mobilization and optimal resource utilization. A well-structured Budget Control system is followed, accompanied by internal and external statutory audits. Internal auditing is an ongoing process that verifies financial transactions, identifies errors or misstatements, and prepares internal audit reports in accordance with the Internal Audit Policy.

Continuous development is assured through the Internal Quality Assurance Cell (IQAC), which provides guidelines for reviewing the curriculum, instructional methods, teaching and learning approaches, and other operational aspects. SJCET periodically reviews the teaching-learning process, organizational structures, methodologies, and learning outcomes through the IQAC. Targets are set based on the achievement of Course Outcomes (CO) and Program Outcomes (PO), and corrective actions are taken to ensure continuous improvement.

Institutional Values and Best Practices

SJCET inculcates universal and national values by practicing students in its functioning and through its

curriculum and conducted activities. The college is committed to the cause of gender equality, women empowerment, awareness about environmental sustainability and green practices and developing communal harmony.

Women in Development cell of the institute takes care of awareness and promotion of gender equality and sensitization by conducting various programs. All its programs and activities are primarily focused on empowering women.

College has taken green initiatives in the campus using renewable energy, waste management and rain water harvesting. Green energy is used through solar panels, solar heaters and biogas plants apart from energy efficient electrical devices like LED and BLDC Fans. Ample waste management system are in place including biogas plant and one STP. MoU is in place for handling e-waste.

The Green audit, Energy audit and Environment Audit are done regularly for environment and energy initiatives. The institution takes initiatives for environmental conservation and contributes to sustainable development of the locality.

The institution provides disabled friendly environment. We have special amenities such as ramps, lifts and special disabled friendly wash rooms. The college inculcates feeling of togetherness, patriotism, religious integration and communal harmony through celebration of festivals and birthdays of great leaders and observing death anniversaries of national heroes.

Our institution has best practices in the form of:

1. **Generic skills and professional competencies for career and life.**
2. **Faculty Development and Research promotion.**

The Distinct feature of our college is: **Quality Education with Moral and Ethics for Social Progression.**

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	ST. JOSEPH'S COLLEGE OF ENGINEERING AND TECHNOLOGY, PALAI
Address	Choondacherry P O, Palai, Kottayam, kerala.
City	Kottayam
State	Kerala
Pin	686579
Website	www.sjcetpalai.ac.in

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	V P Devassia	04822-239777	9495431623	04822-239307	principal@sjcetpalai.ac.in
IQAC / CIQA coordinator	Madhukumar S	04822-239713	8078700701	04822-239307	vp@sjcetpalai.ac.in

Status of the Institution	
Institution Status	Private and Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular

Recognized Minority institution	
If it is a recognized minority institution	Yes Minority Certificate - SJCET.pdf
If Yes, Specify minority status	
Religious	CHRISTIAN
Linguistic	
Any Other	

Establishment Details				
State	University name	Document		
Kerala	A.P.J. Abdul Kalam Technological University	View Document		
Details of UGC recognition				
Under Section	Date	View Document		
2f of UGC				
12B of UGC				
Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)				
Statutory Regulatory Authority	Recognition/Approval details Institution/Department programme	Day,Month and year(dd-mm-yyyy)	Validity in months	Remarks
AICTE	View Document	10-06-2023	12	AICTE APPROVAL RENEWED EVERY YEAR

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?	Yes
If yes, name of the agency	NATIONAL BOARD OF ACCREDITATION
Date of recognition	19-03-2019

Location and Area of Campus				
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.
Main campus area	Choondacherry P O, Palai, Kottayam, kerala.	Rural	46.55	66498

2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Programme/Co course	Duration in Months	Entry Qualification	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BTech,Artificial Intellegence And Data Science,	48	PLUS TWO OR EQUIVALENT	English	60	60
UG	BTech,Civil Engineering,	48	PLUS TWO OR EQUIVALENT	English	60	36
UG	BTech,Computer Science And Engineering,	48	PLUS TWO OR EQUIVALENT	English	120	120
UG	BTech,Computer Science And Engineering Cyber	48	PLUS TWO OR EQUIVALENT	English	60	60

	Security,					
UG	BTech,Electrical And Electronics Engineering,	48	PLUS TWO OR EQUIVALENT	English	30	30
UG	BTech,Electronics And Communication Engineering,	48	PLUS TWO OR EQUIVALENT	English	60	60
UG	BTech,Electronics And Computer Engineering,	48	PLUS TWO OR EQUIVALENT	English	60	60
UG	BTech,Mechanical Engineering,	48	PLUS TWO OR EQUIVALENT	English	90	90
PG	Mtech,Civil Engineering, Structural Engineering and Construction Management	24	B.TECH OR EQUIVALENT	English	24	11
PG	Mtech,Computer Science And Engineering,Computer Science and Engineering	24	B.TECH OR EQUIVALENT	English	12	0
PG	Mtech,Electronics And Communication Engineering, VLSI and Embedded Systems	24	B.TECH OR EQUIVALENT	English	9	1
PG	Mtech,Mechanical Engineering,Advanced Manufacturing and Production	24	B.TECH OR EQUIVALENT	English	12	2

	Management					
PG	MCA,Computer Applications,Masters in Computer Application	24	DEGREE OR EQUIVALENT	English	60	57
PG	MBA,Management,Masters in Business Administration	24	DEGREE OR EQUIVALENT	English	60	45
Doctoral (Ph.D)	PhD or DPhil ,Computer Science And Engineering,	84	MASTERS OR EQUIVALENT	English	10	3
Doctoral (Ph.D)	PhD or DPhil ,Electronics And Communication Engineering,	84	MASTERS OR EQUIVALENT	English	20	2
Doctoral (Ph.D)	PhD or DPhil ,Mechanical Engineering,	84	MASTERS OR EQUIVALENT	English	29	7
Doctoral (Ph.D)	PhD or DPhil ,Computer Applications,	84	MASTERS OR EQUIVALENT	English	4	1
Doctoral (Ph.D)	PhD or DPhil ,Management ,	84	MASTERS OR EQUIVALENT	English	5	0

Position Details of Faculty & Staff in the College

Teaching Faculty												
	Professor				Associate Professor				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/Society or Other Authorized Bodies	9				14				126			
Recruited	9	0	0	9	8	6	0	14	55	71	0	126
Yet to Recruit	0				0				0			

Non-Teaching 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						26
Recruited	21		5		0	26
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				37
Recruited	32	5	0	37
Yet to Recruit				0

Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt/LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	7	0	0	8	6	0	6	2	0	29
M.Phil.	0	0	0	0	0	0	3	3	0	6
PG	0	0	0	0	0	0	45	52	0	97
UG	0	0	0	0	0	0	0	0	0	0

Temporary Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt/LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	2	0	0	0	0	0	0	1	0	3
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	1	13	0	14
UG	0	0	0	0	0	0	0	0	0	0

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

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

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

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	1104	0	210	0	1314
	Female	537	0	74	0	611
	Others	0	0	0	0	0
PG	Male	104	0	0	0	104
	Female	121	0	0	0	121
	Others	0	0	0	0	0
Doctoral (Ph.D)	Male	11	0	0	0	11
	Female	4	0	0	0	4
	Others	0	0	0	0	0

Provide the Following Details of Students admitted to the College During the last four Academic Years					
Category		Year 1	Year 2	Year 3	Year 4
SC	Male	3	1	2	2
	Female	1	0	1	0
	Others	0	0	0	0
ST	Male	0	0	0	0
	Female	0	0	1	0
	Others	0	0	0	0
OBC	Male	34	33	34	11
	Female	26	20	24	8
	Others	0	0	0	0
General	Male	343	352	361	332
	Female	196	195	180	164
	Others	0	0	0	0
Others	Male	19	16	22	23
	Female	6	10	7	4
	Others	0	0	0	0
Total		628	627	632	544

Institutional preparedness for NEP

<p>1. Multidisciplinary/interdisciplinary:</p>	<p>St. Joseph's College of Engineering & Technology, Palai has always believed in the motto of student holistic development, in terms of technical, spiritual, physical, emotional, social and ethical, very much in tune with the National Education Policy 2020. As part of overall inclusiveness, SJCET has promoted and implemented Multidisciplinary and interdisciplinary projects in the final year as per the curriculum. Additionally, Interdisciplinary Minor Courses are introduced and delivered at the Undergraduate level, where students choose an Interdisciplinary course of their choice for higher learning. In addition, the college offers short-term add-on and value-added courses in Interdisciplinary</p>
--	--

	domains with the aim to equip students to pave way for self-employment and employment creation. Vocational courses are being planned.
2. Academic bank of credits (ABC):	As SJCET is affiliated with the APJAKTU, the college has to receive approvals from the University academic committee to implement ABC in full spirit. However, within the framework of the University regulations, SJCET offers and accepts college transfers and continued education to deserving candidates. Enhanced student-centric pedagogical approaches including blended learning, and accepting credits acquired in NPTEL/MOOC courses, are adopted both at the Undergraduate and Postgraduate levels. The honours courses offered at SJCET mandatorily require students to undergo NPTEL courses and acquire credits which are considered for final CGPA computations.
3. Skill development:	As part of SJCETs mission of enhancing students' technical competence and scientific temper, the college takes additional efforts for skill development and inculcates positivity among the learners. The college has arrived at multiple Memorandum of Understanding with Industry so as to impart state-of-the-art hands-on training for both students and faculty. SJCET is a partner institute to the Additional Skill Acquisition Programme (ASAP), Govt. of Kerala and Springboard by M/S Infosys. The college has been selected as the Skill Development Platform of Kerala (SDPK) by the Govt. of Kerala for improving skills and enhancing the employability of students.
4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):	The adoption of Indian culture has been given prime importance as part of students' holistic development in SJCET. Special training on YOGA has been included as part of the Institute's regular mainstream activity. The pedagogical approach adopted by faculty includes course delivery in both vernacular language and English. Value-added courses on based on the philosophies of Indian Knowledge System is also planned.
5. Focus on Outcome based education (OBE):	Inculcating the spirit of a lifelong pursuit of knowledge, and acquiring a positive attitude which will lead students to a successful life is given prime importance at SJCET. The National Board of Accreditation (NBA) accreditation to four programs

	at SJCET shows that the college has accepted OBE in true spirit.
6. Distance education/online education:	SJCET is fully equipped to embrace the new norm of online education. For the convenience of students, during the lockdown period due to the COVID pandemic, both faculties and students adopted online learning through SJCET - Google Workspace, including Google Classroom and Google meet. Video lectures recorded at the in-house studio are uploaded on the SJCET E Education Portal (SEEP) for students to access at their convenience. Blended learning has been a widely accepted and promoted pedagogical approach in SJCET.

Institutional Initiatives for Electoral Literacy

1. Whether Electoral Literacy Club (ELC) has been set up in the College?	Yes, the Electoral Literacy Club is set up in St. Joseph's College of Engineering & Technology, Palai (SJCET, Palai) with the primary objective of sensitizing the student community about democratic rights which includes casting votes in elections.
2. Whether students' co-ordinator and co-ordinating faculty members are appointed by the College and whether the ELCs are functional? Whether the ELCs are representative in character?	Yes, students' coordinator and coordinating faculty members are given below. ELC Coordinator : Mr. Ahlath Tomy , Asst. Director , Physical Education ELC Additional Coordinator : Ms. Rose Mary John, Asst. Prof , Dept of Science and Humanities Students Coordinators : 1. Mr. Justine Jibi Varghese - Computer Science and Engineering - 4th year 2. Mr. Rohan Shrimant Jadhav - Mechanical Engineering - 3rd year 3. Ms. Anju Benny - Electrical and Electronics Engineering - 2nd year Yes, the ELCs are functional and are representative in character.
3. What innovative programmes and initiatives undertaken by the ELCs? These may include voluntary contribution by the students in electoral processes-participation in voter registration of students and communities where they come from, assisting district election administration in conduct of poll, voter awareness campaigns, promotion of ethical voting, enhancing participation of the under privileged sections of society especially transgender, commercial sex workers, disabled persons, senior citizens, etc.	We have conducted awareness classes regarding the importance of casting votes in elections. The chairman and other representative of the Students Counsel of the college were elected from the student community in line with democratic election process.

