SELF STUDY REPORT

FOR

1ˢᵗ CYCLE OF ACCREDITATION

CHANDIGARH ENGINEERING COLLEGE,JHANJERI

VILLAGE JHANJERI, JHANJERI, MOHALI, PUNJAB, 140307
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chandigarhengineeringcollege.com

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

Established in 2012 with engineering as a flagship program, Chandigarh Engineering College, Jhanjeri (CEC-J) has come a long way in its journey of delivering quality higher education at affordable fees. CEC-J, whose roots date back to 2001 and has evolved from CGC Group, is today one of North India's leading higher education provider that offers quality technical education and endless placement opportunities to the students from all corners of the country. The Institute is affiliated to I.K.Gujral Punjab Technical University (IKGPTU) and is approved by the All India Council for Technical Education (AICTE), New Delhi. The college offers seven UG Program. B.Tech Computer Science and Engineering, B.Tech Electronics & Communication Engineering, B.Tech Mechanical Engineering, B.Tech Artificial Intelligence & Data Science, B.Tech Artificial Intelligence & Machine Learning, B.Tech Civil Engineering and B.Tech Robotics & Artificial Intelligence

The college embraces seasoned dedicated faculty, a student-centric and research-intensive environment and most importantly, an education model that blends the theory and hands-on exposure effectively.

Apart from this, CEC-J gives utmost importance to the 360° pre-placement training as well as building strong industry-academia alliances – that's why we are trendsetters in campus placements. We have tied up with many top-notch companies in diverse fields to understand the industry trends and implement an industry-standard curriculum.

Looking back, it feels gratified that Chandigarh Engineering College, Jhanjeri has won so many wonderful recognitions. We are not the first in imparting education, but what sets us apart is the passion we have for what we do. Some of the attributes that have helped us win these many prestigious awards include – **our commitment, consistency and honesty towards providing quality higher education.** A Few awards are Iconic Leadership 2022 in Best Campus Placement, National Employability Award 2022, North India's Fastest Growing Educational Group 2021, Most Innovative Engineering College-2019**,** National Employability Award 2020. Apart from the above for its excellent overall contribution in the field of Technical Education, S.Rashpal Singh Dhaliwal, President CEC received award from Shri Jai Ram Thakur, Hon'ble Chief Minister, Himachal Pradesh during Annual Function of Himachal MahaSabha in 2019 as well as from S. Amrinder Singh Hon'ble Chief Minister of Punjab in 2018 for Excellence in Campus Placement.

Vision

To emerge as an institution of technical excellence imparting professional education for sustainable development of society

Mission

- To provide quality technical education through state-of-the-art infrastructure and well qualified & experienced faculty.
- Having academic flexibility through strong industry academia interactions.
- Focus on students' employability, entrepreneurship, higher education and competitive examinations.

- To inculcate ethical and moral values in students.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- CEC-J has a world class infrastructure and surrounded by lush green environment.
- A team of well qualified and dedicated faculty members as per AICTE and IKGPTU norms.
- Progressive and Committed Management.
- Clear Vision, Mission and Objectives.
- Strong Industry Institute Interaction.
- Placements in top notch companies.
- Good number of companies visiting CEC-J every year.
- MOUs with Industry and reputed Institution (National & International) for curriculum enrichment, FDPs and Students Training Programs.
- Students of CEC-J have given best of academic results in IKGPTU.
- Separate on campus hostel facilities for boys and girls with all modren amenities.
- Transport facility for students and staff.
- Proactive Internal Quality Assurance Cell (IQAC) to ensure quality in teaching learning process including Centre of Excellence, latest technological labs and trainings.
- Various clubs and chapters to facilitate co-curricular and extension/outreach activities. In house newsletters and magazines are published regularly.
- Various indoor and outdoor games and sports facilities are available.
- Full financial support to participate in National and International level events/ conferences/ seminars/ workshops/ compititions.
- Green building and Waste management system.
- Extension and services to society conducted by NSS through various activities which are supported by CEC-J management.
- Constant endeavor to upgrade quality.

Institutional Weakness

- Government grants are less than expectations.
- Departments yet to get recognition as research centres from Govt. of India and State Govt.
- The primary fact levelled against higher education in India is that the quality of students have drastically reduced.
- Less number of Students from reserve catagory coming to campus.
- Non-availablity of senior faculty in emerging areas.

Institutional Opportunity

- Scope for more consultancy and research projects sponsored by funding Govt. agencies.
- Tie-ups with research laboratories to promote Industry sponsered Centre of Excellences to make the student industry ready.
- Strong Alumni Association gives a chance to the students through their mentoring sessions

(online/offine) to make them industry ready.

- Increased focus on higher education:- Govt. of India focusing more on higher education to provide quality education for UG and PG courses.
- Digitisation:- Digitisation will present a huge opportunity for educational institutions in terms of saving costs as well as reaching out to more students.
- E-learning platform:- Investment in e-learning and starting of Massive Online Open Course (MOOC's) is an opportunity waiting to be harnessed for quality education and to generate resources particularly through distance education mode.
- CEC-J has developed expert lectures recording facility to creat a video lecture reservoir
- Programs in recent emerging specialization.

Institutional Challenge

- To enhance Faculty/ Student exchange programs with reputed National/ International Organizations.
- To attract more research funding from DST/ DIT/ UGC/ AICTE/ DRDO/ ISRO etc.
- Due to fast technological chages in industry it is difficult to find good faculty for those specilization filed.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

- Chandigarh Engineering College (CEC-J) Jhanjeri strongly believes in providing the suitable learning opportunity for the students to make them industry ready engineers.
- CEC-J follows the curriculum prescribed by the IKGPTU.
- Specialisation based Elective System under Choice Based Credit System (CBCS) introduced in all UG programs from the academic year 2018.
- CEC-J encourages the faculty to keep themselves abreast with technological changes in industry and enhance their knowledge by offering faculty development programmes and workshops.
- CEC-J academic calendar of the institute, reflects IKGPTU academic calendar and includes curricular, co-curricular, extracurricular activities.
- CEC-J academic calendar and teaching plans are strictly followed and are audited regularly. Well defined mechanism for planning, execution and monitoring of curriculum and value added courses to enhance the skills of students towards industry expectations and competitive examinations.
- CEC-J is sensitive to gender bias, caste & creed bias and environment related issues.
- Human values and professional ethics related different programs conducts regularly.
- Allotment of subjects including open electives is done by the HOD based on the faculty expertise and preference obtained as per preference given by faculty.
- Faculty Preparation Program (FPP) which consist of a detailed lesson plan is prepared by focusing on Outcome Based Education. For each course Question Bank, Manual, is prepared which is scrutinized by department level and then approved by IQAC. IKGPTU has introduced courses on professional ethics and environmental science.
- Departmental activities are scheduled which include Industrial visits, in plant training, Guest Lectures, Project Competition, Seminars, Conferences, Placement and Training and Association activities.
- The IQAC monitors and assists the faculty members for effective curriculum delivery.
- The feedback received from the students and stakeholders are carefully analysed, discussed and

appropriate actions are initiated.
- Curricular gaps are identified and communicated to University.

Teaching-learning and Evaluation

- Admission process for different programs is carried out through Counselling by the State Government of Punjab. The admission process ensures inclusion of students including reserve catagory defined by State Government of Punjab. At the entry level induction /bridge courses programs are conducted for the newly joined students.
- CEC-J has a Learning Management System and a good reservoir of e-learning materials. The excellent mentor-mentee system of the institute takes care of academic and stress related issues.
- CEC-J has NPTEL local chapter where students & faculty take course programmes from NPTEL course basket.
- Additional support for advanced learners students and student centric learning environment that promotes an independent, interactive and collaborative learning.
- Encouragement and support for all co-curricular and extracurricular activities to nurture critical thinking, creativity and scientific temperament.
- Students are made aware of their programme based POs, PSOs, PEOs.
- The institute systematically checks the attainment of outcomes and reviews the Teaching- Learning process.
- On an average 95% of students graduate every year.
- Senior memebers from alumni association help in enhancing teaching learning process by giving advices to the students for latest courses to be taken for enhancing thier placement opportunities through online/offline session

Research, Innovations and Extension

- CEC-J has a dedicated team of researchers which include a senior faculty member of each department as research coordinator.
- Faculty members and undergraduate students are provided with adequate resources to pursue research in their respective field of interest.
- Students are encouraged to take up projects under the supervision of the faculty members. The college provides state of art facilities for carrying out research projects through future tech labs.
- Each Future tech labs are guided by industry and academic mentors and focussing on intellectual property development.
- The researchers are encourge for research by providing them the required equipment, labs, books and leaves for research work.
- Financial assistance is provided to attend conferences, e-resources, computer facilities, Wi-Fi etc.
- CEC-J provides incentives to the faculty for their research contribution. Research meeting is conveyed to discuss proposals to funding agencies.
- The faculty members who do not possess Ph.D degree are provided with the chances to register in Ph.D Program.
- During last five years, 300+ research papers have been published in the Web of Science, SCOPUS Indexed, UGC recognized journals.
- During last 5 years, 400+ book chapters and conference papers have been published by faculty members.

- More than 20 industrial linkage program such as internship, field trip, on-job training have been organized.
- 30+ MOUs have been signed with reputed organisations.
- Faculty members and students are actively involved in Institutional Social Responsibility activities through structured forums like NSS, Clubs and Societies alongwith the programs/activities which conducted by Government Organizations.
- Many recognition and awards are received for various extension activities from Universities, State level agencies and NGOs.
- Numerous activities have been organized in near past, such as tree plantations, adoption of the villages and life saving activities by State Disaster Responce Force (SDRF).

Infrastructure and Learning Resources

- The state-of-art infrastructure augments learning environment is the significant impact of the CEC-J. The Management of Institutions is committed in enhancing the infrastructure as and when needed which promotes a good teaching learning environment.
- Campus area has 32.35 acres and built up area of 19527.63 sq.m. Sufficient number of class rooms and laboratories with all facilities as prescribed by AICTE/ affiliating IKGPTU
- Future tech lab is a unique facility provided by the management for augumenting research and training activities.
- Classrooms and Seminar Halls are equipped with ICT facilities.
- College and Hostels are internet/ Wi-Fi enabled. High speed Internet connection with 520 Mbps Leased Line. CEC-J has licensed and open source software in various departments. The Library has a collection of 12836 Volumes and 1423 Titles and 12 print Journals, 944 E-journals, more than 1lacs E-Books.
- Digital Library is equipped with Digital Systems; users can access eresources like EBSCO, DELNET, NDL and other e- resources. Faculty and students can access the facilities beyond the office working hours. Excellent power back up through generators.
- Wide and spacious playgrounds for students.
- Excellent campus maintenance.
- Adequate financial allocations are made for internal maintenance work of all infrastructures and maintenance of greenery.

Student Support and Progression

- CEC-J puts in relentless efforts for the all round development of students. Student chapters of various professional societies like Students Clubs, NSS, Games and Sport Committees actively organize technical & cultural fests, social activities, cocurricular activities.
- Adequate representation is given for students in all academic/administrative committees and students are involved in the decision making process.
- More than 16.02% of the students avail scholarships & free ships from Government as well as the institution.
- Guidance for competitive examination, soft skills training, life skills, ICT/Computing Skills, Yoga and meditation classes are initiatives for the holistic development of students.
- Add-on Certificate courses are offered to all the students to enhance their skills and capabilities.Industrial tie ups with companies are done to carry out value added programmes.
- Grievance Redressal Committee and Anti-Ragging Committee and Internal Complaints Committee help

the students to address the issues, if there is any.

- CEC-J has a good placement record and on an average 50% of the students are placed on campus. More than 10% of the students opt for higher education in prestigious institutions.
- Students who are appearing for the competitive examinations are all qualified.
- Department level clubs/ associations to encourage students in cultural activities.
- More than 35 sports/cultural activities/competitions are organized in the CEC-J every year.
- The alumni association contributes actively to the growth of the institution .

Governance, Leadership and Management

- CEC-J has an effective and transparent governing system in tune with the vision and mission of the Institution.
- The organization structure of the institution and decentralization is clearly defined in the campus.
- The Governing Body conducts periodical meetings to analyse the progress of the institution and recommends the improvements.
- The Management has been in constant touch with the Executive Director and respective Directors to discuss the financial needs and infrastructural development.
- The Executive Director is the Academic and Administrative head of the CEC-J and responsible for the implementation the Vision and Mission of the CEC-J.
- Institution/ departments have a clear perspective/ strategic plan and it is deployed effectively. Each functional body is clearly defined with service rules and procedures. Institution has well defined procedures for recruitment and promotion.
- CEC-J has implemented e-governance in the all the areas of administration, examination process and academics.
- Various institutional bodies/ cells/ committees are working effectively. Regular meetings are called for the discussions, minutes of meetings are recorded and action taken reports are sorted.
- HODs organize career guidance programmes, workshops, value added course, symposium, social relevance activities, seminars and conferences to enrich the knowledge and showcase the talents of students.
- More than 60% of teachers benefited from financial support to attend conferences/ workshops and towards membership fee of professional bodies during the last 5 years.
- More than 40+ professional development/ administrative training programs organized in the campus for benefits of teaching and non-teaching staff during the last 5 years.
- More than 80% of teachers got benefited by attending professional development programs.
- CEC-J has implemented various welfare measures for teaching and non-teaching staff to keep them comfortable.
- CEC-J follows rigorous Quality Assurance processes that pave the way for ensuring academic excellence.
- The IQAC is responsible for the effective implementation of the academic quality processes, by conducting periodic meeting and organize collaborative and quality initiatives.
- IQAC conducts the Academic and Administrative Audits and based on the observation of the report, quality recommendations are given.