<p>4. Any socially relevant projects/initiatives taken by College in electoral related issues especially research projects, surveys, awareness drives, creating content, publications highlighting their contribution to advancing democratic values and participation in electoral processes, etc.</p>	<p>We followed the directions given by the District Collector (District Election Officer) and successfully enrolled 77 new voters in the electoral roll during the Special Summary Revision 2023. Our institution was awarded Certificate of Appreciation from the District Collector (District Election Officer).</p>
<p>5. Extent of students above 18 years who are yet to be enrolled as voters in the electoral roll and efforts by ELCs as well as efforts by the College to institutionalize mechanisms to register eligible students as voters.</p>	<p>We conducted a survey and identified students above 18 years who are yet to be enrolled as voters in the electoral roll. We are making every effort such as awareness and motivational sessions to inspire these students to register their names in the electoral roll before the next elections.</p>

Extended Profile

1 Students

1.1

Number of students year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
2150	1997	1936	1838	1863

File Description	Document
Upload Supporting Document	View Document
Institutional data in prescribed format	View Document

2 Teachers

2.1

Number of teaching staff / full time teachers during the last five years (Without repeat count):

Response: 198

File Description	Document
Upload Supporting Document	View Document
Institutional data in prescribed format	View Document

2.2

Number of teaching staff / full time teachers year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
149	158	142	153	155

3 Institution

3.1

Expenditure excluding salary component year wise during the last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
1367.20	1195.29	984.24	1018.67	1028.92

File Description	Document
Upload Supporting Document	View Document

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curricular Planning and Implementation

1.1.1

The Institution ensures effective curriculum planning and delivery through a well-planned and documented process including Academic calendar and conduct of continuous internal Assessment

Response:

Adhering to the university's curriculum and employing well-planned delivery methods to enhance the overall teaching and learning experience, SJCET welcomes newly admitted class 12 students into the new environment of professional education with a specifically designed **Induction Program**, to assist students to adapt to the institution's professional environment by creating a rapport between students and faculty, understanding themselves and the society at large. Subsequently, SJCET follows

Academic Calendar: SJCET prepares its academic calendar based on the University's published academic calendar, incorporating a general framework for the conduct of internal assessments, extra-curricular, and co-curricular activities.

Subject/Course Allocation: The HOD collects course preferences from individual faculty based on prior experience or additional training, and course allocation is performed accordingly, ensuring adequate workload distribution.

Timetable: The Institute timetable committee, with representatives from all departments, prepares the class timetable, including time slots for honours programs, remedial courses, and other activities.

Course Plan: The course plan, including details such as textbooks and reference books, is prepared in accordance with University's prescribed course plan. Specific topics beyond the curriculum, which are expected to improve the overall employability of the student, are also included.

Course File and Diary: Each faculty member prepares the course file, including the timetable, course plan, COs, CO-PO-PSO mapping, adherence to the academic calendar, identified curricular gaps, previous question papers, and performances. At the completion of the semester, it is updated with an analysis of students' feedback, and attainment of COs, POs, and PSOs.

Content Delivery: Student-centric peer group discussions, role plays, quizzes, and video lectures are adopted in addition to pedagogical lectures to deliver course content.

Assessments: The assessment is in two ways, as per the regulations of APJAKTU:

Continuous Internal Evaluation comprising of two internal exams (mid-semester and near end semester) and a few assignments for student engagement, as planned by the course faculty for 50 marks.

End Semester University Examination conducted by the university as prescribed in the University

Academic Calendar for 100 marks.

Remedial Classes and Personal Mentoring: Based on the student's first internal exam performance, slow learners are identified. Personalized remedial classes and personal faculty mentoring (in the ratio 1:30) are arranged to improve performance.

Academic Audit: IQAC conducts two academic audits per semester at various levels of the organizational hierarchy, ensuring proper academic activity planning, adherence to the academic calendar and evaluation of action plans for the semester.

Co-Curricular & Extracurricular Activities: for the benefit of every student, Seminars, Conferences (International level with foreign delegates as keynote speakers), Addon courses to improve fundamental understanding, MOOC courses for in-depth knowledge, sports and cultural activities are organized to enrich the exposure of students and also to inculcate a broader outlook.

Result Analysis and Course Attainment: For continuous improvement, as soon as the result is published, results are analysed, course attainment computed, and probable suggestions to improve the course delivery in the subsequent years are put forward to the stream coordinators for further implementation.

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

1.2 Academic Flexibility

1.2.1

Number of Certificate/Value added courses offered and online courses of MOOCs, SWAYAM, NPTEL etc. (where the students of the institution have enrolled and successfully completed during the last five years)

Response: 194

File Description	Document
List of students and the attendance sheet for the above mentioned programs	View Document
Institutional programme brochure/notice for Certificate/Value added programs with course modules and outcomes	View Document
Institutional data in the prescribed format	View Document
Evidence of course completion, like course completion certificate etc. Apart from the above:	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

1.2.2

Percentage of students enrolled in Certificate/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years

Response: 70.68

1.2.2.1 Number of students enrolled in Certificate/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
1660	1322	1894	1416	623

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

1.3 Curriculum Enrichment

1.3.1

Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability in transacting the Curriculum

Response:

The curriculum offered by APJAKTU addresses a wide variety of cross-cutting issues like Gender, Environment and Sustainability, Human Values and Professional Ethics. SJ CET Palai, being an Institution run and managed by the Diocese of Palai, gives emphasis in maintaining and sustaining a balance in all respects to its stakeholders. It also believes that the environment must be balanced for future generations.

The major courses introduced in the curriculum towards achieving this objective are

HUT 200: Professional Ethics:-

introduces students to

1. A general awareness on professional ethics, human and social values
2. Inculcate knowledge and exposure on personal and legal ethics in technology domain
3. Provide basic familiarity about Engineers as responsible Experimenters, Research Ethics, Codes of Ethics, and Industrial Standards.

HUN 101: Life Skills:-

introduces students to understand team dynamics, where gender balance and gender respect plays a vital role. Among other course objectives, key focus is given to

1. Understand team dynamics & effectiveness.
2. Create an awareness of human values and coping with emotions and stress
3. Instill Moral and Social Values, Loyalty and also to learn to appreciate the rights of others.
4. Imbibe leadership qualities and practice them.

MCN 201 : Sustainability Engineering:-

introduces students to the concept of

1. Sustainability, its need, technologies involved and development methods
2. Natural resources and pollution, carbon credits and the concept of zero waste
3. Life cycle analysis, impacts on the environment
4. Concept of sustainable urbanization habitat, green buildings and green materials
5. Conventional and renewable energy sources

MCN 202: Constitution of India

This course integrates cross cutting issues on gender, human values and ethics in the society along with many other important aspects. The course objectives are, but not limited to

1. The importance and value of their country, environment and their own human rights
2. Their fundamental rights, duties and day to day discipline so as to face the society and people
3. Understand the union executive, state executive, legislature, parliament and judiciary.
4. Show national and patriotic spirit as responsible citizens of the country

HUT 310: Management for Engineers:-

The course on Management for Engineers is key to instilling in students many effective management techniques with adequate importance on gender, ethics and sustainability. A few of the objectives of this course are

1. Generate innovative ethical management competencies, required for today's complex and global workplace
2. Critically reflect on ethical theories and social ideologies to create sustainable organizations
3. Broad overview of management functions like operations, human values, finance and marketing

In addition to these courses, specific topics in various other courses as part of the curriculum duly address various cross-cutting issues. The detailed list of subjects and its curriculum which specifically addresses crosscutting issues are elaborated in the additional files.

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

1.3.2

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

Response: 52.93

1.3.2.1 Number of students undertaking project work/field work / internships

Response: 1138

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

1.4 Feedback System

1.4.1

Institution obtains feedback on the academic performance and ambience of the institution from various stakeholders, such as Students, Teachers, Employers, Alumni etc. and action taken report on the feedback is made available on institutional website

Response: A. Feedback collected, analysed, action taken& communicated to the relevant bodies and feedback hosted on the institutional website

File Description	Document
Feedback analysis report submitted to appropriate bodies	View Document
At least 4 filled-in feedback form from different stake holders like Students, Teachers, Employers, Alumni etc.	View Document
Action taken report on the feedback analysis	View Document
Link of institution's website where comprehensive feedback, its analytics and action taken report are hosted	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1

Enrolment percentage

Response: 78.19

2.1.1.1 Number of seats filled year wise during last five years (Only first year admissions to be considered)

2022-23	2021-22	2020-21	2019-20	2018-19
627	626	632	544	482

2.1.1.2 Number of sanctioned seats year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
717	729	729	756	792

File Description

Document

Institutional data in the prescribed format

[View Document](#)

Final admission list as published by the HEI and endorsed by the competent authority

[View Document](#)

Document related to sanction of intake from affiliating University/ Government/statutory body for first year's students only.

[View Document](#)

Provide Links for any other relevant document to support the claim (if any)

[View Document](#)

2.1.2

Percentage of seats filled against reserved categories (SC, ST, OBC etc.) as per applicable reservation policy for the first year admission during the last five years

Response: 74.46

2.1.2.1 Number of actual students admitted from the reserved categories year wise during last five years (Exclusive of supernumerary seats)

2022-23	2021-22	2020-21	2019-20	2018-19
89	83	95	48	61

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

2022-23	2021-22	2020-21	2019-20	2018-19
123	106	119	69	88

File Description	Document
Institutional data in the prescribed format	View Document
Final admission list indicating the category as published by the HEI and endorsed by the competent authority.	View Document
Copy of communication issued by state govt. or Central Government indicating the reserved categories(SC,ST,OBC,Divyangjan,etc.) to be considered as per the state rule (Translated copy in English to be provided as applicable)	View Document

2.2 Student Teacher Ratio

2.2.1

**Student – Full time Teacher Ratio
(Data for the latest completed academic year)**

Response: 14.43

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 and teachers use ICT- enabled tools including online resources for effective teaching and learning process

Response:

1. Information & Communications Technology (ICT) enabled teaching methodologies and advanced technology are being adopted by the faculty members of all departments. Digital Class rooms, Multimedia teaching aids such as LCD projectors, classes with internet enabled computer/laptops are used by the faculty members for better illustration of concepts and processes.
2. Communication tools such as Google Class rooms, Official WhatsApp groups, Group mail IDs facilitate communication between the teachers and their students. ICTs arouse interest among students and encourage them to adopt a new way of acquiring in- depth knowledge and developing skills.
3. The electronic resources such as online course materials of National Programme on Technology Enhanced Learning (NPTEL) are made available in the Digital Library.
 1. Sufficient number of e-journals and e-books are available in the library and facility for accessing these journals is provided through proxy server in the campus.
 2. Teaching learning methods adopted by the faculty members include, improved lecture modes, interactive modes, project based learning, computer assisted learning, experiential learning, tutorial sessions and more. The teaching learning activities are made effective with use multimedia, through illustration and special lectures. In teaching learning process, for effective delivery, along with intensive ICT tools, Group Discussions, seminars, Debates and Brainstorming sessions are conducted. This technique helps to enhance students' interpersonal communication, presentation skills and independent & team learning.
 3. Other than class room lectures Industrial visit is arranged for the students to get practical knowledge. This will help them to enrich their knowledge in a practical manner. State- of- art laboratories have been established for students to impart the experiential learning through Theory to Practice Lectures.
 4. Professional Body Memberships: SJCET is an institutional member in many professional bodies like IEEE, CSI, SIE, ASME, ISNEE etc. and students enjoy the golden opportunity to interact with highly experienced persons in the field of Business and Technology. The discussions, seminars and conferences organized by these professional bodies are attended by the students. These help them to catch up with latest trends in their fields. Every year technical festival is organized for identifying and improving various talents of the students. This is an institutional level function and students from all the years of study are encouraged to design and conduct technical events.
 5. Tutorial classes form part of the course delivery to inculcate problem solving skills among the students to supplement regular teaching learning process. The students register for online NPTEL Certificate courses so that they can gain knowledge in addition to their regular curriculum. Assignments are given to the students to nurture their problem-solving abilities. Collaborative learning is encouraged by the support of platforms like Google classroom. Students are encouraged to find out the solutions for real time problems via case studies, hackathon and field/industrial projects. Field visits, In-plant training etc. have been organized to make the students acquaint with industry standards and work ethics.

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

2.4 Teacher Profile and Quality

2.4.1

Percentage of full-time teachers against sanctioned posts during the last five years

Response: 100

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

2022-23	2021-22	2020-21	2019-20	2018-19
149	158	142	153	155

File Description	Document
Sanction letters indicating number of posts sanctioned by the competent authority (including Management sanctioned posts)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.4.2

Percentage of full time teachers with NET/SET/SLET/ Ph. D./D.Sc. / D.Litt./L.L.D. during the last five years (consider only highest degree for count)

Response: 20.74

2.4.2.1 Number of full time teachers with NET/SET/SLET/Ph. D./ D.Sc. / D.Litt./L.L.D year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
37	36	35	28	21

File Description	Document
List of faculties having Ph. D. / D.Sc. / D.Litt./ L.L.D along with particulars of degree awarding university, subject and the year of award per academic year.	View Document
Institution data in the prescribed format	View Document
Copies of Ph.D./D.Sc / D.Litt./ L.L.D awarded by UGC recognized universities	View Document
Copies of Ph.D./D.Sc / D.Litt./ L.L.D awarded by UGC recognized universities	View Document

2.5 Evaluation Process and Reforms

2.5.1

Mechanism of internal/ external assessment is transparent and the grievance redressal system is time- bound and efficient

Response:

- **Internal assessment**

SJCET follows the evaluation criteria prescribed by affiliating university. The process is transparent and is communicated to the stakeholders - students, faculty and parents through advisory meeting, campus ERP system, hand book etc.

- The evaluation process, which includes attendance, internal assessment marks, assignment marks and pattern of end semester examinations, is published/printed and shared with all the students through the handbook.
- Dates of the tests are notified on the department notice board and announced by the faculty in respective classes.
- The corrected answer scripts are returned to the students after evaluation to bring out the discrepancies, if any, to the notice of teacher concerned, and the necessary corrections are carried out.
- In laboratory courses, continuous assessment is done by considering day to day laboratory work, preparation of work book and regular class viva and evaluation is recorded.
- Project evaluation has two internal assessments. The Guide's assessments are recorded weekly in the project diary maintained by the student.
- Students submit the assignments as per the scheduled date specified by faculty. After evaluation, scripts are returned and marks are entered.
- There are two internal evaluation tests, each of 2hrs duration. Retest is permitted to the students who could not appear for the internal tests due to genuine grounds.
- Internal marks are published in department notice board.
- Monthly attendance report of each course is published in respective classes.

- Department meetings, Class committee meeting and counselling sessions are helpful for the better coordination between staff and students.
- Yearly interaction of HoDs, Faculties, Parents and Students are arranged for discussion on performance of students during previous academic year. CIE methods are discussed and explained in case of lack of clarity.
- Regular interactions of HoDs and Faculty with the students are also arranged.
- The marks awarded to the students in the continuous assessment tests and the attendance percentage is communicated to parents through post by the department, which is accessible through campus ERP system (etlab). Parents and students are provided with user ids and passwords to access this system.
- Any student who is not satisfied with the assessment and award of marks may approach the HOD concerned, who will discuss the issue with the faculty concerned and resolve the grievance.
- **External assessment**
 - The students can apply for revaluation of the answer books of the end semester examination after the results are declared. The final mark awarded will be the better of the two marks.
 - If the difference in marks obtained in revaluation and the original valuation is more than 15% of the maximum marks, it shall be sent for third valuation. The final mark shall then be the average of the closer of the two marks obtained in the three valuations to the advantage of the student or the mark obtained in the original valuation whichever is higher.
 - The revaluation fee will be fully returned to the students, if he/she has secured more than 15% mark variation based on revaluation.

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

2.6 Student Performance and Learning Outcomes

2.6.1

Programme Outcomes (POs) and Course Outcomes (COs) for all Programmes offered by the institution are stated and displayed on website

Response:

- The program outcome & program specific outcomes are displayed on the website. Attainment of course outcomes, program outcomes and program-specific outcomes are evaluated by the institution.
- The assessment gives us essential information about what the students are learning and the extent to which teaching goals are met.

Attainment of Course outcomes:

Attainment of course outcomes are assessed by considering the following two categories of marks

1. Internal Assessment Examination Marks
2. End Semester University Examination Marks or Grades

- A correlation is established between COs and POs on a scale of 1 to 3, 1 being the slight (low), 2 being moderate (medium) and 3 being substantial (high), No Correlation (-). A mapping matrix for CO, PO, and PSOs is prepared for every course in the program.
- Subject wise CO direct attainment level is calculated by adding 70% of the final internal assessment attainment level and 30% of end semester examination attainment level. Thus, the average percentage of students attaining the entire COs decides the CO attainment level.
- In indirect method a course exit survey has been conducted for each course regarding their course outcomes by giving four grade points as 5 = Excellent, 4 = Very Good, 3 = Good, 2 = Fair, 1 = Poor.
- Final CO attainment level is calculated by adding 80% of the direct attainment level and 20% of indirect attainment level.

Sample rule for attainment level calculation:

% of Students having above 50% marks	level
70% or more students Score More than Set Target:	3
60% or more students Score More than Set Target:	2
50% or more students Score More than Set Target:	1
Less than 50% or more students Score More than Set Target:	0

Attainment of Programme outcomes, Programme specific outcomes:

Attainment of PO and PSO are calculated by the following tools

- From CO-PO matrix and CO-PSO matrix, the attainment level is calculated as follows for both direct and indirect methods. Attainment of each PO and PSO is calculated by multiplying the weightage of the CO attainment level with the corresponding correlation.
- Graduate survey is conducted for final year students for calculating PO attainment indirectly.
- Calculate final attainment of POs & PSOs from direct and indirect attainment levels.
- Final attainment = 80% direct method + 20% indirect method.

Course Outcomes (COs) are the learning skills to be attained by the students after the successful completion of each course. The COs are formed as per the syllabus and curriculum given by the University by considering the Program Outcomes (POs) and Program Specific Outcomes (PSOs).

Fixing the Course Outcome

Each course has a set of Course Outcomes (COs). The COs of a course is set by the faculty in charge who is handling the course by referring the syllabus and in discussion with the course coordinator and is verified by the Program Assessment Committee (PAC). As per Regulation 2019, the course outcomes and CO-PO mapping are provided by the University.

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

2.6.2

Attainment of POs and COs are evaluated.

Explain with evidence in a maximum of 500 words

Response:

(QIM): Attainment of POs and COs are evaluated.

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

Attainment of Course outcomes:

Attainment of course outcomes are assessed by considering the following two categories of marks

1. Internal Assessment Examination Marks
2. End Semester University Examination Marks or Grades

Subject wise CO attainment level is calculated by adding 80% of the final internal assessment attainment level and 20% of end semester examination attainment level. Thus, the average percentage of students attaining the entire COs decides the CO attainment level.

Attainment of Programme outcomes, Programme specific outcomes:

Attainment of PO and PSO are calculated by the following tools

1. Direct Attainment

1. Continuous assessment : Internal Evaluation Marks

The Institution conducts two Internal Tests for all semesters. The faculty evaluates the students based on these two tests and the submitted assignments. This in turn contributes to the attainment of the programme outcomes (PO) and Programme Specific Outcomes (PSO).

The performance of a candidate in a course will be assessed for a maximum of 150 marks as explained below:

1. Internal marks – 50
2. External Assessment marks – 100

The internal marks are evaluated by the faculty in charge based on the internal tests, assignments submitted; attendance percentage (2019- Regulations onwards) and the external marks are based on the exams conducted by the university as below.

	Internal Test	Internal Test	Internal Test Total	Assignment	Internal Marks Total
Regulation	I	II	A	B	A + B
2015	20	20	40	10	50

Table 1 - Internal Mark Evaluation – Regulation 2015

	Attendance	Internal Test	Internal Test	Internal Test	Assignment	Internal Marks Total
Regulation	A	I	II	B	C	A+B+C
2019	10	12.5	12.5	25	15	50

Table II - Internal Mark Evaluation – Regulation 2019

For laboratory courses - Continuous assessments in the laboratory

Sl No	Assessment Methods	Max Marks
1.	Performance	20
2.	Output/ Results	20
3.	Observation/ Record	20
4.	Viva	10
5.	End Semester Exam + Viva	30
Total		100

Performance, Viva and Record

< >Students should complete the experiment within the allotted time given to them. The students will record the output and get it verified by the course handling faculty and submit it on or before the next lab session. In each lab session a viva, based on the experiment, will be conducted to test the technical knowledge of the student. It is either conducted as quiz in LMS or as oral viva. The student's continuous internal evaluation is based on the performance in lab, viva, internal assessment test and

record/observation.**End Semester Examination Marks Indirect Attainment**Exit Surveys conducted from the passed-out students in each academic yearThe co-curricular activities of students.Feedback obtained from the workshops and seminars conducted to bridge the gap between the curriculum and POs.Alumni Survey

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

2.6.3

Pass percentage of Students during last five years (excluding backlog students)

Response: 91

2.6.3.1 Number of final year students who passed the university examination year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
393	418	504	531	449

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

2022-23	2021-22	2020-21	2019-20	2018-19
457	473	517	537	538

File Description	Document
Institutional data in the prescribed format	View Document
Certified report from Controller Examination of the affiliating university indicating pass percentage of students of the final year (final semester) eligible for the degree programwise / year-wise.	View Document
Annual report of controller of Examinations(COE) highlighting the pass percentage of final year students	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.7 Student Satisfaction Survey

2.7.1

Online student satisfaction survey regarding teaching learning process

Response: 3.69

File Description	Document
Upload database of all students on roll as per data template	View Document

Criterion 3 - Research, Innovations and Extension

3.1 Resource Mobilization for Research

3.1.1

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

Response: 109.85

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

2022-23	2021-22	2020-21	2019-20	2018-19
24.914	27.28	21.164	27.295	9.2

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

3.2 Innovation Ecosystem

3.2.1

Institution has created an ecosystem for innovations, Indian Knowledge System (IKS), including awareness about IPR, establishment of IPR cell, Incubation centre and other initiatives for the creation and transfer of knowledge/technology and the outcomes of the same are evident

Response:

The institution strongly emphasizes research, innovation, and entrepreneurship. The institute has a policy to provide financial support to boost research and development, and the faculty members are motivated and promoted to attend seminars, conferences, and publish papers. The institute has also received a grant of 109+ lakhs to undertake research projects. 200+ workshops/seminars/conferences were conducted for the dissemination of knowledge during the assessment year.

The college has an Innovation and Entrepreneurship Development Centre (IEDC) cell that provides various platforms for interaction between students and entrepreneurs by organizing talks and meetups with entrepreneurs. The college encourages students to participate in various Idea competitions conducted by Kerala Start-up Mission (KSUM), and many teams of students have received Idea grants from KSUM. The college also conducts various Idea Fests, hackathons, and Idea pitching competitions to enhance the innovative spirit among the students and provides financial support for the development

of product prototypes.

A few notable innovations are: a) 'Funeral Stand,' a convenient device for interment in cemeteries designed to remove the manual effort of lowering the casket into the grave; b) a hybrid Scooter, which can work on both an electrical motor and a petrol engine; c) Mini Ventilators, which were crucial in the COVID-19 scenario; and d) an automatic Laddu making machine.

The Centre for Industrial Consultancy of the institution provides consultancy services like structural design, various types of testing, providing software services, and installation of CCTV Surveillance systems to clients. The institution has generated an amount of Rs 20+ lakhs through consultancy services.

The IEEE student branch of SJCET is one of the best student branches across the region. The institution also has active professional societies like ASME, SAE, ISHMT, CSI, and ASCE that provide platforms for the students to experience new and innovative ideas and happenings around the globe.

The SJCET Startup Bootcamp is another initiative that encourages students to challenge themselves and come up with innovative ideas. Students are provided with expert mentorship to convert their ideas into prototypes and eventually into marketable products. The Bootcamp has incubated two startup companies, Infusory Future Tech Labs Pvt Ltd and Lamaara Technologies Pvt Ltd, both founded by our students. During their incubation period, Lamaara Technologies Pvt Ltd received a brand equity investment worth Rs 50 lakh from the Times Group. The Bootcamp has received several awards and recognition, including the Best Performing IEDC award, the Hero of the Startup award, and the best sustainable startup award.

In addition, the institution conducts seminars related to IPR for the faculty and students. Faculty members in the institution have filed 10 patents so far, of which 3 patents have been awarded. Additionally, students have filed 4 patents.

The various initiatives undertaken by the institute, such as the IEDC cell, professional societies, and industrial consultancy, help nurture the entrepreneurial spirit among the students.

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

3.2.2

Number of workshops/seminars/conferences including on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship conducted during the last five years

Response: 205

3.2.2.1 Total number of workshops/seminars/conferences including programs conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
42	71	42	27	23

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

3.3 Research Publications and Awards

3.3.1

Number of research papers published per teacher in the Journals notified on UGC care list during the last five years

Response: 1.1

3.3.1.1 Number of research papers in the Journals notified on UGC CARE list year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
39	49	36	42	51

File Description	Document
Link to the uploaded papers, the first page/full paper(with author and affiliation details)on the institutional website	View Document
Link to re-directing to journal source-cite website in case of digital journals	View Document
Links to the papers published in journals listed in UGC CARE list or	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.3.2

Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five years**Response:** 0.75**3.3.2.1 Total number of books and chapters in edited volumes/books published and papers in national/ international conference proceedings year wise during last five years**

2022-23	2021-22	2020-21	2019-20	2018-19
43	40	25	15	25

File Description	Document
List of chapter/book along with the links redirecting to the source website	View Document
Institutional data in the prescribed format	View Document
Copy of the Cover page, content page and first page of the publication indicating ISBN number and year of publication for books/chapters	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.4 Extension Activities**3.4.1****Outcomes of Extension activities in the neighborhood community in terms of impact and sensitizing the students to social issues for their holistic development during the last five years.****Response:**

a) The Institute organizes a number of extension activities to promote the institute's relationship with the neighborhood community and to sensitize the students towards community needs. The students actively participate in social service-related activities, leading to their all-round development. The college effectively runs National Service Scheme (NSS) and National Cadet Corps (NCC) units.

b) The college undertakes various extension activities in the neighborhood community. NSS organizes a residential seven-day camp every year in the nearby village, and NSS volunteers carry out several activities addressing social issues, including cleanliness, blood donation camps, tree plantation, repairing hospital equipment and furniture, agriculture activities, water conservation, environmental awareness, women empowerment, etc.

c) The students promote agriculture in the community by applying technological knowledge and modern tools.

d) Our students are office bearers and volunteers of 'Rudhirasena,' a state-level forum that aims to spread awareness and create a culture of voluntary blood donation.

e) In connection with the landslide at Kootickal, the staff and students of Civil Engineering assessed the structural competency of residential buildings in the area and provided technical support for their construction.

f) As part of the Rebuild Kerala Initiative after the flood occurred in the year 2018 and 2019, our institution was delegated the works related to field investigation for the preparation of a detailed project report. The institution ensured quality assurance at the site by conducting random checks and suggested possible improvements wherever required. Our institution also provided road strength studies in Idukki district under the Rebuild Kerala Initiative works entrusted by LSGD, Government of Kerala, as part of post-flood and disaster investigation.

g) The institution organized and conducted state-level "Young Innovation Awards" event, where school children were recognized and appreciated for their innovative ideas. Additionally, the students of our institution showcased innovative projects and developments to school children.

h) Over the assessment period, the institute organized and conducted 190+ activities to sensitize students on social issues and promote holistic development.

i) The students under the guidance of faculty member developed a system that can predict the occurrence of cloudbursts and assist in alerting farmers, civilians, meteorological centers, and climate change researchers about the possibility of a disaster, enabling them to save lives.