Institutional Values and Best Practices

- CEC-J is committed to maintain a culture of innovation, creativity, hard work, perseverance and

excellence.

- The motto of CEC-J is 'moulding true citizens', who can contribute immensely for the progress and development of our nation. The main focus is on a holistic development of the students in an eco-friendly campus.
- The efforts to evolve new ideas and strategies in line with the Vision and Mission of the institute made the CEC-J distinctive in the region.
- CEC-J has taken some significant measures in energy conservation, waste management, rain water harvesting and tapping unconventional energy sources.
- Sensor-based energy conservation is done to avoid unwanted usage of electricity and steps are initiated by the institution for the management of degradable and non-degradable wastes and water conservation.
- Various schemes like, elevation of the under privileged sections of the society, scholarships to the deserving students, financial aid to the poor students without any discrimination of caste, creed or gender, women empowerment programs, counselling for students and social awareness programs in collaboration with various governmental agencies are being implemented.
- The best practices are oriented towards the quest for excellence and with concrete efforts this can bring a change in the system of the whole institution as well as the stake holders.
- Various training programmes, industry connected value added programmes are being organized continuously to make students industry ready and to get placed in fortune companies.
- Through service and cultural clubs various events are conducted to ensure gender equity and sensitization in cross cutting issues.
- CEC-J students are encourage to celebrate and organize National and International commemorative days, events and festivals regularly, which enables them to excel in logical thinking, team building skills and leadership skills.
- Technical labs of CEC-J provides an excellent eco system for student development and R&D for faculties and students.
- CEC-J have 3 wings of NCC i.e. Army, Air, Navy.

The popular inspirational quote of Honorable, Dr. A.P.J. Abdul Kalam is a continuous driving force behind all the stakeholders

.**"Dream is not that you see in sleep. Dream is something that does not let you sleep."** --**Dr. A.P.J. Abdul Kalam**

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	CHANDIGARH ENGINEERING COLLEGE,JHANJERI
Address	Village Jhanjeri, Jhanjeri, Mohali, Punjab, 140307
City	Jhanjeri
State	Punjab
Pin	140307
Website	chandigarhengineeringcollege.com

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Director	Neeraj Sharma	0160-5045318	6284240881	1060-5045318	ed@cgc.ac.in
IQAC / CIQA coordinator	Bhasker Pratap Choudhary	0160-5045300	9897278481	0160-5045300	iqac@cgc.ac.in

Status of the Institution	
Institution Status	Private and Self Financing

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

Recognized Minority institution	
If it is a recognized minroity institution	No

Establishment Details

State	University name	Document
Punjab	The I.K. Gujaral Punjab Technical University	View Document

Details of UGC recognition

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

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

Statutory Regulatory Authority	Recognition/Approval details Institution/Department programme	Day,Month and year(dd-mm-yyyy)	Validity in months	Remarks
AICTE	View Document	01-06-2022	12	

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

Location and Area of Campus				
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.
Main campus area	Village Jhanjeri, Jhanjeri, Mohali, Punjab, 140307	Rural	32.35	19527.63

2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Programme/Course	Duration in Months	Entry Qualification	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BTech,Artificial Intelligence And Data Science	48	HSC	English	60	60
UG	BTech,Artificial Intelligence And Machine Learning	48	HSC	English	60	60
UG	BTech,Civil Engineering	48	HSC	English	60	37
UG	BTech,Computer Science And Engineering	48	HSC	English	180	180
UG	BTech,Electronics And Communication Engineering	48	HSC	English	60	60
UG	BTech,Mechanical Engineering	48	HSC	English	60	23
UG	BTech,Robotics And Artificial Intelligence	48	HSC	English	60	60

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				12				6				86
Recruited	11	1	0	12	5	1	0	6	32	54	0	86
Yet to Recruit				0				0				0
Sanctioned by the Management/Society or Other Authorized Bodies				12				6				86
Recruited	11	1	0	12	5	1	0	6	32	54	0	86
Yet to Recruit				0				0				0

Non-Teaching Staff				
	Male	**Female**	**Others**	**Total**
Sanctioned by the UGC /University State Government				18
Recruited	10	8	0	18
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				18
Recruited	10	8	0	18
Yet to Recruit				0

Technical Staff				
	Male	**Female**	**Others**	**Total**
Sanctioned by the UGC /University State Government				0
Recruited	8	5	0	13
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				0
Recruited	8	5	0	13
Yet to Recruit				0

Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualification	**Professor**			**Associate Professor**			**Assistant Professor**			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0
Ph.D.	11	1	0	5	1	0	8	11	0	37
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	24	43	0	67
UG	0	0	0	0	0	0	0	0	0	0

Temporary Teachers									
Highest Qualificatio n	Professor			Associate Professor			Assistant Professor		
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	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

Part Time Teachers									
Highest Qualificatio n	Professor			Associate Professor			Assistant Professor		
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	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	Others	Total
	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	307	1208	0	21	1536
	Female	66	205	0	3	274
	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	0	6	5	1
	Female	0	0	1	0
	Others	0	0	0	0
ST	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
OBC	Male	2	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
General	Male	559	451	379	400
	Female	0	0	0	0
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
Total		561	457	385	401

Institutional preparedness for NEP

1. Multidisciplinary/interdisciplinary:	Education with Multidisciplinary components is an academic and pedagogical approach to develop multiple capacities in the intellectual, aesthetic, social, physical, emotional, and moral domains,

	among the students inside and outside the classroom, by integrating formal and informal learning opportunities and teaching, research and community engagements and promoting cross-disciplinary and interdisciplinary perspectives and academic practice. NEP 2020 suggests that the colleges will be "gradually phasing out the system of 'affiliated colleges' over a period of fifteen years" i.e. by 2035. The phasing out of the system of 'affiliated colleges' shall be supported by the mentoring of the affiliated colleges by the respective affiliating university. We have mooted this to implement in our institution and various steps have been taken including attending seminars and conferences related to NEP, identifying bench marks from various institutions for multidisciplinary courses and closely following the norms and regulations of the IKGPTU affiliating university.
2. Academic bank of credits (ABC):	As per the UGC Notification on University Grants Commission Notification (28th July, 2021) "Academic Bank Account" means an individual account with the Academic Bank of Credits opened and operated by a student, to which all academic credits earned by the Student from course(s) of study are deposited, recognised, maintained, accumulated, transferred, validated or redeemed for the purposes of the award of degree/diploma/certificates etc. by an awarding institution. Academic Bank of Credits shall be established, on the lines of the National Academic Depository shall have a dynamic website providing all details of Academic Bank of Credits and its operational mechanism for the use of all stakeholder of higher education. Academic Bank of Credits is essentially a credit-based, and highly flexible, student centric facility. Our institution has been in the process of getting approval to apply for registration with Academic Bank of Credits from statutory authorities such as Governing Council, Academic Council and university authorities. Courses undergone by the students through the online modes through National Schemes like SWAYAM, NPTEL, etc. or of any specified university, shall also be considered for credit transfer and credit accumulation.
3. Skill development:	Integrating vocational education with general education is the most promising way to provide for holistic development of the students, equipping them

	with knowledge, skills and competencies which would prepare them for life and work. We have identified to collaborate with industries for internship to expose the students to the work environment and get the experience of hands-on practice. We are in the process of developing some bridge courses of varying duration depending on the pre-requirements of the course a student intends to move to horizontally.
4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):	NEP 2020 envisages a greater Promotion of Indian Languages, Arts and Culture. The NEP document elaborates on the cultural and knowledge heritage of India, the importance of Indian Philosophy in the renewed perception and influence on the world events, the importance of the Multilanguage multicultural background of the country and the necessity for revitalizing these realms for the betterment of the country and the world. This strategy calls for a paradigm shift in our immediate past educational system (which, in general opinion, has devalued the Indian traditional knowledge). To bring back the glory of the ancestoral values and knowledge and a line with AICTE, guidelines the institution has introduced a mandatory course on'Indian Constitution and Traditional Knowledge' for all the UG students. To augment the lectures in the class room, standard text books on Indian Constitution and Cultural heritage of India have been given to the students. Through the efforts of Clubs, competitions are being regularly conducted in the regional language on the contemporary topics on environment, energy conservation, etc., as well as topics on the cultural and ethnic values of India.
5. Focus on Outcome based education (OBE):	The Institute switched over to Outcome Based Education (OBE) in year to impart education through student centric approach and follow outcome oriented teaching learning process. Programme Outcomes (POs), Programme Specific Outcomes (PSOs), and Course Outcomes (COs) have been formulated for all the UG and PG programs. Programme Outcomes (POs) represent the graduate attributes formulated as per Washington Accord and adopted by National Board of Accreditation. Programme Specific Outcomes (PSOs) are specifically defined outcomes of the programme which the graduates have to acquire by the end of the programme. Program Outcomes (POs), Program Specific Outcomes (PSOs) of all the UG and PG Programmes have been

	disseminated to the stake holders.
6. Distance education/online education:	There is a perceptible change in the modes of the Teaching-Learning all over the world and there is a significant shift from all class room teaching and Learning to partly classroom partly online Teaching Learning. This is exhibited in the worldwide popularity of Online education like MOOCs, etc. India is also keeping abreast in this new paradigm. We encourage our students and faculty to register and write examinations under SWAYAM-NPTEL for several years. Students can take up full time internship in suitable industries. This doubly benefits the students to acquire skills required by the industry and also a favorable career opportunity.

Extended Profile

1 Students

1.1

Number of students year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
1721	1733	1878	1969	1960

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

2 Teachers

2.1

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

Response: 153

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

2.2

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

2021-22	2020-21	2019-20	2018-19	2017-18
104	104	105	105	105

3 Institution

3.1

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

2021-22	2020-21	2019-20	2018-19	2017-18
543.4	417.6	692.3	706.6	513.9

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:

Chandigarh Engineering College Jhanjeri, Mohali is affiliated to I.K.G. Punjab Technical University (IKGPTU), Jalandhar, Punjab and has insignificant role in curriculum designing and development. The university formulates and revises the curriculum frequently. Also, the implementation will be well documented to have effective monitoring of the curriculum delivery at various levels

Curriculum Analysis:

The I.K.G. Punjab Technical University, Jalandhar, Punjab curriculum is a blend of Humanities, Basic Science, Basic Engineering, Core Courses, Elective Courses, Projects and Seminars etc. The Institute also follows the AICTE model curriculum and the courses prescribed by AICTE not covered by I.K.G. Punjab Technical University, Jalandhar, Punjab are offered as Value Added courses or addressed through topic beyond curriculum or gaps in curriculum.

General Counselling, Annual Day, Sports Day and Holidays are well included in the Academic Calander of the College as per University Academic Calander. Based on the academic calendar the department plans the Seminars, Conferences, Workshops, Guest lectures and Industrial Visits. If there is any deviation in the schedule due to unavoidable reasons, then the event may be conducted with the approval of HOD and Principal at a later date.

**Curriculum Delivery Plan and Implementation**

Course Allocation:

Before the commencement of every semester, the course competency matrix is formulated. The course allocation is done based on the choice/expertise of the faculty members by the HOD. For each course, a subject expert is identified as a course coordinator.