Impact & Sensitization: Exposure to extension and outreach activities sensitizes the students towards social issues and familiarizes them with legal and social remedies for matters like domestic violence, dowry, child abuse, beggary, drug abuse, victims of violence, the elderly and ailing, refugees, and displaced persons, etc. The conducted activities lead to the imbibing of values of social responsibility

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

3.4.2

Awards and recognitions received for extension activities from government / government recognised bodies

Response:

1. Appreciation from MLA Mr. Mani C Kappan for the NSS Programme Officers and the NSS units for their excellent work and interest in agriculture, also for providing awareness to the public about the importance of agriculture.
2. Appreciation from the District Collector for the efforts in enrolling students in the Young Innovators Program 4.0, as part of fostering an innovation ecosystem in the Kottayam district.
3. The local Panchayat appreciated the NSS units for their contributions to various activities in the development of Mutholy Panchayat's "Grameenam Mutholy Phase I to VII."
4. Budding Master award for IIT Spoken Tutorial from IIT Bombay organised by MHRD, Govt. of India in 2023.
5. In recognition of the continuous effort to engage IEEE members for their technical anprofessional development through enhanced chapter activities, the IEEE student branch was recognized as the outstanding student branch during the years 2019 and 2021 by the IEEE Kerala Section.
6. The Civil and Computer Science Engineering departments received a gold and silver medal, respectively, for the Student Project from KSCSTE in the year 2021.
7. In recognition of the dignified contribution in the realm of professional education promotion from the

Honourable Governor of Goa, recognized and presented the John Paul II Puraskaram to our beloved Chairman Rev. Dr. Joseph Maleparambil in the year 2020.

8. The Institution received the Akshaya Oorja Award instituted by the Agency for NonConventional Energy and Rural Technology (ANERT), Govt. of Kerala, in the year 2020 for its contributions to renewable energy.

9. The Institution received the Engineering Education Excellence award, instituted by Deepika News Daily, in the year 2019.

10. In appreciation of the commendable achievements towards the utilization of Renewable Energy in the category of Educational Institution in the state of Kerala, the Department of Power, Govt. of Kerala, through the Agency for Non-Conventional Energy and Rural Technology (ANERT), awarded the Institution the Best Performance award in the year 2018.

11. Prof. Tom Zachariah, ME, is recognized as a Top Scientist of Kerala Origin by Stanford University, USA, and Elsevier, Netherlands.

12. Prof. Ashly Thomas of CSE is appreciated and recognized with Discipline star certificate by NPTEL for July-December 2022, for completing more than 50 weeks of learning with a score of $\geq 55\%$ in all subjects.

13. The Institution received the All-India Persistent Inspiration Award at the 2nd Smart India Hackathon 2018-19 from AICTE.

14. The project "AUXILIA: An Assistive Learning Tool for Children with Down Syndrome" was awarded the first prize in the Intellectual or Developmental Disabilities National Hackathon organized by the Business Innovation and Incubation Centre in the year 2023.

15. Institution faculty members are been recognized as office bearers in various professional society bodies.

16. Institution faculty members are been recognized as expert members for various technical events organized in and around the nation. also, faculty members are invited

to deliver technical talks in various institutions.

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

3.4.3

Number of extension and outreach programs conducted by the institution through organized forums including NSS/NCC with involvement of community during the last five years.

Response: 191

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

2022-23	2021-22	2020-21	2019-20	2018-19
39	32	38	24	58

File Description	Document
Photographs and any other supporting document of relevance should have proper captions and dates.	View Document
Institutional data in the prescribed format	View Document
Detailed report for each extension and outreach program to be made available, with specific mention of number of students participated and the details of the collaborating agency	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.5 Collaboration

3.5.1

Number of functional MoUs/linkages with institutions/ industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research during the last five years.

Response: 344

File Description	Document
Summary of the functional MoUs/linkage/collaboration indicating start date, end date, nature of collaboration etc.	View Document
List of year wise activities and exchange should be provided	View Document
List and Copies of documents indicating the functional MoUs/linkage/collaborations activity-wise and year-wise	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1

The Institution has adequate infrastructure and other facilities for,

- teaching – learning, viz., classrooms, laboratories, computing equipment etc
- ICT – enabled facilities such as smart class, LMS etc.

Facilities for Cultural and sports activities, yoga centre, games (indoor and outdoor), Gymnasium, auditorium etc (Describe the adequacy of facilities in maximum of 500 words.)

Response:

1. The eco-friendly **46.5 acres** campus of **St. Joseph's College of Engineering & Technology (SJCET) Palai** projected through the lush green environment, abundant water availability and spacious and airy surroundings, consists of **five academic blocks** and **five sets of laboratory blocks** with a total built up area of **66,498 m²**.
2. Institute has **75 spacious, well-ventilated class rooms** which includes **5 smart classrooms**, 10 chambers for Heads of Departments, separate cubicles for each faculty member, 3 drawing halls, a central library of 1088 m² area, 9 department libraries, separate section for placement and training which includes GD room and a couple of interview rooms.
3. All class rooms are furnished with adequate number of tables and chairs, ceiling fans and lights, black/green/white boards, platform and LCD projectors. The 2297 m² multipurpose auditorium offers facilities for indoor games, cultural activities, yoga training and gatherings of the whole SJCET community.
4. To cater to the physical health, institute has 2 playgrounds, basketball court, separate gymnasiums for both ladies and gents. Institute organizes sports and games competitions, annual cultural fest (**SARGAM**) and an intercollegiate tech-fest (**ASTHRA**) in every year.
5. There are **51 laboratories** and **2 workshops** set up in the institution on **an area of 7607 m²** having state-of-the-art equipment and research facilities for fulfilling the program-specific curriculum of APJAKTU.
6. There are three aesthetically designed, well-equipped air-conditioned seminar halls, where international/national conferences, workshops and seminars are being held.

Computing equipment and Facilities

- 350Mbps leased connection, Wi-Fi enabled campus, 83 Wi-Fi access points
- 15 Computer labs, 768 computers, 615 Computers for student's access
- Central library browsing area, 75 Printers, 16 Scanners, 34 Laptops

Other campus infrastructure facilities

- Language lab and Central Computing Facility.
- CCTV enabled campus with more than 232 HD IP cameras.
- Boot-camp, Maker-Space, Heritage Museum, Heritage Diesel Engine, GSLV model.

- Medicare, 2 Prayer halls, Ramps and Lifts for differently-abled, 15 Drinking water points, separate parking areas for staff and students.
- Solar powered campus (total capacity of 210kW), Water treatment plant (3.5 lakhs liters of water/day), Incinerator, Biogas plant, Nakshatra garden, Fish pond, Vermi-compost unit, Rainwater harvesting tanks, Meteorological Centre and Groundwater recharge ponds.
- 11 kV substation, 24/7 electric power supply with backup generators (542 kVA), 3-phase UPS (130 kVA).
- 2 Canteens, Cafeteria, Store, 3 Reprographic Facilities, Guest-lounge.
- 2 ATMs, Post office, Bank, BSNL exchange, Mobile tower.
- 20 college buses for students and staff.
- Separate rooms for IQAC meetings, Board meetings, Examination control, University valuation camp, Yoga, Alumni, NCC, NSS, Music Club, Guidance and Counselling.
- Cashless payment facilities are available in all offices, stores, canteens, cafeteria and hostels. Two ladies' hostels and two gents' hostels with total capacity for 1300 plus students' within the campus. Overall, the campus is very clean and well equipped with all state-of-the-art facilities to provide quality education in variety of engineering domains.

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

4.1.2

Percentage of expenditure for infrastructure development and augmentation excluding salary during the last five years

Response: 10.52

4.1.2.1 Expenditure for infrastructure development and augmentation, excluding salary year wise during last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
286.89	53.25	88.08	33.25	126.83

File Description	Document
Institutional data in the prescribed format	View Document
Audited income and expenditure statement of the institution to be signed by CA for and counter signed by the competent authority (relevant expenditure claimed for infrastructure augmentation should be clearly highlighted)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

4.2 Library as a Learning Resource

4.2.1

Library is automated with digital facilities using Integrated Library Management System (ILMS), adequate subscriptions to e-resources and journals are made. The library is optimally used by the faculty and students

Response:

Library and Information Division of SJ CET was established in the year 2002. From the very inception the institute has been using the state-of-the-art software for library automation namely Dimensions, TCS-ion and e- live till 2022. From 2023 onwards, the library is automated using KOHA, an integrated library management system (ILMS) with Web OPAC.

By using KOHA software and services, library gets the following advantages:

Koha is a Free and Open Source Integrated Library Management System (ILMS) which includes Acquisition, Cataloguing, Circulation, Serials control, Report generation and Online Public Access Catalogue (OPAC) with many other advanced features. SJ CET library is using customized version of Koha 22.11.

Koha supports international library standards and protocols such as MARC 21, UNIMARC, z39.50, SRU/SW, SIP2, and SIP/NCIP which ensures interoperability between Koha and other software & tools in library services. Data migration from another ILS to Koha becomes easy.

Facilities and Services provided at the Library making use of the Koha software

- Computerized Transactions using Barcode
- E-Gate Register
- Online Public Access Catalogue (OPAC)
- Web OPAC
- Book reservation
- Reference and Lending Services

In addition to the above services, the following facilities are also provided through the college infrastructure.

- Wi-Fi Enabled Library
- Inter Library Loan and Resource sharing
- IP Based and Remote Access to E- Journals and Resources
- Research Scholars Cubicles
- Reprography
- Display of New Arrivals
- Newspaper Clipping Service

Highlights of Koha:

Free Software: Koha uses the Free Software General Public License (GPL) and PERL programming language. Koha depends on other Open Source software components like the Maria DB database and Apache web server.

Enhanced Searching: A detailed bibliographic search is possible with Koha ILS and is powered by the Zebra search engine.

Multilingual: Koha supports web interfaces in different languages.

Platform Independent: Koha has a web-based interface with XHTML, CSS, and JavaScript support.

Subscription to E-Resources and OER Repositories

Links to various OER- Open Education Resources were provided in the website for the users of the library. Library is a member of Developing Library Network (DELNET), and National Digital Library (NDLI). Students can access the e-journal packages like IEEE ASPP, IEEE POP, Elsevier Science Direct, J Gate JSSH -Journal package of Social Science and Humanities and EBSCO E- books package. The library subscribes to more than 73 printed technical journals and 33 magazines. Members can access Books, Journals, Magazines, Digital materials, E-Journals, E Books etc. The Library reading space can accommodate more than 200 students with a total floor area of 1088 sqm. At present the total collection is 56,233 print books and 6867 e-books, totalling 63,100 books

Amount spent on Purchase of Books and Subscription of Journals

On an average we are spending Twenty-Three lakh rupees annually for the purchase of books and subscription of journals.

Library follows the open access system. On an average 156 users are visiting the library and 114 library resources (both print 50+64 online) were referred by the users per day.

Log on to Library Webpage: <http://web.sjcetpalai.ac.in/library-and-information-division/>

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

4.3 IT Infrastructure

4.3.1

Institution frequently updates its IT facilities and provides sufficient bandwidth for internet connection

Describe IT facilities including Wi-Fi with date and nature of updation, available internet bandwidth within a maximum of 500 words

Response:

SJCET has consistently deployed best-in-class **IT infrastructure** and applications development for academic and research support. The management offers all opportunities for faculty, students, and administrative personnel to work with robust hardware facilities, software, and networking support for securely maintaining academic, administrative, examination, and research-related activities.