Faculty Preparation Program and Course File:

Faculty Preparation Program (FPP) is prepared by the faculty members based on the course allocated to them. They prepare a detailed lesson plan, course data sheet handouts, assignments questions, question bank, answer keys, previous years university question papers and quiz questions. FPP is reviewed by the course coordinator and it is approved by the IQAC Coordinator, Head of the Department and the Director. At the end of the semester, in addition to the contents present in the FPP, Internal Assessment Tests and Model Exam question papers, answer keys, sample answer scripts, students marks, sample assignments, action taken for the slow learners, content beyond syllabus, attendace register is vetted by IQAC. Faculty members use various pedagogical methods for effective teaching and learning processes like Conventional

Learning, ICT Based Learning.
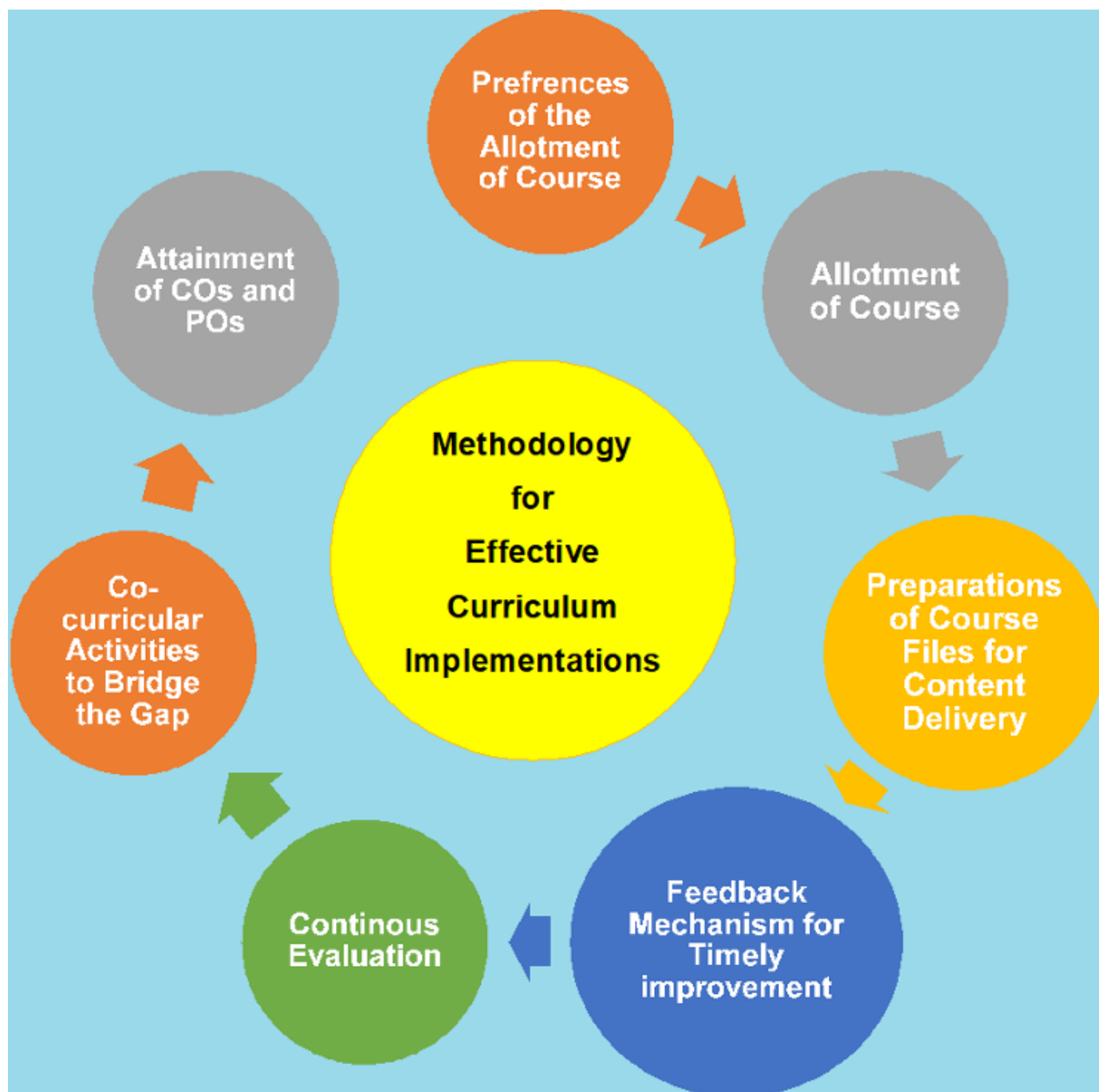
Curriculum on National/Global Relevance:

The curriculum at par with global standard facilitates industry integrated course and MOUs with National and International Corporate like India Block Chain alliance, USA, Bosch Pvt. Ltd., Prism Johnson Limited, Cheema Boilers Limited, University of South Australia, Kings University College at Western University London etc. address the specific needs of the present curricular component with the courses will help the students to become employable at Global level. ICT tools in teaching, learning and assessment and NPTEL or SWAYAM courses are platforms for lifelong learning. Value Added Courses, NCC and NSS are a part of the curricula for enhancing learning.

File Description	Document
Upload Additional information	[View Document](#)
Provide Link for Additional information	[View Document](#)

1.2 Academic Flexibility

1.2.1 Number of Add on /Certificate/Value added programs offered during the last five years

Response: 22

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

1.2.2 Percentage of students enrolled in Certificate/ Add-on/Value added programs as against the total number of students during the last five years

Response: 77.34

1.2.2.1 **Number of students enrolled in subject related Certificate/ Add-on/Value added programs year wise during last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
1211	1521	1325	1654	1451

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 into the Curriculum

Response:

Chandigarh Engineering College (CEC-J) Jhanjeri believes in building a value-based inclusive development of student community. Many courses cover crosscutting topics related to professional ethics, gender, human values, environment and sustainable development. Students are encouraged to undergo internships as part of their study projects. The curriculum help students continue to make a significant contribution to their development and the well-being of humanity. The college has made several efforts towards developing value based education to budding technocrats with a vision for promotion of human values to make them a better global citizen.

Professional Ethics:

Courses such as "Professional Ethics", "Human Resource Management", "Development of Society", "Project Management", "Constitution of India", "Network Security & Cryptography", etc, are included in the curriculum to study management and ethical practices in engineering. 'Total Quality Management' creates awareness about ISO and QS certification process and its need for the industries, and also to understand the statistical approach for quality control. 'Professional Ethics' infuse ethics in the workplace that has given new importance to human relations and values. Inner ability of students is strengthened through soft skills training. Placement Cell of the institute organized placement activities including training, development of students, aptitude test etc. on a usual basis as per the requirements of the current industry.

Human values:

Courses including Universal Human Values, Value education for Youth Empowerment impart awareness on physical health, strengthening life forces, wellness of mind, individual virtues, societal virtues, morals, human values and harmony in all aspects. Yoga classes enable our students to improve their physical fitness and self-confidence in achieving inner peace and mindfulness. Various clubs operating at different programs enable the students to understand the importance of group work and imbibing leadership. The course 'Indian Constitution and Traditional Knowledge' tells about the Central and State policies, fundamental rights and their duties. Students will get awareness to make use of legal directions in developing solutions to societal issues. Beyond the syllabus, the institution organized programmes to inculcate human values in students and staff which includes periodic Blood Donation Camp, arrangement of social and cultural activities in the college and adopted village by NSS unit.

Gender:

The institution practices gender equity in all its activities. The Women Empowerment Cell established in the college aims to help female faculty and students to discover their potential in all aspects, providing an affable working/studying environment for them.

Gender equity is being followed in recruitment of staff, admission of students, batch allocation in laboratories, academic project team, cultural activities, sports, association activities, NCC, NSS, club activities, etc. Office bearers of associations, class representatives and club coordination – all these responsibilities equally shared among boys and girls.

Environment and Sustainability:

Environment and sustainability courses prepare one to be an engineer able to assess and address environmental effects of our use of herbal assets and man-made networks and systems. Course like 'Environmental Science and Engineering' covers topics including eco system, biodiversity, pollution, disaster management, environment protection acts, natural resources, population and human health. Awareness on reducing the use of hazardous materials, maximizing energy efficiency and ensuring recyclability of a redundant product are given to students.
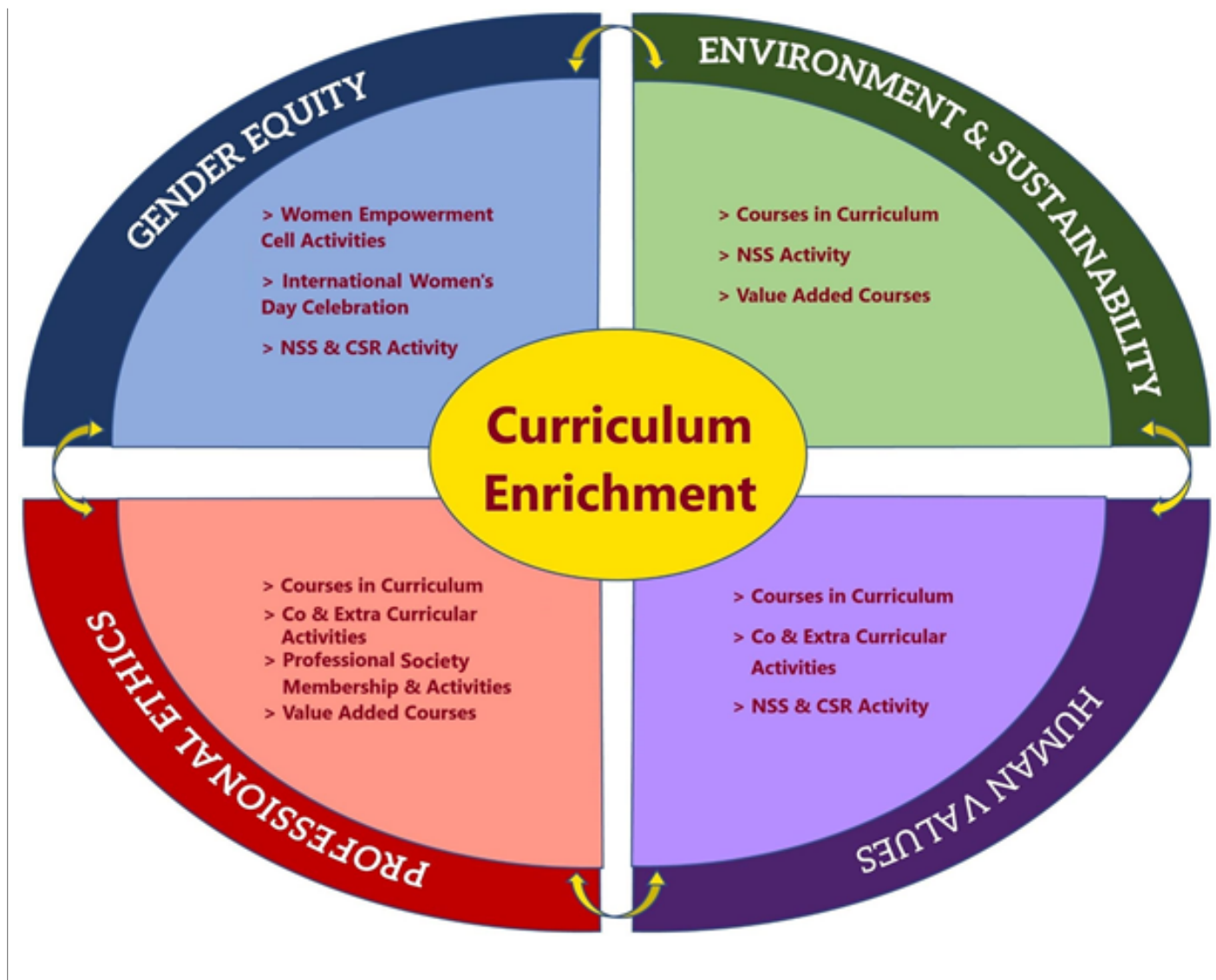
File Description	Document
Upload Additional information	[View Document](#)
Provide Link for Additional information	[View Document](#)

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

Response: 66.53

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

Response: 1145

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 (Yes or No)

Response: Yes

File Description	Document
Upload supporting document	[View Document](#)

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Enrolment percentage

Response: 73.41

2.1.1.1 **Number of students admitted year wise during last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
457	385	401	456	477

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

2021-22	2020-21	2019-20	2018-19	2017-18
540	540	510	642	732

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

2.1.2 Percentage of seats filled against seats reserved for various categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy) during the last five years (Exclusive of supernumerary seats)

Response: 2.1

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

2021-22	2020-21	2019-20	2018-19	2017-18
0	6	6	1	8

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

2021-22	2020-21	2019-20	2018-19	2017-18
184	183	173	217	244

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

2.2 Student Teacher Ratio

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

Response: 16.55

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 using ICT tools

Response:

Student-centric learning methods are introduced as a hub-spoke model in Chandigarh Engineering College, Jhanjeri, Mohali, where teaching-learning activities to meet curricular requirements are carried out by academic departments. CEC-J, has provided the facilities to involve students in co-creation of various learning modules, delivering additional lectures/ courses through peer-learning and build confidence levels of the students.
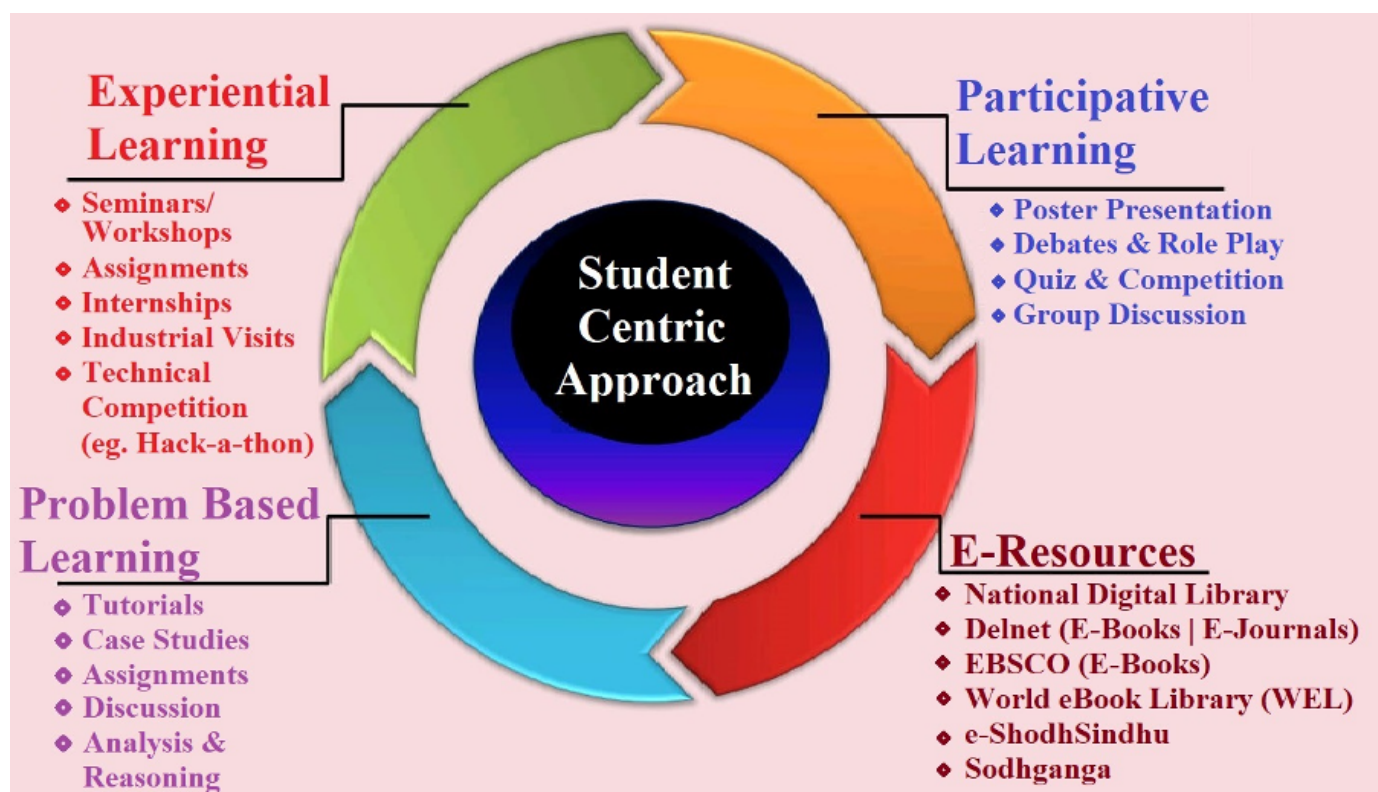
Academic interventions for enhancing experiential learning, problem solving abilities are addressed through innovative curricular components such as

1. Embedded courses – where theory and practical components are taught simultaneously/ parallel to understand concepts.

2. Simulation based experiments in MATLAB, Corel Draw, ANSYS, Solid Works lab, industry sponsored facilities with commercial scale experiments (Departments-Electronics, Mechanical, Computer Science, Civil, AIML, AI&DS, Robotics & AI).