SJCET has the following IT facilities: -

1. The campus has enabled internet service with **350Mbps (leased line 1:1) bandwidth** on **24x7 LAN** network support with **STAR topology**.
2. The infrastructure consists of a **fiber optic cable network of 3 km** connecting all the building blocks. More than **64 switch racks, 79 network switches, 83 access points, and so on. More than 1000 LAN points** were augmented across the campus in computer and office spaces.
3. **The firewall Sophos XGS4500**, updated with the **latest firmware version SFOS 19.5.0 EAP1**, has been deployed to handle enhanced loads on the network.
4. The network connection and long-range **Wi-Fi access points** with over **83 numbers** were deployed across the campus including hostels for **24X7** internet service. Students can register their laptops using the **MAC address** to get connected to the network.
5. The campus is fully equipped with a **CCTV camera system** and has more than **232 HD IP cameras deployed** throughout the campus including the hostel.
6. A **Data Centre** with an area of 220 sq. ft. is established in the main block, to manage network operations and host all the racks and servers with a continuous power supply. The server infrastructure includes high-power computing, **4 rack and 7 tower servers** with a **12 TB capacity of NAS storage**.
7. **The Computer Maintenance Wing**, takes care of the network, hardware, software, projector, and UPS maintenance activities of the institution.
8. SJCET has **768 desktops deployed in the campus** along with **75 printers** distributed in the campus. **11 servers** are available in the campus to enhance the server availability.
9. All systems are installed with **Microsoft Windows OS** and **MS Office** through **Microsoft Open Value Subscription Scheme** for Institutions, throughout the campus. **Linux** based operating

systems and applications are installed on selected systems for academic use. **Antivirus Software** (Securite EPS Client-Server AV & Integrated Windows Security Protection) is installed and enabled on all systems in the campus.

10. **The Learning Management System (LMS) -Moodle** is used for its teaching and learning practices. The various materials are shared through an online platform. Internal tests, quizzes, assignments can be configured on the platform and access to e-learning resources is enabled through centrally allocated username and password.
11. The **etlab – E-Campus Management System** is a campus administration **ERP** developed by Etuwa Concepts Pvt Ltd. An integrated suite of software applications provided to automate the campus and to address all the administrative requirements of the institution with a user-specific login system. Parents are provided with a login facility. **Previously, elive-ERP** was implemented on the campus.

Biometric systems are implemented for keeping the staff attendance on campus.

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

4.3.2

Student – Computer ratio (Data for the latest completed academic year)

Response: 3.5

4.3.2.1 Number of computers available for students usage during the latest completed academic year:

Response: 615

File Description	Document
Purchased Bills/Copies highlighting the number of computers purchased	View Document
Extracts stock register/ highlighting the computers issued to respective departments for student's usage.	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

4.4 Maintenance of Campus Infrastructure

4.4.1

Percentage expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, during the last five years (INR in Lakhs)

Response: 11.35

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

2022-23	2021-22	2020-21	2019-20	2018-19
158.49	109.06	95.80	111.69	159.78

File Description	Document
Institutional data in the prescribed format	View Document
Audited income and expenditure statement of the institution to be signed by CA for and counter signed by the competent authority (relevant expenditure claimed for maintenance of infrastructure should be clearly highlighted)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

Criterion 5 - Student Support and Progression

5.1 Student Support

5.1.1

Percentage of students benefited by scholarships and freeships provided by the institution, government and non-government bodies, industries, individuals, philanthropists during the last five years

Response: 72.17

5.1.1.1 Number of students benefited by scholarships and freeships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
1831	1754	1259	1722	495

File Description

Document

Year-wise list of beneficiary students in each scheme duly signed by the competent authority.

[View Document](#)

Upload Sanction letter of scholarship and free ships (along with English translated version if it is in regional language).

[View Document](#)

Upload policy document of the HEI for award of scholarship and freeships.

[View Document](#)

Institutional data in the prescribed format

[View Document](#)

5.1.2

Following capacity development and skills enhancement activities are organised for improving students' capability

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

Response: A. All of the above

File Description	Document
Report with photographs on Programmes /activities conducted to enhance soft skills, Language and communication skills, and Life skills (Yoga, physical fitness, health and hygiene, self-employment and entrepreneurial skills)	View Document
Report with photographs on ICT/computing skills enhancement programs	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.1.3

Percentage of students benefitted by guidance for competitive examinations and career counseling offered by the Institution during the last five years

Response: 64.05

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

2022-23	2021-22	2020-21	2019-20	2018-19
1442	1309	1225	1574	717

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

5.1.4

The institution adopts the following for redressal of student grievances including sexual harassment and ragging cases

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

Response: A. All of the above

File Description	Document
Proof w.r.t Organisation wide awareness and undertakings on policies with zero tolerance	View Document
Proof related to Mechanisms for submission of online/offline students' grievances	View Document
Proof for Implementation of guidelines of statutory/regulatory bodies	View Document
Details of statutory/regulatory Committees (to be notified in institutional website also)	View Document
Annual report of the committee motioning the activities and number of grievances redressed to prove timely redressal of the grievances	View Document

5.2 Student Progression

5.2.1

Percentage of placement of outgoing students and students progressing to higher education during the last five years

Response: 71.59

5.2.1.1 Number of outgoing students placed and / or progressed to higher education year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
296	230	375	370	372

5.2.1.2 Number of outgoing students year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
393	418	504	531	449

File Description	Document
Number and List of students placed along with placement details such as name of the company, compensation, etc and links to Placement order(the above list should be available on institutional website)	View Document
List of students progressing for Higher Education, with details of program and institution that they are/have enrolled along with links to proof of continuation in higher education.(the above list should be available on institutional website)	View Document
Institutional data in the prescribed format	View Document

5.2.2

Percentage of students qualifying in state/national/ international level examinations during the last five years

Response: 20.55

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

2022-23	2021-22	2020-21	2019-20	2018-19
60	42	28	3	1

File Description	Document
List of students qualified year wise under each category and links to Qualifying Certificates of the students taking the examination	View Document
Institutional data in the prescribed format	View Document

5.3 Student Participation and Activities

5.3.1

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

Response: 48

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

2022-23	2021-22	2020-21	2019-20	2018-19
9	2	6	11	20

File Description	Document
Upload supporting document	View Document
list and links to e-copies of award letters and certificates	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.3.2

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

Response: 41.8

5.3.2.1 Number of sports and cultural programs in which students of the Institution participated year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
41	54	44	30	40

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

5.4 Alumni Engagement

5.4.1

There is a registered Alumni Association that contributes significantly to the development of the institution through financial and/or other support services

Response:

SJCET Palai Alumni Association (SJCETPAAN) was founded in December 2006, after the graduation of its very first batch in July 2006 and registered in 2008. The primary mission of SJCETPAAN is to reconnect the alumni with their fellow alumni, institute, and students in the campus. It also strives to engage them through various activities among all the stakeholders, to generate impact through several social and academic projects for a collective growth. SJCETPAAN represent about 7000 plus SJCET alumni in various chapters spread across the globe, joining hands to make St Joseph's College of Engineering and Technology a world- class institution. Alumni Association provides a forum for the Alumni to interact with the college on a regular basis.

SJCETPAAN work with key internal and external communities building awareness, engagement and support for the St Joseph's College of Engineering and Technology, Palai by offering programs of value to alumni throughout their lives.

SJCET Alumni Chapters are currently active at Trivandrum, Cochin and UAE. The Trivandrum chapter was inaugurated on 1st June, 2018 and is currently active with more than 200 members.

The Cochin chapter came into existence on 30th June, 2018 and it has the participation of around 175 members.

The 1st meeting of the UAE chapter was held on 12th December, 2019. The UAE chapter has above 100 active members till date and the count is still increasing.

Alumni Contributions

(a)Invited Talk

SJCET Palai Alumni Association is keen on the overall grooming of students in their Alma Mater and extends support in various avenues by offering technical talks in their respective domains of expertise and conducting interactive sessions with our students. We have 30 talks /year as part of Alumni Association and such activities help our students to get exposed to current advancements in the realm of Engineering and management studies. Industry Institute Interaction cell, Alumni Association and Department Associations jointly host technical events of this genre in the campus.

(b) Advisory Boards

Eminent Alumni of SJCET are included in Department Advisory Boards so that their expertise and experience are also put to use in formulating academic plans thereby contributing to the Institutional development.

(c) Resource persons

Those alumni who are working in the elite institutions / industries in India and abroad are invited as Resource Persons in FDPs.

(d) MoUs

The college has signed MoUs with the companies under the initiative of alumni.

(e) Awards

The Alumni Association recognizes and honours achievers among our students by instituting awards for the “Best outgoing student” which is presented on the “Merit and Farewell Day”.

(f) Internship Support

The alumni has provided support for providing internship opportunities in MNC’s for our students during their tenure of study which was incredibly beneficial as it provides exposure to the students on the latest technological development that gives an additional boost to their development

(g) Placement support

Our alumni have contributed to the placement of our students by providing referral to top MNCs and also provide information of placement opportunities in core companies to our students

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

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1

The institutional governance and leadership are in accordance with the vision and mission of the Institution and it is visible in various institutional practices such as NEP implementation, sustained institutional growth, decentralization, participation in the institutional governance and in their short term and long term Institutional Perspective Plan.

Response:

St. Joseph's College of Engineering & Technology (SJCET), Palai is a self-financing Engineering College, administered by value driven policies and procedures, as envisaged in the institute's Vision and Mission statements. The governance of the institution, with the Governing Body at the apex level, ensures aligning the interests of all stakeholders, through innovative practices, catering to the educational, social, cultural, and economic needs of society.

The Institute's vision is to 'Develop into a world-class, pace-setting Institute of Engineering and Technology with a distinct identity and character, meeting the goals and aspirations of society'. In order to achieve the stated vision and mission, each academic department also maintains individual Vision and Mission Statements.

The Quality Manual of SJCET, formulated in line with ISO 9001:2015 procedures, is the backbone of the Quality Management System of the Institute. The Quality Policy is stated explicitly in doc. no. MO5A of QMS. The establishment of mandatory bodies, such as the IQAC, college council, internal academic audit cell, grievances redressal forum, anti-ragging committee, purchase committee, etc., with clearly defined roles and guiding principles in line with the college's vision and mission, effectively governs the various administrative and academic departments of the college.

The Principal, as the administrative head creates committees with members from the teaching faculty, non-teaching staff, and students for the overall management of the college's various operations. This includes committees for admission, academic coordination, examination administration, promotion of research and extension activities, development of infrastructure facilities, staff hiring, maintenance of service records, and supporting cultural activities, implementation of healthy practices in the campus, and inculcation of the spirit of national integrity and social responsibility.

The campus Software 'etlab' controls the academic activities of the Institute. A dedicated Software Development Cell (SDC) maintains and customises the software in the college. This ensures a very high level of accountability and transparency to the academic evaluation processes.

The policy of adherence to the values and principles of inclusivity, responsibility, and social accountability is ensured by the functioning of different professional societies such as IEEE Students branch, ISTE student chapter, CSI student chapter, ACM Student chapter, SAE India – student chapter, ASME student chapter and ISHMT student chapter.

These associations function actively to explore students' interest areas and promote the creation and

transfer of knowledge. There are additional cultural societies devoted to Indian culture, arts, magazines, photography, music etc. Through a variety of skill-based and talent-enhancing activities, the faculty supervisors and student office bearers of these societies work to inspire students to pursue their holistic development so that they can contribute to society as responsible citizens.

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

6.2 Strategy Development and Deployment

6.2.1

The institutional perspective plan is effectively deployed and functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment, service rules, and procedures, etc

Response:

Policies and procedures serve as a framework for the institution's operations and serve to lower the likelihood of any undesirable events. SJCET Palai has created a number of policies to help achieve its goals. Policies can be classified into four categories

- Academic policies included in ICT policies, e-governance, and examination policies offer a structured academic working environment, while campus infrastructure.
- Resource policies such as resource mobilisation, infrastructure use, e-governance, and green campus policies assist in developing tangible and intangible assets for the institution.
- Student policy such as those concerning reservations for admission and rules promoting a barrier-free and disabled-friendly environment, as well as programmes for student mentoring, testing, and campus placement.
- HR policies of the institution that support the establishment of the institution includes staff recruitment, gender equity, grievance redressal, code of conduct & ethics, and employee evaluation.

The administrative structure at SJCET Palai is clearly defined with the governing council at the apex level. The Principal, Vice Principal, department heads, teaching staff and non-teaching staff constitute the different levels of the administrative hierarchy. Future leaders who are competent, innovative, ethical, and committed to improving society following international standards is what SJCET seeks to achieve.

The governing body approves the institution's policies, vision, and mission statements, which provide the institute directions. The governing body also continuously assessing the institute's educational initiatives and recommending corrective actions. The Principal is in charge of day to day operations of the

Institution. The Principal puts the governing body approved policies into action, keeping an eye on how the resources are being used, and plans for the institution's expansion. Academic, research, student affairs, quality aspects, and placement-related activities are handled, respectively, by the dean academics, dean research, student council, IQAC, and placement cell. In Academic Council meeting, Heads of Department provide inputs and feedback on the academic operations on which the Principal acts upon. Heads of department are in charge of staff members and student's academic performance. Administrative department including Finance, Exam control, Establishment, store and purchase, Public relations and Medicare directly reports to the Principal. Transportation and campus maintenance and housekeeping is under the administrative control of the college bursar who is appointed by the diocesan educational trust. Lab upkeep and maintenance is done by the lab manager.

File Description	Document
Upload Additional information	View Document
Institutional perspective Plan and deployment documents on the website	View Document
Provide Link for Additional information	View Document

6.2.2

Institution implements e-governance in its operations

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

Response: A. All of the above

File Description	Document
Screen shots of user interfaces of each module reflecting the name of the HEI	View Document
Institutional expenditure statements for the budget heads of e-governance implementation ERP Document	View Document
Annual e-governance report approved by the Governing Council/ Board of Management/ Syndicate Policy document on e-governance	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

6.3 Faculty Empowerment Strategies

6.3.1

The institution has performance appraisal system, effective welfare measures for teaching and non-teaching staff and avenues for career development/progression

Response:

The Institute has a welfare mechanism in place, for teaching and non-teaching staff. Various Welfare measures for Teaching and non-teaching Staff are:

1.Provident Fund:

Institute provides provident fund for all the members of staff whose gross salary is less than Rs.15000/-

2. Gratuity:

Gratuity is given to members of the staff who are relieved after 5 years of continuous service

3. Group Insurance:

Institution provides personal accident insurance policy for all teaching and non-teaching faculty members.

4. Leave Policies:

- Various kinds of leave available to teaching and non-teaching staff are vacation leave, casual leave, medical leave, compensatory leave, duty leave and maternity leave for ladies.
- Duty Leave will be sanctioned with full pay to all staff members for attending FDP/Workshops/Conferences.
- All the non-doctoral staff members are encouraged to be enrolled for Ph.D. and 6 months leave will be sanctioned for completing course work of part-time Ph.D.

5. Residential Facilities

Faculty house facility is available for male faculties and ladies hostel is available for female faculties who wish to stay in the campus.

6. Transportation facilities

19 long route bus trips are available. Students and faculty can avail the facility. A staff is assigned as in-charge of each bus route.

7. Medical Facilities

Central Dispensary with medical facilities exists in the campus and medicines are available for minor

ailments. Doctor is available on every Wednesday in the campus. The Institute is having tie-up with Mar Sleeva Medicity, Palai and Staff and family members get discount at the hospital

8. Research Policies

Institution promotes all the doctoral staff members satisfying required criteria to acquire PhD Guideship. 15 faculty members from different departments are acting as research guides.

Monetary incentives are provided for the research publications in Quality Journals by faculty members, based on the impact factor.

9. Library

The campus provides a well-equipped library with facilities like Software enabled Library Transaction, research scholar cubicles and free access to various scientific journals. Faculty members will be issued 6 books for a period of 30 days.

10. SJCET Family Meet

Celebrating the 20th year of its inception, the Institution has organized a family get together of the entire SJCET family on October 29th 2022.

Self-Appraisal

The performance of each employee is assessed annually after completion of one year of service. The salient features of the performance appraisal system are as follows:

Teaching Staff

The performance of each faculty member is assessed based on parameters like student feedback (subject knowledge index, teaching effectiveness index & Behavioural index), academic result, research contributions, consultancy works undertaken & participation in institutional activities.

Non-Teaching Staff

All non-teaching staff are also assessed through annual confidential reports and annual performance appraisal. The various parameters used for assessment of staff members are Knowledge, Quality of work, response to supervisor, interpersonal skills etc.

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

6.3.2

Percentage of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies during the last five years**Response:** 3.57**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**

2022-23	2021-22	2020-21	2019-20	2018-19
9	7	6	0	5

File Description	Document
Policy document on providing financial support to teachers	View Document
Institutional data in the prescribed format	View Document
Copy of letter/s indicating financial assistance to teachers and list of teachers receiving financial support year-wise under each head.	View Document
Audited statement of account highlighting the financial support to teachers to attend conferences / workshops and towards membership fee for professional bodies	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

6.3.3***Percentage of teaching and non-teaching staff participating in Faculty development Programmes (FDP), Management Development Programmes (MDPs) professional development /administrative training programs during the last five years*****Response:** 51.96**6.3.3.1 Total number of teaching and non-teaching staff participating in Faculty development Programmes (FDP), Management Development Programmes (MDPs) professional development /administrative training programs during the last five years**

2022-23	2021-22	2020-21	2019-20	2018-19
131	103	134	95	95

6.3.3.2 Number of non-teaching staff year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
63	64	64	63	63

File Description	Document
Refresher course/Faculty Orientation or other programmes as per UGC/AICTE stipulated periods, as participated by teachers year-wise.	View Document
Institutional data in the prescribed format	View Document
Copy of the certificates of the program attended by teachers.	View Document
Annual reports highlighting the programmes undertaken by the teachers	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

6.4 Financial Management and Resource Mobilization**6.4.1**

Institution has strategies for mobilization and optimal utilization of resources and funds from various sources (government/ nongovernment organizations) and it conducts financial audits regularly (internal and external)

Response:

Being a Self-financing Engineering College, SJ CET is keen for mobilizing the maximum possible resources and for optimal utilization of such resources.

The main source of income to the College is the fees collected from the students. There is a well-defined mechanism for the collection of periodical fees from students. The students can use different payment options like Card Swiping, Mobile Payment Apps, Internet Banking, Direct Bank Payment etc. The timely collection of Fees is monitored by the Accounts Section and reported to the Department Heads and Principal.

Even though the scope of Government funds is limited, we are putting best efforts to gather such funds wherever possible like the subsidy obtained for Solar Power plant. Besides, by conducting various projects, funds are obtained from various agencies like ANERT, CERD, and Kerala State Start-up Mission etc. Such funds are received into the particular Bank accounts as stipulated by the agencies and specific audit is conducted after completion of the project as directed by the funding agencies. Apart

from all these, while conducting various events like Technical and Art fests, funds are mobilized with the participation of students and staff.

Other two sources of income are those obtained from Software Development and by the Consultancy Services.

For optimal utilization of all such funds, we are following a well laid out Budget Control system followed by Internal and External Statutory Audit. Mechanism for Internal Audit and External Audit is as follows.

Internal Audit is a continuous process which ensures that after each and every financial transaction, the same is checked for errors and misstatements and a quarterly Internal Audit report is prepared as per Internal Audit Policy.

The Department Budget and the College Budget in general are presented by the Finance Officer in the Governing Body Meet for approval. In the initial stage, the Finance Officer scrutinizes and verifies the financial requests from the Departments and ensures availability of Budgeted funds and reports to the Principal for further scrutiny. For each such expenditure, Utilization Statement is also prepared. Expenditure related to infrastructure and Development activities is closely monitored by the Chairman, Finance Officer and the Bursar. The Institution is liberal, yet follows the strategy of restraint as far as the expenditure is concerned.

Proper procedure for purchases is adopted. The Institution has formed a Purchase Committee for the purpose.

The External audit takes place annually after the completion of every financial year.

The bills and vouchers of the College revenue expenditure and income are checked. The Invoices, Vouchers and proper records with the concerned Department for the capital expenditure are also checked and verified. Cash Register and Cheque payment Register are checked with the supporting Bills and Vouchers. The Utilization Certificates of the funded projects are also audited by the external auditor.

After statutory external audit and assessment of Income and Expenditure, Balance Sheet is drawn and presented to the stakeholders and uploaded in our Website. The audit objections/compliance, if any, is handled by the Accounts Department within reasonable time.

File Description	Document
Upload Additional information	View Document

6.5 Internal Quality Assurance System

6.5.1

Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes. It reviews teaching learning process, structures &

methodologies of operations and learning outcomes at periodic intervals and records the incremental improvement in various activities

Response:

Continuous development is ensured through IQAC. It is responsible for directing, developing, providing, and implementing guidelines to review curricular, instructional, teaching and learning methods.

IQAC has contributed significantly for Institutionalising the following process.

1. E-Governance

SJCET implemented e-governance in all areas of operations, including finance and accounts, student admissions and support, administration, library, and examination.

2. Promotion of ICT and Learning Management System (LMS)

Initiatives have been taken by IQAC to promote the use of ICT and LMS in managing digital notes, assignments, and smart classrooms.

3. Evolving policies and procedures

We have policies and procedures so that there is a system to follow to take us to the next level.

4. ISO certification

SJCET is an institution that holds ISO 14001:2015 and 9001:2015 certifications.

5. NBA Accreditation of the UG programs

The undergraduate programs in Mechanical Engineering, Civil Engineering, Electronics and Communication Engineering, and Computer Science and Engineering have received accreditation from the NBA

6. Student enhancement programs on curricular, co-curricular and extracurricular activities

The IQAC has issued instructions to the departments, encouraging students to actively participate in co-curricular activities to enhance the quality of education.

7. Green Audit in SJCET

A green audit involves evaluating the environmental impact of the institution's operations and identifying areas where improvements can be made.

8. Organization of Workshops, Seminars and Faculty Development Programmes

The staff is trained through Institute-level and department-level training programs to implement the quality assurance procedures effectively.

9. Research promotion

SJCET offers research programmes in various disciplines of Engineering, Management and allied Interdisciplinary areas.

10. Academic audit and review of teaching-learning process

The academic audit ensures timely, efficient, and progressive performance of academic administrative and financial tasks.

11. Student Mentoring

Each faculty member in the department is assigned the responsibility of 30 students. This Faculty Mentor establishes a close relationship with students, orients them to college practices, follows their progress and guides them.

12. MOU and Collaborative activities

To provide industry exposure, gain valuable work experience, explore a career path, develop, and refine skills, MoU is signed.

13. Establishment of Innovation and Entrepreneurship Development Centre

IEDC is formulated in SJCET to promote innovation and entrepreneurship culture among students.

14. Digital Diary

With the use of ERP, teachers' diaries are digitized.

The institution reviews its teaching-learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC and targets are fixed as per CO-PO mapping and achievement will be checked.

To enhance the effectiveness of the teaching-learning and evaluation process, responses from students and alumni are collected in the following ways.

- a. Feedback on teaching staff
- b. Programme exit survey
- c. Infrastructure feedback
- d. Feedback from alumni and Employees

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

6.5.2

Quality assurance initiatives of the institution include:

- 1.Regular meeting of Internal Quality Assurance Cell (IQAC); quality improvement initiatives identified and implemented**
- 2.Academic and Administrative Audit (AAA) and follow-up action taken**
- 3.Collaborative quality initiatives with other institution(s)**
- 4.Participation in NIRF and other recognized rankings**
- 5.Any other quality audit/accreditation recognized by state, national or international agencies such as NAAC, NBA etc.**

Response: A. Any 4 or more of the above

File Description	Document
Quality audit reports/certificate as applicable and valid for the assessment period.	View Document
NIRF report, AAA report and details on follow up actions	View Document
List of Collaborative quality initiatives with other institution(s) along with brochures and geo-tagged photos with caption and date.	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document
Link to Minute of IQAC meetings, hosted on HEI website	View Document

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1

Institution has initiated the Gender Audit and measures for the promotion of gender equity during the last five years.

Describe the gender equity & sensitization in curricular and co-curricular activities, facilities for women on campus etc., within 500 words

Response:

SJCET Palai takes various **deliberate measures for the promotion of gender equity** and also to **celebrate both national and international commemorative days, festivals etc.**

It is ensured that all activities in the institution organized by various committees and groups within the institution and off campus are **heavily participated in by female staff and students**. At the moment, about **50% of SJCET employees and students are females**; many **top administrative and academic roles at the institution are held by female employees**. To bring about higher awareness among students on the importance of women equality, safety and empowerment, SJCET has a vibrant **Women in Development cell**; and for empowerment in technical domain, the IEEE SJCET Student Branch has an active **Women in Engineering Affinity Group**. These cells work in tandem for the overall empowerment of women engineering students in SJCET and organize talks, workshops and seminars on topics like **Emotional Stability, Work life Balance, Safe Internet Usage, Cyber Security** etc. Associations with TEDx (Technology, Entertainment, and Design) also **broadened the spectrum of activities and exposure of the women students** in SJCET. **Safety of women** in the campus is ensured by **24X7 CCTV surveillance** and Security Guards at various locations, ensuring all staff and students to wear ID cards in campus, separate in-campus hostels for boys and girls (managed by Rev. Fathers for boys and Rev. Sisters for girls) equipped with gymnasium and other facilities for sports and physical fitness, college faculty resident tutors in hostels, presence of lady faculty for programmes in which girl students participate, separate waiting halls and rest rooms in every academic block, functional committees like Anti-Ragging Committee, Disciplinary Action Committee, Grievance Redressal Committee, zero tolerance to eve teasing/ragging, extended library working hours for the benefit of hostel in-mates etc. guarantee a **non-discriminatory, fearless and gender friendly campus**.