3. Workshops with computer-based learning–CAD, Rapid Proto typing, CNC machines, CAM and Simulation-and-animation oriented learning wherever applicable.

4. Activities of Clubs and Societies, Department Associations bring additional values in understanding emerging trends in collaboration with relevant agencies.

5. Industrial visits/field visits/visits to industrial fairs are organised to appreciate new developments in their domains.

6. Internships for a period ranging between six-week to one-semester are provided during winter/summer vacation to carry-out projects in industry.

**Participative learning are deployed in three different ways–**

1. Students joining with faculty members in executing projects funded by the Industries, Government agencies, thereby providing opportunity to understand higher level concepts in their domains, get hands-on experience in handling lab equipments,and machines.

2. Handling of the lab classes to the junior students by final year senior students, mentoring by alumni after college hours in learning analytical subjects, laboratory courses, preparation for competitive examinations.

3. Short courses, lectures, workshops and demonstration sessions are organised by senior students to freshmen and second year students to gain the field knowledge.

Problem Solving, in the context of society and the Nation, is given attention during entire learning cycle of the students through systematic efforts, which includes,

1. Offering courses that leads to diagnosing a problem and providing solutions.

2. Project Based Learning with a cohort for nurturing advanced learners.

3. Tutorial component is introduced in the analytical courses, wherever required.

4. Intramural hackathons are organised by departments to enhance the learning experience, implementthe understanding and improving abilities of students to provide solutions to complex problems.

5. Designing and developing new products to participate in various competitions, solving problems related to the CEC-J - Campus (faculty attendance – touch free system, campus sanitation, Smart Apps, etc.)

6. Pre-placement internships in companies to solve problems assigned to student teams(individual/group projects.)

Executing projects which necessitates careful planning, executing and finalising various activities using technical tools, software and new/novel materials for solving a problem chosen.
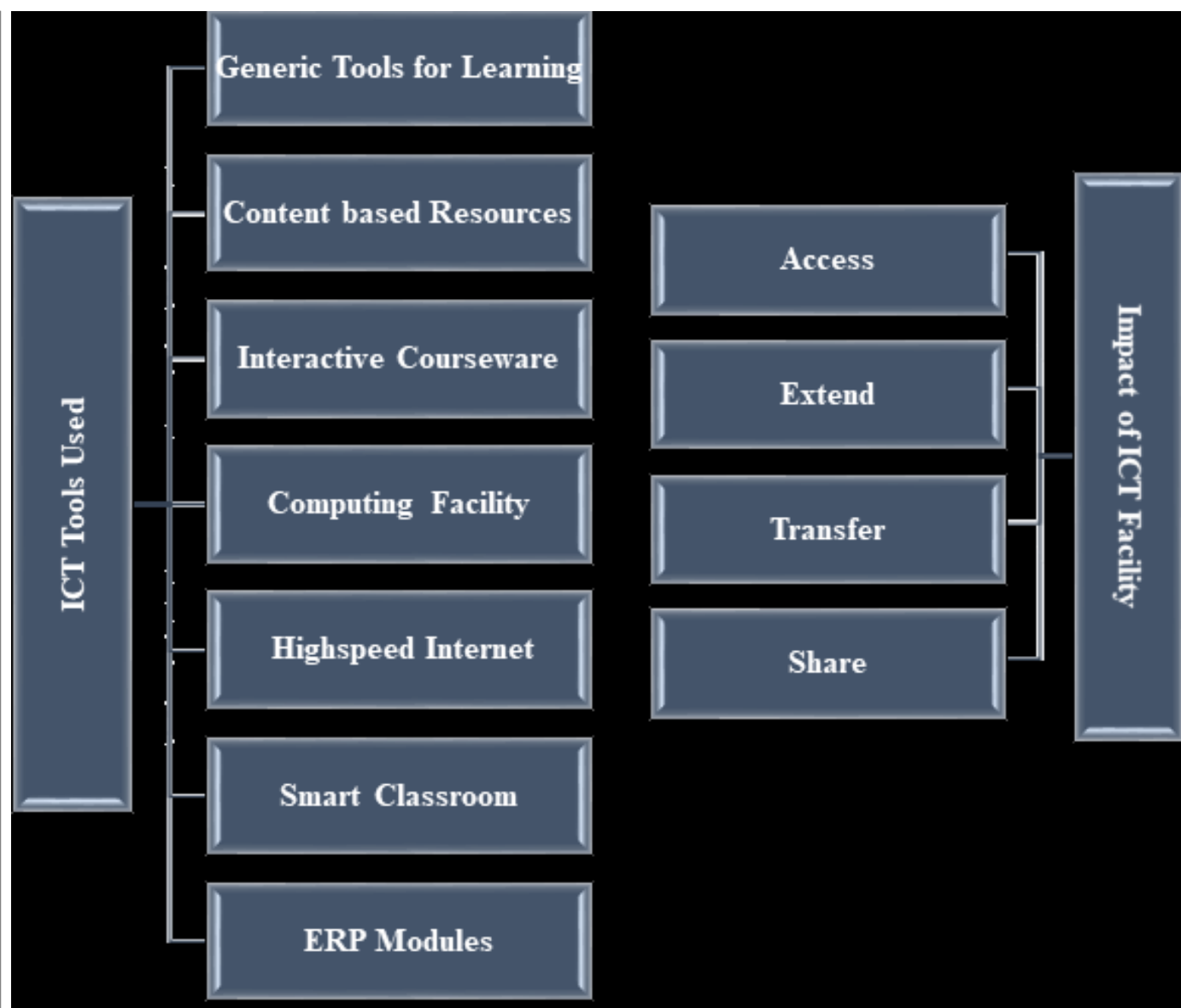
File Description	Document
Upload Additional information	[View Document](#)
Provide Link for Additional information	[View Document](#)

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 / required positions for teaching staff/ full time teachers year wise during the last five years:**

2021-22	2020-21	2019-20	2018-19	2017-18
104	104	105	105	105

File Description	Document
Upload supporting document	[View Document](#)

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

Response: 13.38

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

2021-22	2020-21	2019-20	2018-19	2017-18
20	16	13	11	10

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[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:

- The Examination Cell is an important part of the academic work.
- Formation of Exam Committee Members by Director.
- Circular, Guide line, Office Order, Notification received by the IKGPTU, Jalandhar is dispatched to all the departments with Director signature.

Conduct of Internal Assessment Test (UG)

- Conduct of two Internal Assessment Tests for UG programme as per academic calendar.
- The subjects handling faculty are directed to prepare two different set of question paper as per IQAC.
- Examination Team Prepare the Instruction for students and invigilator, invigilation duty roaster and

seating arrangements.
- Answer sheets will be issued to the respective faculty for evaluation.

Procedure for Conducting University Practical's / Viva-Voce Examinations

- External examiner are appointed by the Head of the Department and finalized by Director of the institution.
- Conducting University practical examination for each semester, circular is sent to all HODs for the details of internal examiners and External Examiner for each practical lab/viva-voce.
- The practical examinations are conducted batch wise.
- The mark statements are prepared and signed by both Internal and External Examiner. The marks are uploaded in IKGPTU Portal on the same day.
- The hard copy of the marks signed by Internal and External Examiner are submitted in University after competition of all Viva- Voce.
- The External and Internal examiners conduct the viva-voce for the project as per university protocol.

Conduct of University Theory Examinations

- Examination schedule and fee circular for filling the examination form are display on notice boards.
- Candidates fill the examination form on the IKGPTU portal that can be approved by HOD's on his university portal, and approved candidates are allowed to appear in end semester examination.
- The Centre Superintendent and examination team are appointed by the Director and uploaded on the I.K.G. Punjab Technical University portal.
- IKGPTU assign the required data on their respective college id's allocated by university.
- Question papers are uploaded on the Printing Cell Coordinator Id by the IKGPTU before 45 minutes start of the exam. Printing Cell Coordinator after getting the security password by the COE, downlod and get it printted by Photocopy operator as per sitting arrangement.
- IKGPTU appoints a Observer from any IKGPTU affiliated colleges for smooth conduct of examination.
- Invigilation duty, Hall & Seating arrangements are made by the Exam Cell as per IKG PTU requirements.
- IKGPTU assigns a Nodal Centre near the college. Answer Sheets and other required materials are provided by Nodal centre.
- The sealed answer sheets are handed over to the Nodal Centre by the Centre Superintendent on the same day.
- Any malpractice of the candidate is booked and reported by the hall superintendent to the Chief Superintendent/COE.
- IKGPTU releases a circular to inform the commencement of central evaluation.

Students Grievances and time bound response

- Students are shown their answer sheets of their internal assessemnt exams, in case of any grievances in internal examination it is rectified by HOD where as grievances regarding IKGPTU are rectified by University itself through online exam portal.
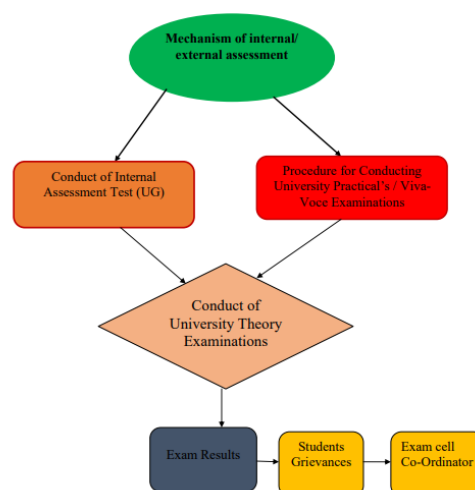
File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

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 and attainment of POs and COs are evaluated

Response:

Framing of Outcomes

Curriculum of a programme offered in CEC-J, is designed and developed by IKGPTU based on Program Educational Objectives (PEOs), Program Outcomes (POs)/ Program Specific Outcomes (PSOs) and Course Outcomes (COs). Assessment and attainment of these outcomes are carried-out using bottom-up approach.

The initial process of designing curriculum and syllabi, which involves framing Educational Objectives of the programme, an essential step in defining Outcomes. Considering Vision and Mission of the Department, Department Academic Committee (DAC) recommends the PEOs, which are then reviewed, analysed by Board of Studies (HOD's) – for approval, after it will go for approval by Director CEC-J. Then the Objectives are published to relevant stakeholders.

Process of Framing PO and PSO

On acceptance of PEOs, Programme Outcomes (POs) recommended by the National Board of Accreditation and Programme Specific Outcomes (PSOs) in line with recommendations of DAC (comprising expertise and experience) are framed. Every outcome is then divided into smaller categories to form Course Outcomes (COs), which are then converted into content of suitable courses, i.e. syllabi.

COs defines the expectation from each student, who register a course, capable of being able to comprehend the facts, concepts, procedures (knowledge) with adequate skill set. This process ensures stating/ mapping of COs with POs, PSOs and PEOs completely. Extent of compliance of curriculum for mapping and attaining the POs/ PSOs is verified and finally with approval of Academic Council, curriculum is implemented.

Once the PEOs, POs, PSOs and COs are approved, then they are disseminated to create awareness among the stakeholders to understand by students and faculty so that they respond to expectations and develop their capabilities.

Dissemination of COs

Course Outcomes (COs) of each course are given as a pre-reading material in the curriculum and placed before the syllabus to enable the students and others to understand the objective of curriculam thoroughly. The capabilities of students will be able to perform/ demonstrate. While framing Assessment and evaluation questions, course outcomes are considered to allocate the proportion of marks, to justify their mapping strength POs and PSOs.

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

Assessment/attainment of POs/ PSOs are carried out following bottom-up approach, i.e. calculating the attainment of different course outcomes, mapping them with relevant POs/ PSOs and then calculating the outcomes of POs and PSOs, compared with target values.

Steps Involved:

1. COs assessment matrix is prepared for every course based on assessment categories. Average marks obtained in assessments against items for each COs is taken as attainment .
2. Target is set by Course Coordinator, in consultation with Head of the Department. Attainment gaps are identified based on the difference between target and actual score.
3. From this result, attainment of each COs of the course is reviewed, analysed and if targets are achieved, it is inferred that COs is attained for that period.

File Description	Document
Upload Additional information	[View Document](#)
Provide Link for Additional information	[View Document](#)

2.6.2 Pass percentage of Students during last five years

Response: 97.04

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

2021-22	2020-21	2019-20	2018-19	2017-18
447	477	518	488	433

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

2021-22	2020-21	2019-20	2018-19	2017-18
472	483	522	508	450

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Response: 3.87

File Description	Document
Upload database of all students on roll	[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: 21.5

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

2021-22	2020-21	2019-20	2018-19	2017-18
17.5	1.00	0	0	3.00

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 and has initiatives for creation and transfer of knowledge

Response:

Entrepreneurship Development Cell

Chandigarh Engineering College, Jhanjeri, has a full-fledged Entrepreneurship Development Cell which addresses all the needs of students to become dynamic entrepreneurs. The Entrepreneurship Development Cell (EDC) of the College conducts various awareness programmes such as seminars, workshops, industrial visits, food fest and interaction with young entrepreneurs etc. The institution has organized many awareness camps, seminars, workshops and guest lectures on Entrepreneurship development. Eminent industrialists and budding entrepreneurs are often invited to motivate the young students. These programmes are aimed at making the student community more enthusiastic towards entrepreneurial activity. Also, the college has signed MoU with Small Scale Industries for developing the entrepreneurial knowledge and skill of the students. The successful alumni of CEC-J pursuing the entrepreneurial route also encourage our students through frequent interactions.

Recognized research centers

CEC-J, has recognized research centers of IKGPTU, in the departments of Electronics and Communication Engineering, Mechanical Engineering, Civil Engineering and Computer Science Engineering. The faculty

members are encouraged and supported to guide research scholars to their creative ideas. A good number of research scholars have registered for Ph.D programs and the numbers are increasing every year.

Encouraging students to participate in Club Activities

The students of CEC-J, are encouraged to organize and actively participate in the programmes such as project Expo, toyocathon, Symposium and Hackathon, In Project Expo, the innovative project models are designed and displayed by the students. In Symposiums various events like paper presentation, quiz competitions, and technical oriented competitions are conducted and prizes are distributed to the winners of the events. The institution has formed various committees to impact the environmental education to the students through extension activities carried out by National Cadet Corps (NCC) and National Service Scheme (NSS).

Institution's Innovation Council –

Institution's Innovation Council (IIC) of CEC-J, was established to systematically foster the culture of Innovation among the students across various departments inside the Institute. The IIC is set up to encourage, inspire and nurture young students by supporting them to work on our new ideas and innovation, transform them into prototypes and promote them to create start-ups and entrepreneurial ventures. The IIC at CEC-J focuses on creating a complete ecosystem to foster the culture of Innovation across the CEC-J, from ideas generation as successful start-ups. The IIC will also work on evaluation systems to identify and develop students to transform them self from dependent to startups.

Institute is well connected with societies and organizations like Confederation Indian Industry (CII), ISHRAE, SAE India and provides opportunities for students to interact with Industry experts. College provides financial support for the students and faculty to carry out research publications and patents filing. More than 300+ research paper were published in indexed journals in last five years. More than 90+ Workshops and seminars in the areas of Research methodology, IPR and entrepreneurship were conducted.
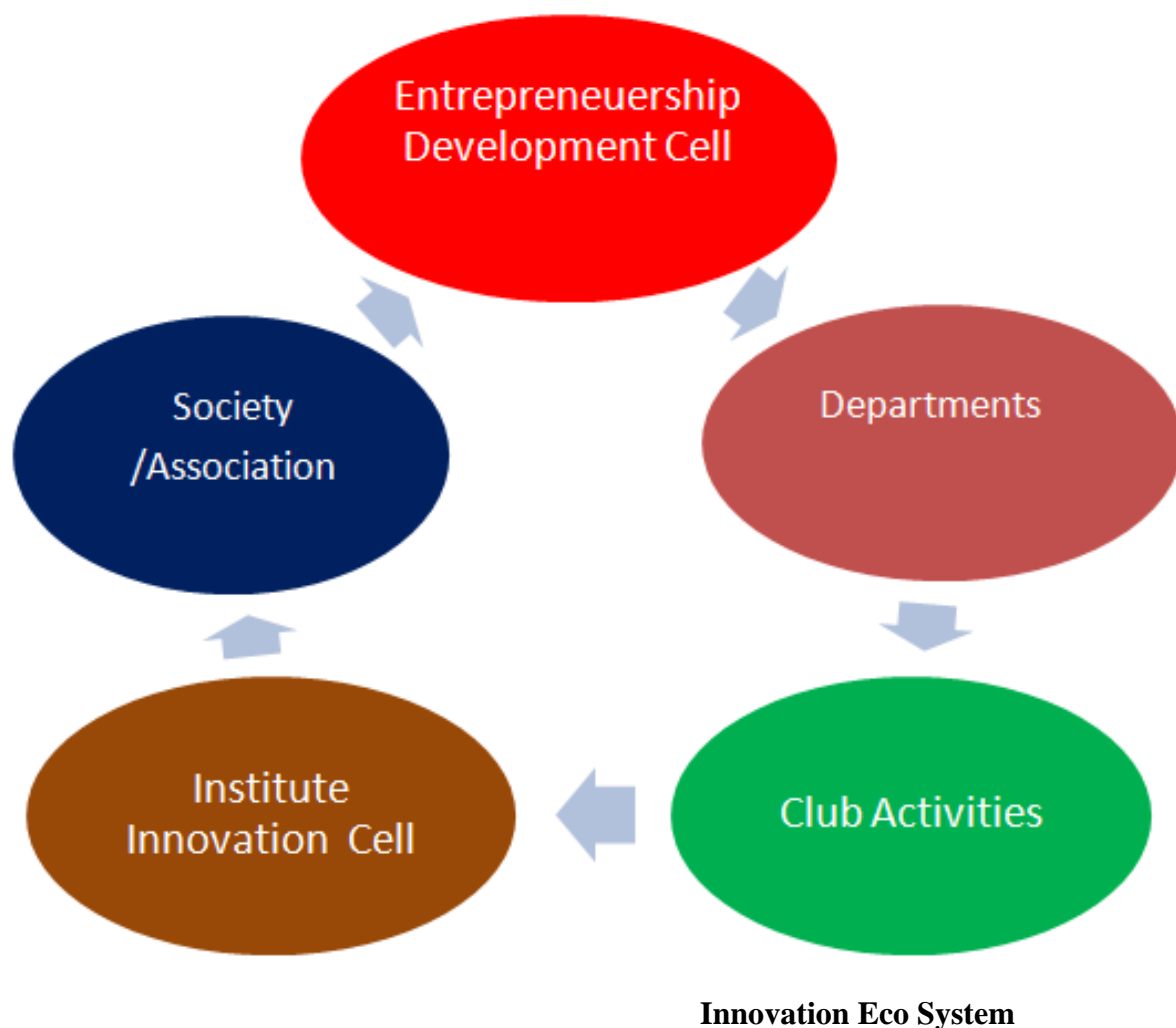
Innovation Eco System

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: 98

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**

2021-22	2020-21	2019-20	2018-19	2017-18
27	22	14	23	12

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: 1.66

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

2021-22	2020-21	2019-20	2018-19	2017-18
196	23	16	08	11

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[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: 2.8

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**

2021-22	2020-21	2019-20	2018-19	2017-18
402	9	7	3	8

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

3.4 Extension Activities

3.4.1 Extension activities are carried out in the neighborhood community, sensitizing students to social issues, for their holistic development, and impact thereof during the last five years.

Response:

Chandigarh Engineering College, Jhanjeri gives high importance to holistic development and societal needs by motivating students and conducting many activities focusing on social issues during last five years. Extension programmes like NCC (all wings) and NSS have been made an integral part of the curriculum to encourage students to participate in community building processes. Social outreach programmes like camps, rallies and awareness/training programmes are organized to sensitize various sections of the society on Institutional Social Responsibility.

National Service Scheme (NSS):

The NSS has carried out various activities like SDRF camp for life saving activities and unforeseen pandemic situations, SDRF scamp for students and faculty, Camps for Sapling Plantation, Awareness programs like Mask Awareness, Cleaning Awareness, Vaccination Awareness, field works for Grocery distribution were conducted. NSS volunteers have organized an Yoga Programme to inculcate the importance of Yoga to maintain healthy life among the school students and have themselves involved in the "Drug addiction" Awareness Programme".

NSS brings together the people through services like donating personal protective equipments like masks, sanitizers and hand gloves to social workers during COVID pandemic. Programs for providing food, grocery items to old age homes and needy were also organized. Camps and Awareness programs like Pulse Polio Immunization camp, Blood Donation camp, Clean India project, Dengue Awareness cycle rally, AIDS Awareness program, Cancer Awareness program were organized. Independence Day, Teachers Day were celebrated inside the campus.

Unnat Bharat Abhiyan Scheme:

Under UBA, Chandigarh Engineering College, CEC – Jhanjeri, has adopted five villages namely Macchali, Jhanjeri, Popne, Majat and Majatri. UBA team members of our college visited the adopted villages and conducted Cleaning Awareness program, planted 200+ saplings, initiated the use of cloth bags.

National Cadet Corps (NCC):

The NCC club arranges camps for Blood Donation. Every year various activities were conducted to promote Swatch Bharat Mission, Yoga Day, International Day against Drug Abuse, Population Day, Pollution Free Day, Heart Day. Various activities were conducted to nurture and teach the importance of environment to students. Traffic awareness rally are observed every year. 195 cadets appeared in C-certificate examination and more than eight has been selected in Army and Navy.

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:

CEC-J, has not only scored great accolades in academics alone, in the view to create the holistic environment through extension activities, our college are anticipating various social awareness programs in the name of extension activities.

Intellectual property rights are concerned as the robust and enforced, to safeguard families and consumers. Informed customer decisions concerning the security, dependability and efficiency of their transactions are made possible by strong and sound IP rights. To educate and create awareness about the IPR, CEC-J has conducted the National Intellectual Property Awareness Mission (NIPAM) training program to all

aspirants related to this field.

Similarly, the students of CEC-J have taken pledge to reduce the dependance on conventional way of power production and reduce the usage of fossil fuels by using green energy (hydrogen fuel cell), bio fuel and use of solar pannel, wind mill and hydro power.

By developing new products and services as well encouraging the students for their entrepreneurial ventures to create employement for human kind.

Benefits of Awards and Recognitions:

Proves recognition of Institution among society and create positive perception

Show Appreciation,

Encourage Friendly Competition.

Improve Productivity.

Benefits of Awards & Recognition.

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 NSS/NCC/Red cross/YRC etc., (including the programmes such as Swachh Bharat, AIDS awareness, Gender issues etc. and/or those organised in collaboration with industry, community and NGOs) during the last five years

Response: 23

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

2021-22	2020-21	2019-20	2018-19	2017-18
7	4	3	5	4

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[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: 57

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1 Availability of adequate infrastructure and physical facilities viz., classrooms, laboratories, ICT facilities, cultural activities, gymnasium, yoga centre etc. in the institution

Response:

Academic Wings

CEC-J, is stretched over an area of 32.35 acres in a green, clean, neat and spacious environment. It is a fully self-contained campus with requisite infrastructure based on AICTE norms. CEC-J has modernized classrooms equiped with ICT facilities, laboratories, seminar halls, meeting rooms /boardrooms, tutorial rooms that are adequate to provide a good learning ambience to students. To nurture learning, a wide array of sophisticated equipment is available in all the laboratories.

Innovation Center

To increase the technical ideas generation among the students , CEC -J have developed innovation center. Through the innovation center students have created many models of eVehicals, Go-Cart and some prototypes of human powered rickshaw and other design.

Laboratories

We have latest labs for every branch students and industry sponseded labs.

Internet connection

The college has a dedicated 519 Mbps leased line connectivity from Tata Tele services for providing uninterrupted internet services. There is a separate server room which provides all network connectivity, administrative services throughout the campus. Entire campus is Wi-Fi enabled with securelog in mechanisms.

Central Library

To inculcate the habit of reading, the central library has a wide collection of books, magazines, journals in the central library. It is fully automated. The books related to recent technologies and advancements in all fields of engineering, books for personality development, books to prepare for GATE exams, TOEFL, GRE, GMAT exams are also available. To patronize the spirit of perpetual learning a digital library is functioning inside the central library. The students can access e-books, e-journals NPTEL videos in this digital library.

Miscellaneous facilities

The Amenities and facilities also include well maintained lawns, ramp, garden, temple, health care centre, first aid facilities, sanitary pad wending machine, tactile paving for blind persons, electricity backup, fire extinguishers, NCC & NSS facilities, SBI Bank & ATM. The campus also has CCTV surveillance at all

strategic locations, generator, elevator, RO water purifier. Spacious and well-maintained canteen provides delicious and hygiene food. The innovative project cell, Training and placement cell provides consistent support and motivation to the students for their self -development.