To increase awareness among students and to imbibe in them a **sense of national pride and global citizenship** various National/International commemorative days, events and festivals are celebrated in coordination with the various clubs and professional society chapters in SJCET. The **National flag** is hoisted in front of the campus, followed by **patriotic songs** by students and staff, both on **Republic day and Independence day**, to express solidarity and integrity to the nation. The **National anthem** is played on campus **everyday**. **Teacher's day** is celebrated to acknowledge the dedication and contribution by faculty members. Students visit nearby organizations/locations to perform extensive cleaning to commemorate 'Swatch Bharath Divas'. **Blood Donation, Mothers Day, World Environment Day, World No Tobacco Day, Global Recycling Day, Constitution Day, Yoga Day, World Aids Day, IEEE Day, Tourism Day** etc are also commemorated with **activities, posters, e-flyers, technical talks, waste collection, distribution of saplings, planting trees, taking part in Yoga** etc. Celebration of

National and state festivals like **Onam, Kerala Piravi, Christmas** etc with great enthusiasm and active involvement from both staff and students serve as a platform to demonstrate the **cultural heritage and communal harmony** in the campus.

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

7.1.2

The Institution has facilities and initiatives for

- 1. Alternate sources of energy and energy conservation measures**
- 2. Management of the various types of degradable and nondegradable waste**
- 3. Water conservation**
- 4. Green campus initiatives**
- 5. Disabled-friendly, barrier free environment**

Response: A. 4 or All of the above

File Description	Document
Policy document on the green campus/plastic free campus.	View Document
Geo-tagged photographs/videos of the facilities.	View Document
Circulars and report of activities for the implementation of the initiatives document	View Document
Bills for the purchase of equipment's for the facilities created under this metric	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

7.1.3

Quality audits on environment and energy regularly undertaken by the Institution. The institutional environment and energy initiatives are confirmed through the following

- 1. Green audit / Environment audit**
- 2. Energy audit**
- 3. Clean and green campus initiatives**
- 4. Beyond the campus environmental promotion activities**

Response: A. All of the above

File Description	Document
Report on Environmental Promotional activities conducted beyond the campus with geo tagged photographs with caption and date	View Document
Policy document on environment and energy usage Certificate from the auditing agency	View Document
Green audit/environmental audit report from recognized bodies	View Document
Certificates of the awards received from recognized agency (if any).	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

7.1.4

Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and Sensitization of students and employees to the constitutional obligations: values, rights, duties and responsibilities of citizens (Within 500 words)

Response:

SJCET has incorporated an inclusive environment into its institutional culture, by transcending differences and fostering harmony towards cultural, regional, linguistic, communal and socio-economic diversities. The institution is determined to shun sectarianism of all kinds and is committed to nurture spirit of oneness and inclusiveness by educating students from diverse backgrounds in a spirit of universal brotherhood.

Equal opportunity for all students in year long activities instill a feeling of unity and togetherness. College provides access to education for all by strictly following the prevailing **policies and rules** of the Kerala state government. Celebrations such as **Onam, Christmas, Holi, and Kerala Piravi** are held to commemorate the various communal festivals in Kerala. English Lab and **Professional Communication** courses are included in first-year academics to promote students' international language skills. **Women's Day, Teacher's Day, and Mother's Day** are celebrated to show respect, honour, and love to the elderly. **NSS and NCC unit camp, Blood Donation Campaign and Old-Age Home Visits, Moral science classes** were held, to make students aware of their societal responsibilities. Different socioeconomic activities such as assessment of landslide sites and suggesting mitigation measures, maintenance of equipment and furniture in hospitals and schools reveal the commitment of the college towards the society.

To discourage discrimination among students and to foster an atmosphere of equality, SJCET enforces a **uniform dress code** for all students. SJCET has strictly followed government directives on **reservation**

seats for disadvantaged groups of people such as SC/ST, OBC/OEC, economically backward classes and differently abled. Fee reductions have also been extended to eligible students in accordance with government policy directives. The college prohibits discrimination against students, as well as teachers and staff, on the basis of faith, caste, creed, gender, financial and social status.

The institution runs a variety of programs promoting patriotism, upholding constitutional values, the national flag and national anthem, cherishing ideals admired in our fight for independence, protecting public property and anti-narcotic measures. The preservation of ecological balance and natural resources, as well as environmental protection, are highlighted as some of the citizens' obligations.

SJCET has always observed remembrance days such as **Independence Day, Republic Day, Constitution Day and Gandhi Jayanti** in order to foster patriotism, respect for the national flag, and republican values. The APJAKTU curriculum courses **MCN 301: Constitution of India and HUT 200: Professional Ethics** are included in the B. Tech Program to spread the constitutional principles and fundamental obligations.

As a part of sensitizing the employees towards the constitutional obligations: values, rights and duties of citizens, more than 15 faculty members have participated in the workshop on Universal Human values conducted by AICTE on the theme "Inculcating Human values in Technical Education". In order to sensitize students about the democratic way of life and **leadership qualities**, the college follows strict protocols for the **election of student representatives, department associations, class, course, and college committees**. The **National Anthem** is sung every day and after every event held in the college with strict protocols help to instill patriotism in the students and staff.

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

7.2 Best Practices

7.2.1

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

Response:

Best Practice - 1

Generic Skills and Professional Competencies for Career and Life

Objectives of the Practice:

1. To develop and strengthen generic skills required for career and societal life.

2. To develop sensitization towards social issues and holistic development.
3. To create the knowledge of recent technology and techniques among students.
4. To develop an attitude for lifelong learning.
5. To instill innate talents through sports and cultural activities.

The context:

The Professionals need to possess a blend of both generic skills and professional skills in order to excel in their careers and achieve success in life. The amalgamation of generic skills and professional competencies determines candidates' ability to perform well in their jobs and contribute to society. Therefore, it is imperative for students to receive education and training in generic skills and professional competencies through an actionable and comprehensive plan. To accomplish this, educational institutes must develop academic calendars and design programs that incorporate best practices and methods for the development of generic skills and professional competencies.

The Practice:

The institute has a well-structured and calendar-based schedule of programs and activities aimed at fostering generic skills and professional competencies. The institute offers the following programs to its students:

- Soft Skills
- Life Skills
- ICT/ Computing Skills
- Language & Communication
- Online MOOC programs –SWAYAM, NPTEL
- Certificate/ Add-on/ Value added programs
- Sports day
- Cultural events
- NSS and outreach programs
- Placement details

Specific training and workshops are organized for each program, ensuring that students from every department have the opportunity to enhance their professional competencies.

Likewise, the institute promotes and facilitates student engagement in both internal and external sports and cultural activities. Additionally, as part of its social corporate responsibility, the institute encourages students to actively participate in NSS and other outreach programs.

Evidence of Success:

- a) Among the 184 capacity building and skill enhancement programs organized by the institute, students from all departments actively took part.
- b) An impressive 95.7% of the students have successfully attended the Certificate / Add on / Value added programs offered and online MOOC programs like SWAYAM, NPTEL etc arranged by the institute.
- c) With the institute hosting 209 outreach programs, nearly every student is actively involved in at least

one of these initiatives.

d) The institute's concerted efforts in organizing these programs have led to a rising placement rate. In the most recent year, 500 industry offers were received for students.

e) There has been a consistent annual increase in the number of students participating in these programs.

Problems encountered and Resources required

It is challenging for both faculty members and students to find time from their regular work and academic commitments to encourage students to undertake innovative and technically competent projects. The following are the problems that have been encountered:

1. Encouraging individuals to participate in the program.
2. Difficulty in finding time for faculty members and students due to regular classes and work.
3. Ensuring completion of certification for the SWAYAM and NPTEL programs.

Through dedicated efforts and comprehensive training right from the start, all mental barriers have been overcome. Students have actively engaged in all programs and acquired the necessary skills with the support and guidance of the faculty, mentors, and training providers.

Best Practice - 2

Faculty Development and Research Promotion

Objectives of the Practice:

1. To establish a cooperative relationship between Institute and Industry.
2. To encourage mutually beneficial research-oriented learning inputs for faculty and students
3. To enhance newer technology transfer for socio- economic development
4. To bridge gap between employability and competence
5. To augment communication and professionalism

The context:

The faculty development and research activities play a significant role in enhancing the performance of the institute and enable the institution to achieve its mission. These activities also empower faculty members to engage in community and regional initiatives. Furthermore, the training and research initiatives have a direct impact on students' project activities and contribute to the expansion of their

knowledge base.

The Practice:

To comprehend the skills demanded by the industry, partnerships and Memorandums of Understanding (MoUs) have been established with 24 organizations and industries. The institution has conducted following activities to boost research and development.

- The institute has implemented a policy to offer financial aid aimed at bolstering research and development. Faculty members are encouraged to participate in seminars, conferences, research projects and paper publications.
- A grant of 114 lakhs has been allocated to the institute for project undertakings.
- The college actively encourages students to participate in Idea grant competitions organized by the Kerala start-up mission (KSUM), and several student teams have successfully secured Idea grants from KSUM.
- Moreover, the institution maintains close association with chapters such as the American Society of Mechanical Engineers (ASME), Society of Automotive Engineers (SAE), Computer Society of India (CSI), and the American Society of Civil Engineers (ASCE).

Evidence of Success:

a) Students have the opportunity to engage in academic project work by visiting these industries. With the support of the industry, they design new products and write research papers. This has led to an improvement in their placement prospects.

b) A significant number of research projects are undertaken throughout the assessment year. c) Faculty development programs have been attended by 42% of the faculty members.

Problems encountered and Resources required:

The research program plays a crucial role in the learning and development process for individuals. However, finding time amidst regular work to encourage individuals to engage in research projects poses difficulties for both faculty members. The following are the problems that have been encountered:

1. Insufficient availability of high-end equipment.
2. Lack of qualified resource persons.
3. Limited availability of research assignments.

These challenges were overcome through the motivation, guidance, and support provided by faculty mentors and the management. To support the willingness of students and faculty members to work on their research projects, several resources were made available, including CAD/CAM software, assistance from the research cell, access to the library, and active participation of educators.

File Description	Document
Best practices as hosted on the Institutional website	View Document
Any other relevant information	View Document

7.3 Institutional Distinctiveness

7.3.1

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

Response:

'Quality Education with Moral and Ethics for Social Progression'

One of the main objectives of the institution is the enlightenment of the whole society. The institution's mission is to grow into a world-class, pace-setting institute with a unique identity and character that meets the aspirations of society. Every curricular and co-curricular activity is carried out in a way that fulfills the institution's vision and mission. The institution provides a state of the art environment and infrastructure for teaching. Faculty and students are urged to participate in research, and students receive certain moral and ethical principles that will help them succeed in life. The SJCET campus is a green campus with a lot of eco-friendly initiatives. From its inception, the management of the institution has followed a nature-friendly approach. The campus is more than 46 acres, and the major area of the campus is filled with well-maintained greenery with thousands of plants and trees. Hundreds of birds from 36 different species have been found on campus. Among them, some are really rare to find around us. The institution makes numerous efforts to uphold the green philosophy. This has led to the development of green morals and ethics towards the environment among the staff and students.

Good citizens should responsibly use water and other natural resources. Students of SJCET are sensitized for optimal use of resources from the day they commence living on campus. The institution teaches them not only engineering but also the lessons of life. Students can observe various water recycling plants and water conservation facilities on campus. Choondacherry by nature is a village with many virtues. A lot of rainfall takes place in this village. There are three main rainwater harvesting tanks in the campus. Besides, there are well-recharging facilities developed in the campus. To maintain harmony with nature, the institute effectively balances the utilization of natural resources and the recycling of the resources. The Meteorological Centre, located on campus, can measure various metrics and store them for later use. SJCET is also an ISO 14001:2015-certified institution, which adheres to the specifications for an environmental management system that an institution may utilise to improve its environmental performance.

Waste management:

All electronic equipments used on the campus are regularly maintained and repaired to ensure the minimum amount of e-waste. E-waste is being disposed of as per the norms of the Pollution Control Board. In order to reduce plastic usage, most of the infrastructural elements are made of wood, glass, and

other degradable materials. The use of plastic inside the campus is strictly restricted. Reusing single-sided papers will significantly reduce the amount of paper used. The campus consists of 3 biogas plants situated in hostels at SJCET. It can greatly contribute to reducing greenhouse gases, as it has the possibility of reducing the need to use fossil fuels. Hostel wastewater is collected on campus and recycled for use in farming and gardening.