Infrastructure and Learning Resources

S. No.	Description	Quantity	Re
1	No. of Class Rooms Seminar Rooms Board Room Meeting Room & Conference Room	32 02 01 01 01	
2	Laboratories	CSE- 09 Nos ECE –09 Nos Mechanical – 11 Nos Civil – 08 Nos AIML – 02 Nos Applied Science – 13 Nos	(6 wo
3	ICT Enabled Class Rooms	Numbers - 32 Nos Wifi, - Yes, 500 Mbps Projector, - 35 Nos Smart Board, - 5 Nos Audio System. – 35 Nos	
4	Library Facilities	Internet – LAN connections e-Journal- 944 e-Books – More than 2 Lacs ILMS – KOHA Inflibnet – E-shodhsindhu Delnet- Yes, Membership	
5	Gymnasium	2No's (Each 1 for Boys and Girls Hostel)	In

| 6 | Yoga Center | 01 (With 100 Capacity) |
| 7. | Cultural Activities. | **07** (Vaisakhi-Mela '22, Holi '22, Vasant Pachnami-Punjabi Virsa '22, Lohri-cultural programme '22, Parichay-'21, Diwali Mela- '21, Teej- Traditional programme-'21) |

File Description	Document
Upload Additional information	[View Document](#)
Provide Link for Additional information	[View Document](#)

4.1.2 Percentage of expenditure, excluding salary for infrastructure augmentation during last five years (INR in Lakhs)

Response: 15.28

4.1.2.1 **Expenditure for infrastructure augmentation, excluding salary during the last five years (INR in lakhs)**

2021-22	2020-21	2019-20	2018-19	2017-18
103.65	63.29	117.53	76.75	77.78

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

4.2 Library as a Learning Resource

4.2.1 Library is automated using Integrated Library Management System (ILMS), subscription to e-resources, amount spent on purchase of books, journals and per day usage of library

Response:

CEC-J Central Library- is the knowledge hub with a built-up area of 704.16?**sq.m.** It is a Learning Resource Centre and offers Library services to all the students, research scholars, Faculty members and all other staff members of CEC-J campus to enhance their knowledge and increase the potential of teaching and learning activities.

The Library follows open access system (**https://chandigarhengineeringcollege.com/library**). It has separate sections like Spacious stack area, Reference section, Circulation Counter, Information Desk, Digital Library, Periodical section, Back Volumes section, Acquisition Section, Technical Section,

CD/DVD Section, Photocopy/Scan Section and Wi-Fi enabled Library.

The Central library has a comprehensive collection of 12836 printed books. The Library collection includes 944 E-journals and EBSCO Academic Collection more than1 Lacs E- Books with unlimited access and 12 print journals and 6 magazines. Remote access is provided to all the CEC users through KOHA OPAC. In addition, it has a collection of 455 CD/DVDs. CEC-J Central Library holds the membership with National Digital Library?and hosted in the local server. The Central Library web page provides needed information to the end users.

The Library is fully computerized and automated by using **KOHA Library software** integrated with Barcode Technology. Web **OPAC (Online Public Access?Catalogue)**?facility is available for?retrieving books and other learning materials of the Library and previous year question papers.

CEC-J holds institutional membership with **DELNET and EBSCO** to access the e-books, e-journals, e-novels and e-magzines. Other open e-resorces are availabe in library as NDLI, Shodhsindhu, Shodhganga, etc to the academic community.

Table 4.2.1: Automation in Library

Automation and Year of Automation	2021-22	2020-21	2019-20	2018-19	2017-18
Implementation of OPAC	Yes?	Yes?	-	-	-
Software	KOHA	KOHA	LIBSOFT	ERP	ERP
Fully / Partially Automated	Fully Automated?	Fully Automated?	Partial Automated?	Partial Automated?	Partial Automated?
Version	18.11.02.000?	18.11.00.000?	8.3	-	-
RFID/Barcode	Yes	Yes	Yes	Yes	Yes
Digital Library	Yes?	Yes?	Yes?	Yes?	Yes?
Availability of WiFi	Yes?	Yes?	Yes?	Yes?	Yes?
Year of Installation (Automation)	2021	2021	2019?	2018??	2018?

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

Response:

Computing Resources

CEC-J has excellent IT facilities for students and faculty. 485 computer systems are available in the campus with LAN connection. The highly configured system available is i5 & i3 processors with 4GB to 16 GB RAM and 1 TB HDD. There are 2 servers available in the server room to provide network connectivity in the campus.

Wi-Fi and Internet

Internet facility is provided through CONNECT Broadband service as a backup with 519 Mbps. By estimating the volume of data transmission, the bandwidth will be further increased during an ad hoc situation. For essential services, NETPLUS Broadband Service with the bandwidth of 500Mbps is available. The computers in the different blocks are inter-connected with LAN through switches. The entire campus including hostel block has various Wi-Fi access points to access educational resources through internet and intranet service.
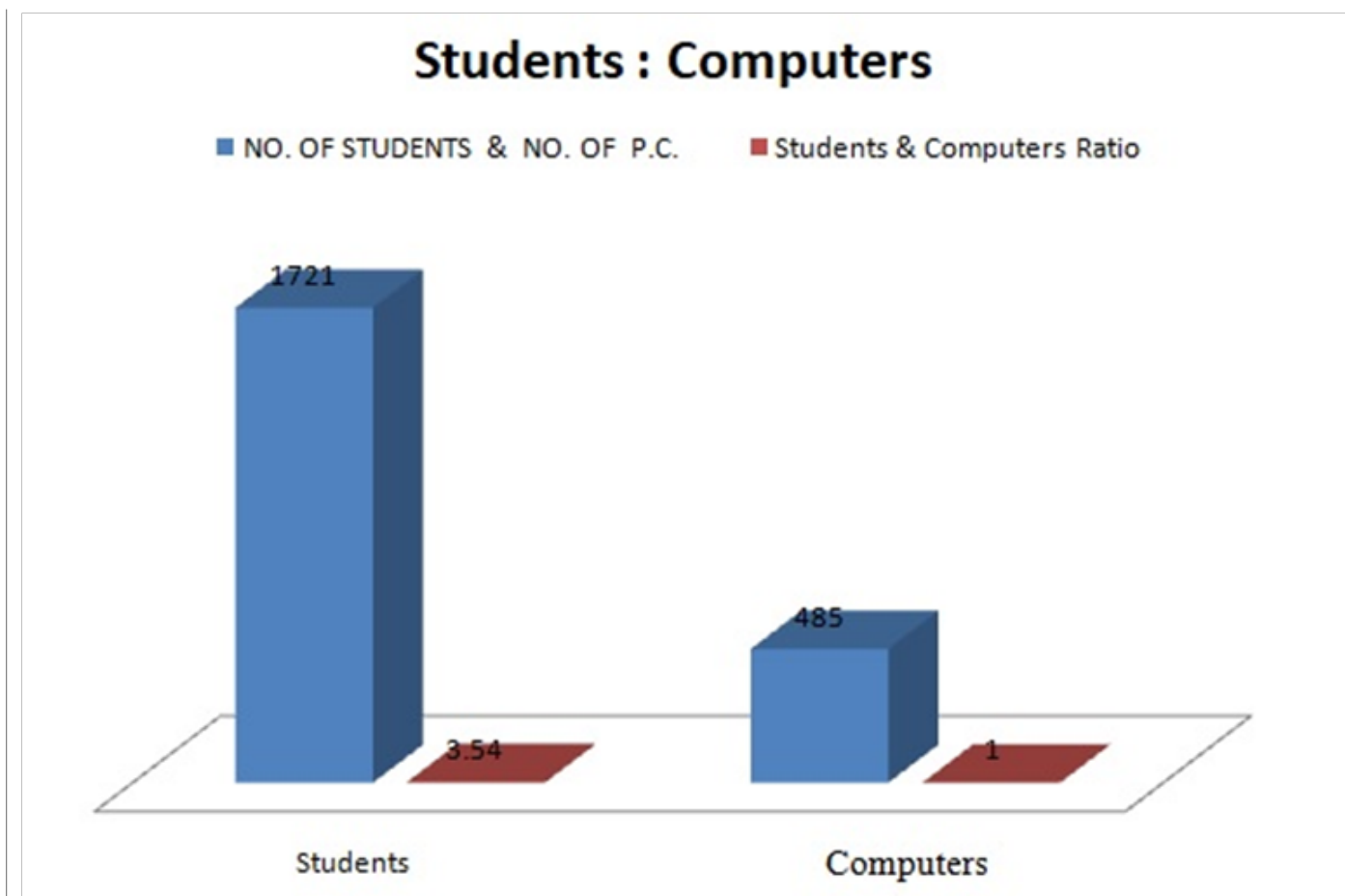
E-Services

Microsoft Team (MS-Team) & Cyborg (ERP), both are effectively used as a Learning Management System (LMS) by faculty and students for teaching learning process. Class notes, assignments are uploaded in ERP. Attendance maintenance is done in ERP. For all the faculty members and students, a unique mail id is created in college domain. CEC-J website provides all the essential information for the stakeholders. In case of emergency, Google Classroom is used for teaching learning process. Bulk SMS facility is also available to communicate important message to all students and faculty through ERP.

Training programmes are periodically organized to upgrade the programming skills of students and faculty both in physical and virtual mode. Zoom license is purchased to organize the short term courses, FDPs, webinars and alumni talk series.

Updating the IT facilities

Based on the gradual increase in the intake of the students, the number of systems in all the laboratories is updated. As per the AICTE norms, the student to computer ratio is maintained as 3.54:1.To carry out research and project activities, highly configured i5 systems are provided in the future tech research centers in the campus. Based on the requirements, necessary software and hardware devices, computer systems and its peripheral devices are purchased.

Students : Computers

■ NO. OF STUDENTS & NO. OF P.C.   ■ Students & Computers Ratio

1721

485

3.54

1

Students

Computers

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: 3.55

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

Response: 485

File Description	Document
Upload supporting document	[View Document](#)

4.4 Maintenance of Campus Infrastructure

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

Response: 25.73

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)**

2021-22	2020-21	2019-20	2018-19	2017-18
141.5	104.7	177.00	183.8	132.4

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[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 Government and Non-Government agencies during last five years

Response: 16.02

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

2021-22	2020-21	2019-20	2018-19	2017-18
238	292	308	339	307

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

5.1.2 *Capacity building and skills enhancement initiatives taken by the institution include the following*

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

Response: A. All of the above

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[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: 79.66

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**

2021-22	2020-21	2019-20	2018-19	2017-18
1359	1501	1315	1696	1506

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

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

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

Response: A. All of the above

File Description	Document
Upload supporting document	[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: 53

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

2021-22	2020-21	2019-20	2018-19	2017-18
194	319	343	210	224

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

2021-22	2020-21	2019-20	2018-19	2017-18
471	483	522	508	450

File Description	Document
Upload supporting document	[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 (eg: JAM/CLAT/GATE/ GMAT/ CAT/ GRE/ TOEFL/ Civil Services/State government examinations)

Response: 100

5.2.2.1 *Number of students qualifying in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ Judicial Services/Public Prosecution services/All India Bar Exams/State government examinations) year wise during last five years*

2021-22	2020-21	2019-20	2018-19	2017-18
4	7	1	1	3

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

2021-22	2020-21	2019-20	2018-19	2017-18
4	7	1	1	3

File Description	Document
Upload supporting document	[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: 12

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

2021-22	2020-21	2019-20	2018-19	2017-18
0	0	7	5	0

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[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: 20.8

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

2021-22	2020-21	2019-20	2018-19	2017-18
18	15	25	25	21

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:

The CGCJ Alumni Association (CGCJAA) was registered with the Application No.220913333, under Punjab Society Registration Act on 25.11.2022. Chandigarh Engineering College Jhanjeri is one of the three beneficiaries which are enlisted in the by-laws of CGCJ Alumni Association. It has a good linkage between institute and alumni. CGCJAA aspires to connect alumni with the institution, build synergistic plans to help the institution realize its vision, and enable the institute to add value to all of its stakeholders. The alumni association aids in the development of a network of alumni as well as keeps in touch with the

business world. Every year, the Alumni Association, with the help of Management, conducts an Alumni Meet, where alumni from all branches are welcomed to express their thoughts and suggestions on the scope of their course, as well as to raise knowledge of the professional world. This allows alumni to reconnect with one another and share their prior experiences and memories.

Alumni contributions to the development of the institution:

Enriching the Curriculum:

Alumni are engaged in identifying the curricular gaps and help in modifying the course modules. Regular webinars are conducted on technical topics by these alumni.

Technical Sessions:

The alumni association assists in the organization of interactive sessions to educate current students about the employability and educational opportunities available at National & International Level. Alumni serve as resource person for a variety of events such as seminars, guest lectures, workshops and webinars.

Industry Relations:

Alumni who are entrepreneurs arrange industrial visits for students and provide advice on how to start a new venture in order to turn them into job providers. The Alumni Association extends its support to the students in provinding opportunities with internships, live projects, entrepreneural practices, etc.

Placements Support:

Many alumni hold prominent positions in well-known industries. The opportunities available within their organizations are shared with the students, and many students who are eligible, have been recruited with the assistance of alumni.

Financial Contribution:

The Alumni association have not only provided placement support but they have also stood up and supported the institute by providing donations/ financial assistance and also donated trees to keep the environment of the campus clean and positive.