Energy Conservation:

The institution has taken initiatives for energy conservation. SJCET owns three solar power plants on campus that will contribute to most of the energy requirements. A total of 210 kWp solar power plant generated 258532 units of electricity in 2022. The installation of another solar plant is in the pipeline. As per KSEBL regulations, we can add another 50 kWp solar power plant to the existing system.

Quality Initiatives:

a) Today's academic institutions are known for producing thousands of research papers, journal articles, and patents in addition to supporting academic activities. APJ Abdul Kalam Technological University's SJCET research centre offers facilities for research in five distinct fields. In this institution, 15 professors are research supervisors, and more than 51 professors are engaged in their own research. There are about 35 faculty with Ph.D.s in various fields.

b) A little over 57 % of teaching faculty are actively involved in research activities. It was emphasised to faculty and students that research participation is an important aspect of the institution's quality mission. Students take an active role in publishing the results of their research projects in reputable publications and take part in competitions related to research and project/design exhibitions.

c) By offering a variety of support services to a wide range of beneficiaries, St. Joseph's Centre for Industrial Consultancy is highly active in a number of sectors, including Civil Engineering, Computer Science, and Mechanical Engineering.

d) Collaboration between industry and academics fosters technological advancement and innovation. Industry collaborations are essential for developing research and a qualified workforce. The majority of the institution's departments signed MoUs with companies that work in their respective fields.

e) For free continual digital learning on a diverse range of topics, we have platforms like Infosys Springboard and UiPath. An Infosys Springboard student can greatly benefit from the educational initiatives and Infosys' partnerships with other reputable industry resource providers like Coursera, Harvard Publications, and more. Students can use UiPath Academy's platform to get certified in a wide range of technologies.

f) Patents are a necessary component of a rapidly expanding academic institution. Patents benefit society because they encourage creativity and aid in the creation of new goods. They protect intellectual property as well. The faculty and students at SJCET are encouraged to conduct research and submit patent applications. We currently own three patents and have eleven more filed.

g) The SJCET Startup Bootcamp- IEDC (Innovation and Entrepreneurship Development Centre) is a part

of the Kerala Startup Mission initiative to develop a startup culture amongst students. Students have the chance to experiment and innovate at the IEDCs. The institution's IEDC received the Best Performing IEDC award in 2017 and 2019. SJCET Bootcamp is supported by the Department of Industries and Commerce and the institution's Innovation Council, Ministry of HRD. There are twelve companies founded and incubated in the SJCET Startup Bootcamp.

h) The management is dedicated to creating a world-class, innovative institute of engineering and technology that produces graduates with strong moral and ethical principles as well as academic and research aptitudes.

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

5. CONCLUSION

Additional Information :

SJCET's commitment to academic excellence goes beyond the confines of the classroom. The college envisions itself as a center of academic distinction, offering unmatched standards of education and cultivating a unique identity and character.

SJCET views its students as valuable resources, each with their own unique potential waiting to be realized. To that end, the college has put in place a comprehensive system that nurtures and fosters the personality development of students. Programs designed to enhance life skills and communication abilities have been implemented with the aim of aligning students with societal values and aspirations. SJCET values both Intelligent and Emotional quotients, recognizing the importance of cultivating both hard skills and soft skills. The institution believes in achieving harmony and balance in life and career, instilling values that are cherished and nurtured.

The governing body of SJCET consists of distinguished individuals who act as catalysts in propelling the college towards its professed vision and mission. With esteemed members such as Dr. Tessa Thomas, a distinguished scientist and Director General of Aeronautical Systems in the Defense Research and Development Organization (DRDO), and Dr. Ramesh Unnikrishnan, Advisor II, Policy & Academic Planning Bureau, All India Council for Technical Education (AICTE), SJCET benefits from their expertise and guidance.

SJCET takes pride in offering various services to its student fraternity. It is the first self-financing engineering college in Kerala to start an NCC unit, reflecting its commitment to fostering discipline, leadership, and patriotism among students. The college has also partnered with the Civil Service Institute, Pala, to provide coaching for civil service entrance exams, widening the horizons of career opportunities for students. The Training and Placement cell at SJCET offers professional counseling services, facilitates campus recruitment, and collaborates with reputed companies to ensure students gain hands-on skills. Scholarships and financial aid, worth over ₹ 2 crore, are awarded to deserving students based on merit and means. The college also provides remedial coaching and special classes for students who require additional support. In addition to providing a stimulating academic experience, SJCET opens doors to highly rewarding and satisfying careers for its students upon program completion.

Concluding Remarks :

SJCET, in its unrelenting perseverance for top notch standards and academic excellence has carved a niche in the domain of engineering education of the state. The institution has made its mark in the realm of technical education along its eventful trajectory spanning over two decades. SJCET remains steadfast in its pursuit of illuminating aspiring minds with knowledge, wisdom, and values, all the while being grounded in work ethics, discipline, and a commitment to high professional quality,. The college relentlessly dedicates itself to

empowering students, nurturing their talent, and contributing to society, which has gone a long way in cementing SJCET's position as a pioneer in technical education.

By upholding core values and fostering an environment of academic distinction, SJCET continues to shape the future of education in engineering and technology. Its efforts have been recognized through various accolades, including being rated as one of the top ten best-performing IEDCs in Kerala and being selected as the Skill Development Platform of Kerala by the government. SJCET's commitment to maintaining an eco-friendly campus has also earned it the prestigious ENCON Green Club award for five consecutive years. The quantum of awards and recognitions SJCET has brought to its shores from international societies of Engineering and Technology, like IEEE, ASME by way of student projects, faculty achievements and institutional awards speaks volumes of the caliber and commitment of SJCET.

As SJCET forges ahead, it remains unwavering in its commitment to work ethics, discipline, and quality awareness. The college's relentless pursuit of knowledge and wisdom adds value to the corpus of professional and technical expertise. With its remarkable achievements and unwavering dedication to academic excellence, SJCET continues to elevate the standards of technical education, not only in Kerala but beyond, creating a brighter future for aspiring engineers and technologists, and thus contributing positively to national development.

SJCET has always treated students as invaluable resources with the effulgence of knowledge and talents hidden beneath the surface. The college offers ample opportunities for the students to hone their skills, sharpen their wit and intellect, and refurbish their hidden talents, enabling them to sparkle like diamonds.

6.ANNEXURE

1.Metrics Level Deviations

Metric ID	Sub Questions and Answers before and after DVV Verification																				
1.2.1	<p>Number of Certificate/Value added courses offered and online courses of MOOCs, SWAYAM, NPTEL etc. (where the students of the institution have enrolled and successfully completed during the last five years)</p> <p>Answer before DVV Verification : 223 Answer After DVV Verification :194</p>																				
2.4.2	<p>Percentage of full time teachers with NET/SET/SLET/ Ph. D./D.Sc. / D.Litt./L.L.D. during the last five years (consider only highest degree for count)</p> <p>2.4.2.1. Number of full time teachers with NET/SET/SLET/Ph. D./ D.Sc. / D.Litt./L.L.D year wise during the last five years</p> <p>Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2022-23</th> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> </tr> </thead> <tbody> <tr> <td>37</td> <td>37</td> <td>35</td> <td>28</td> <td>21</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1"> <thead> <tr> <th>2022-23</th> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> </tr> </thead> <tbody> <tr> <td>37</td> <td>36</td> <td>35</td> <td>28</td> <td>21</td> </tr> </tbody> </table> <p>Remark : Teachers who have worked for less than 12 months are removed as per last date of each academic year</p>	2022-23	2021-22	2020-21	2019-20	2018-19	37	37	35	28	21	2022-23	2021-22	2020-21	2019-20	2018-19	37	36	35	28	21
2022-23	2021-22	2020-21	2019-20	2018-19																	
37	37	35	28	21																	
2022-23	2021-22	2020-21	2019-20	2018-19																	
37	36	35	28	21																	
3.3.1	<p>Number of research papers published per teacher in the Journals notified on UGC care list during the last five years</p> <p>3.3.1.1. Number of research papers in the Journals notified on UGC CARE list year wise during the last five years</p> <p>Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2022-23</th> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> </tr> </thead> <tbody> <tr> <td>39</td> <td>49</td> <td>36</td> <td>42</td> <td>51</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1"> <thead> <tr> <th>2022-23</th> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> </tr> </thead> <tbody> <tr> <td>39</td> <td>49</td> <td>36</td> <td>42</td> <td>51</td> </tr> </tbody> </table>	2022-23	2021-22	2020-21	2019-20	2018-19	39	49	36	42	51	2022-23	2021-22	2020-21	2019-20	2018-19	39	49	36	42	51
2022-23	2021-22	2020-21	2019-20	2018-19																	
39	49	36	42	51																	
2022-23	2021-22	2020-21	2019-20	2018-19																	
39	49	36	42	51																	
3.3.2	<p>Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five years</p>																				

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

Answer before DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
43	40	25	15	25

Answer After DVV Verification :

2022-23	2021-22	2020-21	2019-20	2018-19
43	40	25	15	25

3.4.3 Number of extension and outreach programs conducted by the institution through organized forums including NSS/NCC with involvement of community 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 etc., year wise during the last five years**

Answer before DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
39	32	38	24	58

Answer After DVV Verification :

2022-23	2021-22	2020-21	2019-20	2018-19
39	32	38	24	58

3.5.1 Number of functional MoUs/linkages with institutions/ industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research during the last five years.

Answer before DVV Verification : 361

Answer After DVV Verification :344

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

Answer before DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
427.17	358.17	356.11	386.44	459.57

Answer After DVV Verification :

2022-23	2021-22	2020-21	2019-20	2018-19
158.49	109.06	95.80	111.69	159.78

5.1.3 Percentage of students benefitted by guidance for competitive examinations and career counseling offered by the Institution during the last five years

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

Answer before DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
1442	1309	1225	1574	717

Answer After DVV Verification :

2022-23	2021-22	2020-21	2019-20	2018-19
1442	1309	1225	1574	717

5.2.1 Percentage of placement of outgoing students and students progressing to higher education during the last five years

5.2.1.1. Number of outgoing students placed and / or progressed to higher education year wise during the last five years

Answer before DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
297	230	375	370	372

Answer After DVV Verification :

2022-23	2021-22	2020-21	2019-20	2018-19
296	230	375	370	372

5.2.1.2. Number of outgoing students year wise during the last five years

Answer before DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
496	473	517	537	538

Answer After DVV Verification :

2022-23	2021-22	2020-21	2019-20	2018-19
393	418	504	531	449

5.2.2 Percentage of students qualifying in state/national/ international level examinations during the last five years

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

Answer before DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
63	42	28	3	1

Answer After DVV Verification :

2022-23	2021-22	2020-21	2019-20	2018-19
60	42	28	3	1

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

2022-23	2021-22	2020-21	2019-20	2018-19
11	2	6	11	20

Answer After DVV Verification :

2022-23	2021-22	2020-21	2019-20	2018-19
9	2	6	11	20

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

5.3.2.1. Number of sports and cultural programs in which students of the Institution participated year wise during last five years

Answer before DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
41	54	44	30	40

Answer After DVV Verification :

2022-23	2021-22	2020-21	2019-20	2018-19
41	54	44	30	40

6.3.2 Percentage of teachers provided with financial support to attend conferences/workshops and

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

Answer before DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
81	85	36	49	59

Answer After DVV Verification :

2022-23	2021-22	2020-21	2019-20	2018-19
9	7	6	0	5

Remark : Values updated as per attachment

7.1.3 Quality audits on environment and energy regularly undertaken by the Institution. The institutional environment and energy initiatives are confirmed through the following

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

Answer before DVV Verification : A. All of the above

Answer After DVV Verification: A. All of the above

2.Extended Profile Deviations

ID	Extended Questions																				
1.1	Number of teaching staff / full time teachers during the last five years (Without repeat count): Answer before DVV Verification : 226 Answer after DVV Verification : 198																				
2.1	Expenditure excluding salary component year wise during the last five years (INR in lakhs) Answer before DVV Verification: <table border="1"> <thead> <tr> <th>2022-23</th> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> </tr> </thead> <tbody> <tr> <td>1367.21</td> <td>1195.29</td> <td>984.24</td> <td>1018.67</td> <td>1028.92</td> </tr> </tbody> </table> Answer After DVV Verification: <table border="1"> <thead> <tr> <th>2022-23</th> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> </tr> </thead> <tbody> <tr> <td>1367.20</td> <td>1195.29</td> <td>984.24</td> <td>1018.67</td> <td>1028.92</td> </tr> </tbody> </table>	2022-23	2021-22	2020-21	2019-20	2018-19	1367.21	1195.29	984.24	1018.67	1028.92	2022-23	2021-22	2020-21	2019-20	2018-19	1367.20	1195.29	984.24	1018.67	1028.92
2022-23	2021-22	2020-21	2019-20	2018-19																	
1367.21	1195.29	984.24	1018.67	1028.92																	
2022-23	2021-22	2020-21	2019-20	2018-19																	
1367.20	1195.29	984.24	1018.67	1028.92																	