Distinguished Alumni Award:

During the annual alumni meet, distinguished alumni who are at the top of their organizations and have made major contributions to the nation and society are honoured.

Research and Consultancy:

Alumni assist departments by directing entrepreneurs to carry out consultancy work in various engineering sectors.

Entrepreneurship:

Through the Entrepreneurship Development Cell (EDC), alumni entrepreneurs provide mentorship to aspiring entrepreneurs, promoting campus start-ups, incubating novel ideas of the students.

Administration:

Alumni are members of IQAC and other committees that contributes to the development of a quality system that is responsive to current industry trends and standards.
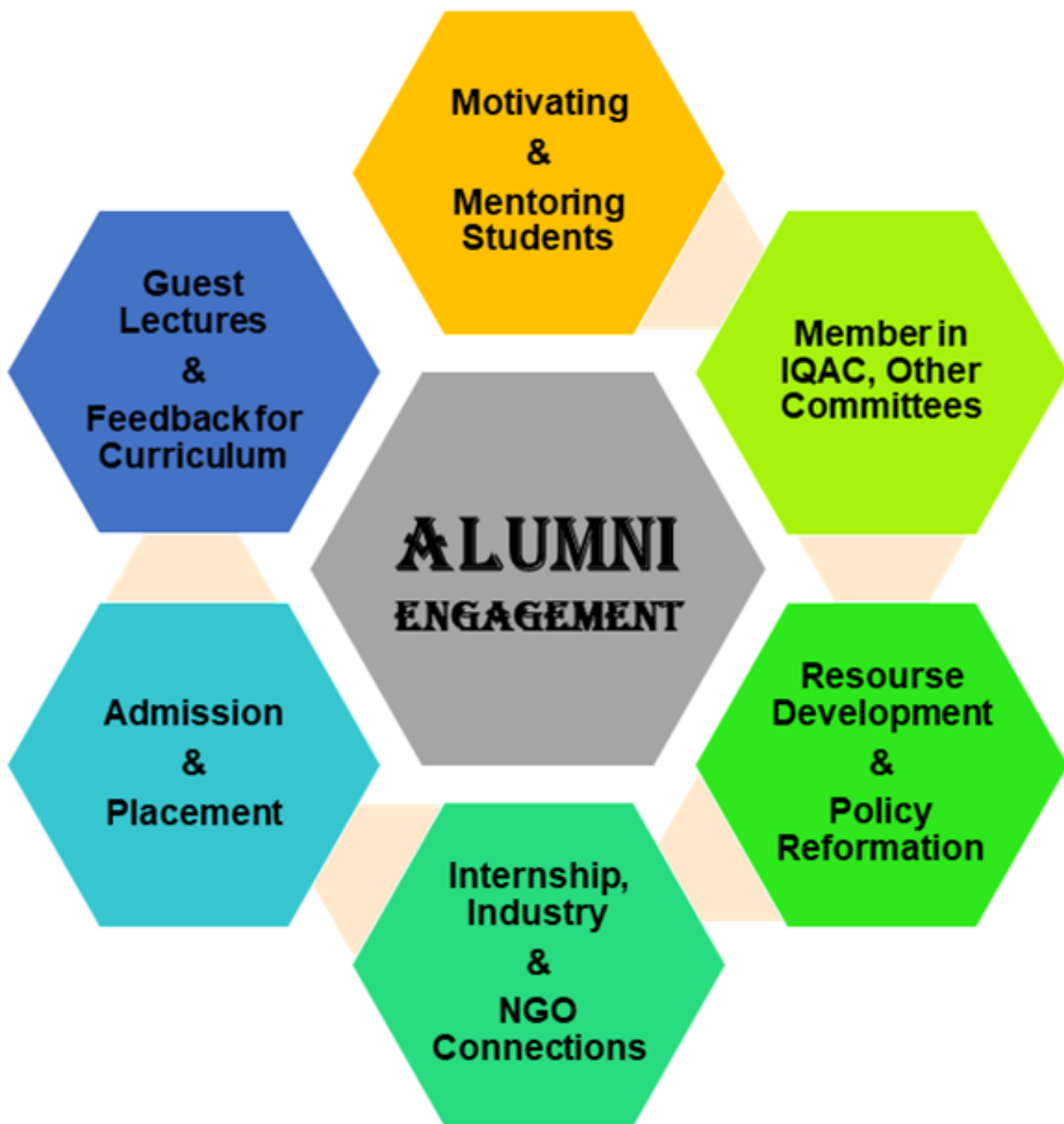
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Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1 The governance and leadership is in accordance with vision and mission of the institution and it is visible in various institutional practices such as decentralization and participation in the institutional governance

Response:

Vision Statement

To emerge as an institution of technical excellence imparting professional education for sustainable development of society.

Mission Statement

- To provide quality technical education through state-of-the-art infrastructure and well qualified & experienced faculty.
- Having academic flexibility through strong industry academic interactions.
- Focus on students' employability, entrepreneurship, higher education and competitive examinations.
- To inculcate ethical and moral values in students.

Nature of Governance

The College Governing Council (CGC) is an integral part which steers the institution towards academic excellence with a holistic approach. The governance of the Institution is reflective of an effective leadership in tune with the vision and mission statements. The established policies in the Institute ensures the integrity and effectiveness of the governance and administration. The Institute believes in shared leadership and participative decision-making approach. This reflects the decentralization of its operations and delegation of the necessary authorities and responsibilities. Such delegations follow a systematized organizational structure with clearly laid down job responsibilities. The council encourages participative management by involving faculty members in taking decisions. So, various verticals have been formulated for effective functioning of institute. Each verticals have independent heads taking decisions in line with institute policies and regulatory requirements in consultation with Directors. The committees or cells are as follows.

1. Exam Cell
2. IQAC
3. International Affair Department
4. Dean Student Welfare (Cultural Events, Sports, Grievance Redressal, NSS)
5. Women Empowerment Cell
6. Research & Innovation Cell
7. **Industry Academia Interface:** Entrepreneur Development Cell (EDC) & Management Development Projects (Consultancy projects)
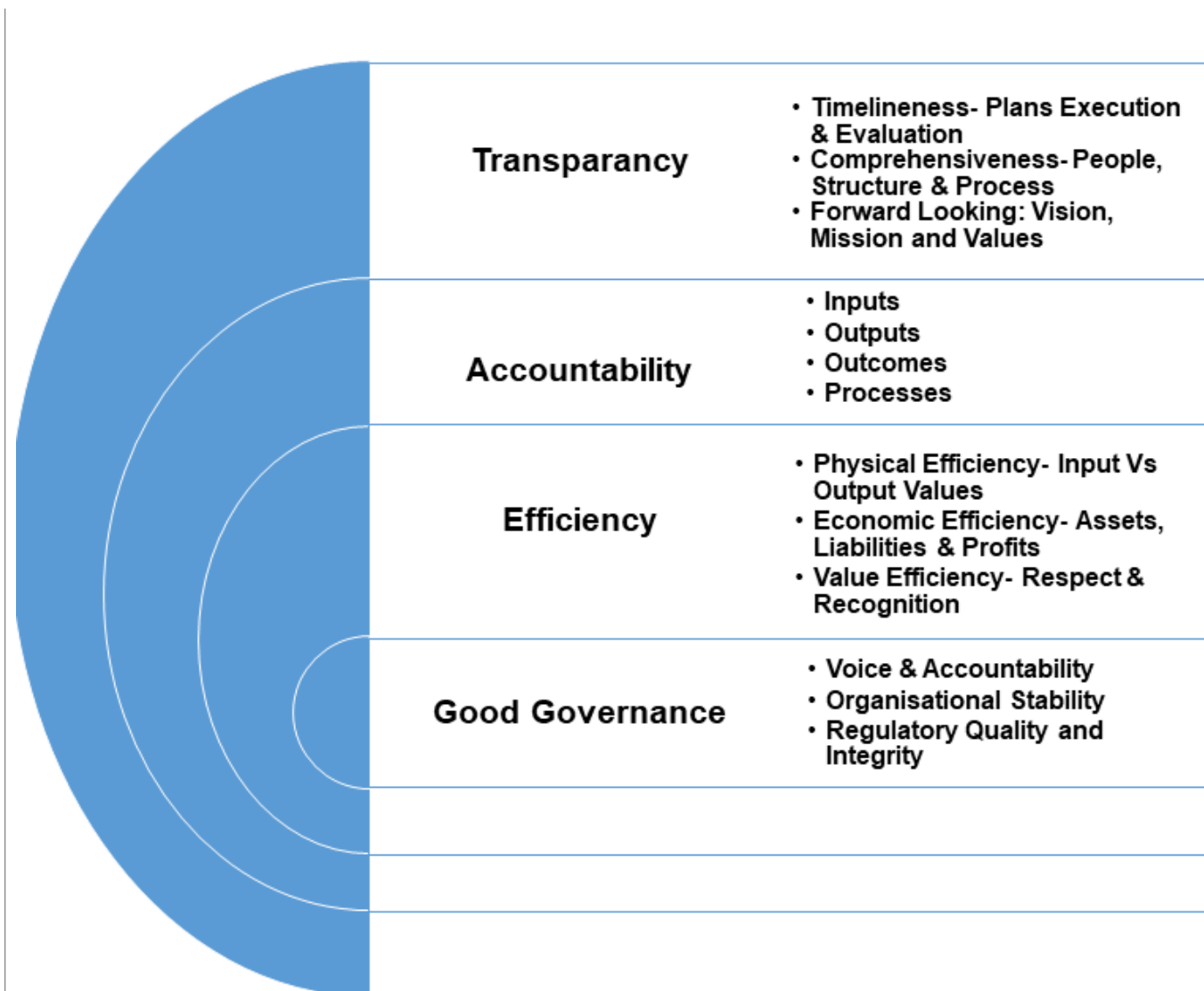8. CCPD (Centre for Career Planning & Development)
9. Registrar Office

10. Human Resource Department
11. Admission Cell

Perspective Plan:

The IQAC considers important factors *i.e.* structure, mechanisms and stake holders within the system. This strategic plan acts as the guideline for the decentralized committees and those decentralized committees work towards the attainment of the laid out plan. The entire process is based on participative approach wherein the decentralized committees, faculty members, and other stakeholders are involved in the development of plans and its efficient execution. The above plan covers:

1. Enhance Engagement with Society (NSS)
2. Diverse Student Learning Environment (CCPD)
3. Enhance Engagement with Industry (CRC)
4. Improve Internal Support Systems (Management & faculty meeting sessions & DSW & Registrar)
5. Enhance Alumni Engagement (CGCJ Alumni Association)
6. Develop a Cleaner and Greener Campus (DSW)
7. Enhance Research Culture (IQAC)
8. Industry Oriented Curriculum (CCPD)
9. Academic Curriculum (IKGPTU curriculum is followed)

Transparancy
- Timelineness- Plans Execution & Evaluation
- Comprehensiveness- People, Structure & Process
- Forward Looking: Vision, Mission and Values

Accountability
- Inputs
- Outputs
- Outcomes
- Processes

Efficiency
- Physical Efficiency- Input Vs Output Values
- Economic Efficiency- Assets, Liabilities & Profits
- Value Efficiency- Respect & Recognition

Good Governance
- Voice & Accountability
- Organisational Stability
- Regulatory Quality and Integrity

File Description	Document
Provide Link for Additional information	[View Document](#)

6.2 Strategy Development and Deployment

6.2.1 The functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment and service rules, procedures, deployment of institutional Strategic/ perspective/development plan etc

Response:
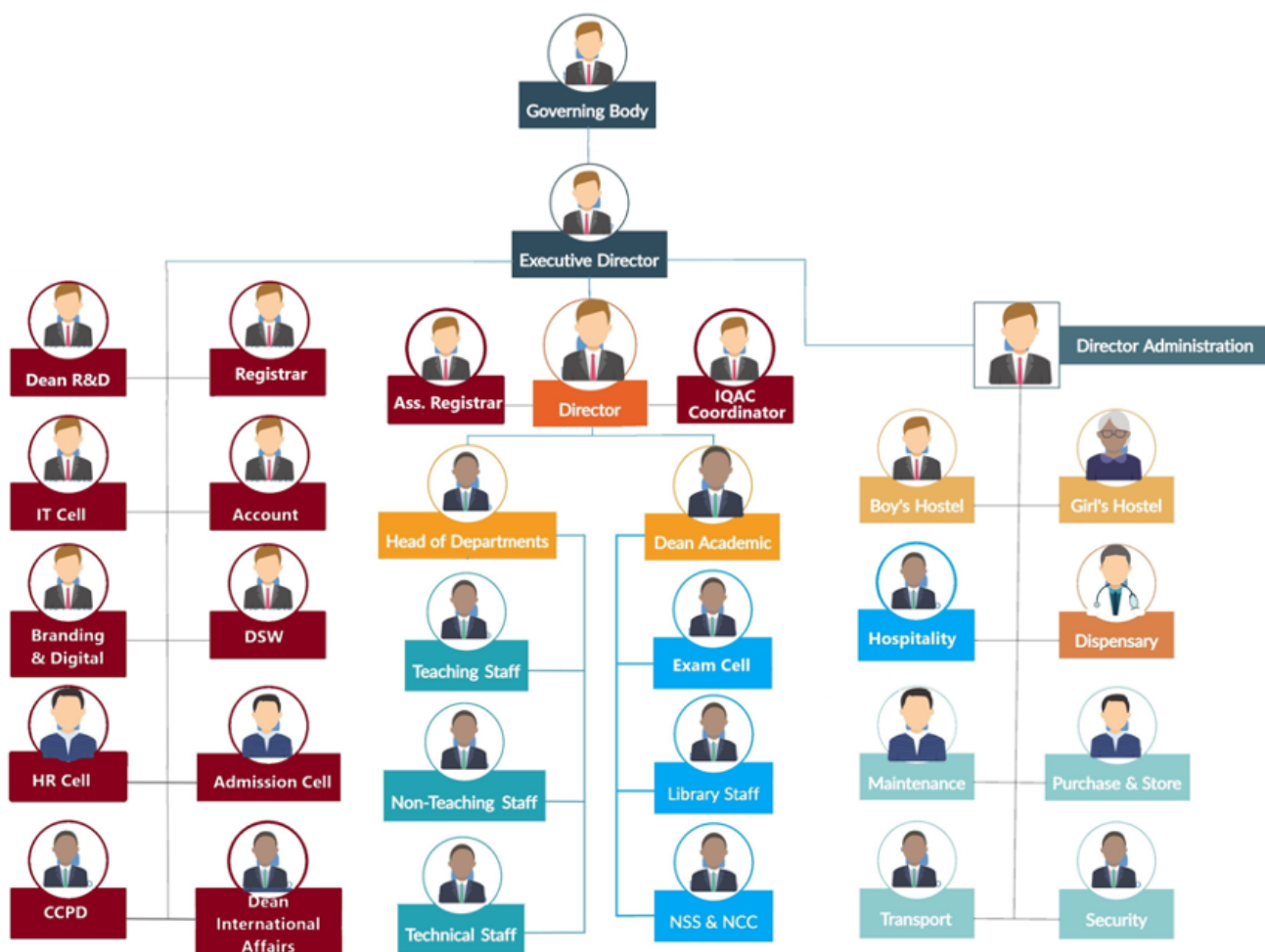
Strategic Plan of CEC, Jhanjeri, aims to support students with scholarships and Free-ship provided under the Government Schemes (National Scholarship Portal Scheme – NSP, and Post Matric Scholarship- PMS for SC/ST/OBC) and Institution's various schemes. The government & Institution schemes are enlisted below:

Government Schemes	Institution's Schemes	
National Scholarship Portal Scheme – NSP	Post Matric Scholarship- PMS for SC/ST/OI	
Post Matric Scholarship- PMS for SC/ST/OBC	Post Matric Scholarship- PMS for SC/ST/OI	
-	Scholarship for B. Tech based on JEE (Mair	
-	Scholarship based on Marks in 10+2	
-	Scholarship for Diploma for LEET cou Diploma Marks	
-	Scholarship for Sports Person (National level)	
-	Financial Assistance for Parents Less studen	
-	Financial Assistance for only Girl Child	
-	Financial Assistance for Physically Challeng	
-	Teacher's Son/Daughter	
-		

-	Real brother / sister studying in CGC, course)
-	Tuition Fee waiver by the Institution under F
	For Defence Personnel
	Open Scholarship for Higher Education (JO at recognizing the talent of meritor with **Scholarships up to 7 Crores**.

CEC, Jhanjeri, is one of the preferred engineering colleges by the students and parents and it stands as one of the top 3 institutions in the State, in terms of admissions.

This is certified that the number of sanctioned seats and number of students admitted for the last five years are as given below.

Sr. No	Academic Year	Number of seat Sanctioned	Number of Students Admitted	Percentage pe
1	2021-2022	540	457	84.63%
2	2020-2021	540	385	71.30%
3	2019-2020	510	401	78.63%
4	2018-2019	642	456	71.03%
5	2017-2018	732	477	65.16%

Average Percentage = 74.15%

Admission Scholarships: College has the following scholarship categories for the engineering courses:

Scholarship Scheme

A) Courses (B.Tech)Scholarship for B.Tech based on JEE (Mains)

S.No.	All India Rank in JEE (Mains)	Incentive Equivalent to
1	Upto 50 K	100% of tuition fee
2	Above 50 K upto 1 Lakh	75% of tuition fee
3	Above 1 Lakh upto 2 Lakh	50% of tuition fee
4	Above 2 lakh upto 5 Lakh	20% of tuition fee

B) Scholarship for B.Tech based on Marks in 10+2

S.no	%age of marks	Incentive Equivalent to
1	90% or more	100% of tuition fee
2	85% but less than 90%	50% of tuition fee
3	80% but less than 85%	20% of tuition fee
4	75% but less than 80%	10% of tuition fee

C) Scholarship for Diploma for LEET courses (Based on diploma Marks)

	%age of marks	Incentive Equivalent to
LEET Courses (Diploma)	90% or more	100% of tuition fee
	85% but less than 90%	75% of tuition fee
	80% but less than 85%	50% of tuition fee
	75% but less than 80%	20% of tuition fee

D) Scholarship for Sports Person

S.No.	Criteria	Financial Assistant
1	National Level Sportsperson	100% of tuition fee
2	State level Sportsperson	50% of tuition fee

E) Table 6.2.1Financial AssistanceExtended (INR in Lakhs)

S.No	Academic Year	Number of Students benefited by Govt. Agencies	Number of Students benefited by Non-Govt. Agency: Institution	Total students benefited by Govt. and Non Govt. Agencies	Total Available Students	Percentage (%)	Amou
1	2021-22	70	168	238	1721	13.82	41,95,
2	2020-21	86	206	292	1733	16.84	58,96,
3	2019-20	60	248	308	1878	16.40	55,58,
4	2018-19	45	294	339	1969	17.21	43,38,
5	2017-18	82	225	307	1960	15.66	48,74,
Total				1484	9261	16.02	2,48,6

File Description	Document
Upload Additional information	[View Document](#)
Provide Link for Additional information	[View Document](#)

6.2.2 Implementation of e-governance in areas of operation

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

Response: A. All of the above

File Description	Document
Upload supporting document	[View Document](#)

6.3 Faculty Empowerment Strategies

6.3.1 The institution has effective welfare measures and Performance Appraisal System for teaching and non-teaching staff

Response:

Welfare Schemes

CEC-J provides an excellent care of its personnel. Numerous welfare initiatives have been implemented for both teaching and non-teaching staff in order to increase employee morale and motivates them to work efficiently. The college values its personnel's contributions to the institution's overall development and progress. Additionally, it encourages employees to take advantage of welfare benefits with simplicity including promotion and increments.

Financial Assistance for Technical Publications

Academic excellence awards in the form of cash and certificates of recognition, incentives for the publication of papers/research articles, support for faculty members conducting/organizing guest lectures, and assistance for faculty members conducting conferences/ seminars/ workshops/ FDPs. The institute sponsors annual membership of professional societies organizations such as IEEE/ IETE/ IME/ IE.

Transportation/ Hostel/ Health Care Facility

All staff members receive complimentary transportation/ fee reductions for their daily commute to the college. Faculty members who serve as Bus in-charge will receive a fee reduction of 100%. The other teaching faculty members receive a 50% fee reduction, while non-teaching personnel get a 25% charge

reduction. The same benefit is extended to all employees who utilize the hostel facilities. All employees are protected by medical insurance up to a maximum of Rs. 1 lakh per year for accidental and health issues.

Emergency care and Ambulance service

The management provides a full-time dispensary and emergency care at Chandigarh Engineering College Jhanjeri. A full time Doctor is available in the Chandigarh Engineering College Jhanjeri, campus itself. An ambulance service is available 24x7 in case of an emergency.

General Facilities

CEC-J has sports, gym, yoga facilities, Bank & ATM (SBI, Jhanjeri inside the campus).

A 25% concession is given to faculty wards enrolled in to CEC-Jhanjeri.

Leave Benefits

CEC-J offers a variety of leave benefits to all employees, including casual leave, compensation leave (COL), special leave, medical leave, and maternity leave. These benefits are available to both teaching and non-teaching staff. In an academic year, an employee may take up to 12 casual leaves and up to 14 special leaves to attend seminars, symposiums, and workshops held by institutions of national and worldwide renown. On-duty leave is available to teaching and non-teaching staff representing the college either for administrative work or research work as well as eight medical leaves (once probation is completed) and maternity leave.

To enhance the employee profile, the institution provides a pool of welfare schemes through the assistance of State Bank of India, Jhanjeri which offers/ provides credit options to college employees such as personal loans, educational loans, housing loans, vehicle loans, and employee provident fund schemes.

Benefits provided

Insurance Policy – Policy Name: Group Personal Accident Insurance. This insurance benefit is available to all students, teaching and non-teaching personnel, and support employees.

Exceptional students are admitted with additional considerations.
Students who meet the sports quota are eligible for free tuition and housing at our college.
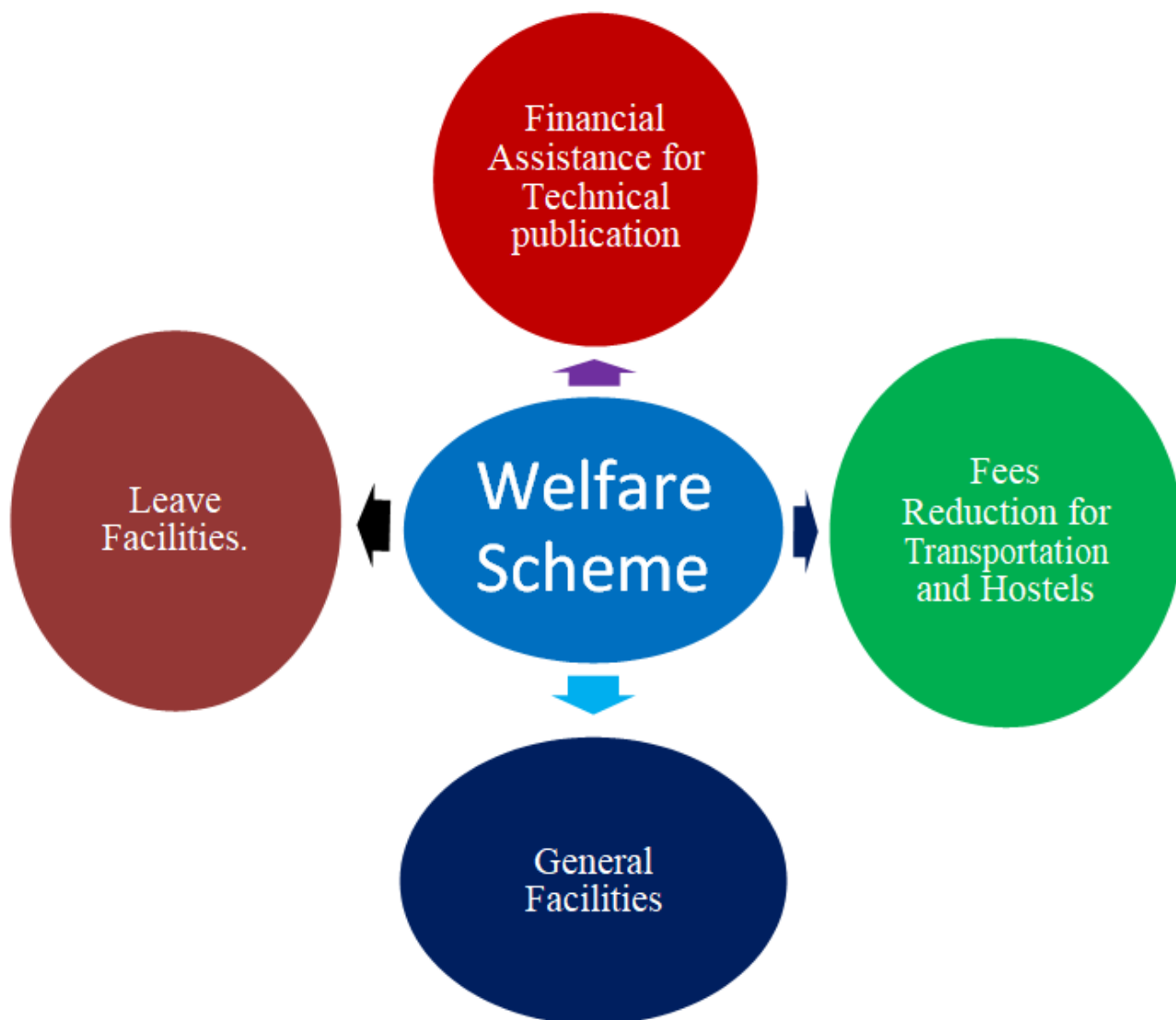
File Description	Document
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Provide Link for Additional information	[View Document](#)

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: 73.23

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**

2021-22	2020-21	2019-20	2018-19	2017-18
78	79	77	76	73

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

6.3.3 Percentage of teaching and non-teaching staff participating in Faculty development Programmes (FDP), professional development /administrative training programs during the last five years

Response: 77.88

6.3.3.1 **Total number of teaching and non-teaching staff participating in Faculty development Programmes (FDP), professional development /administrative training programs during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
119	119	116	117	110

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

2021-22	2020-21	2019-20	2018-19	2017-18
47	45	45	44	42

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

Mobilization of Funds for various resources:

Funds are mobilized from the following resources.

1. Students' fee, and
2. Term Loans (from the banks)
3. However, Consultancy Project work is under process and progress.
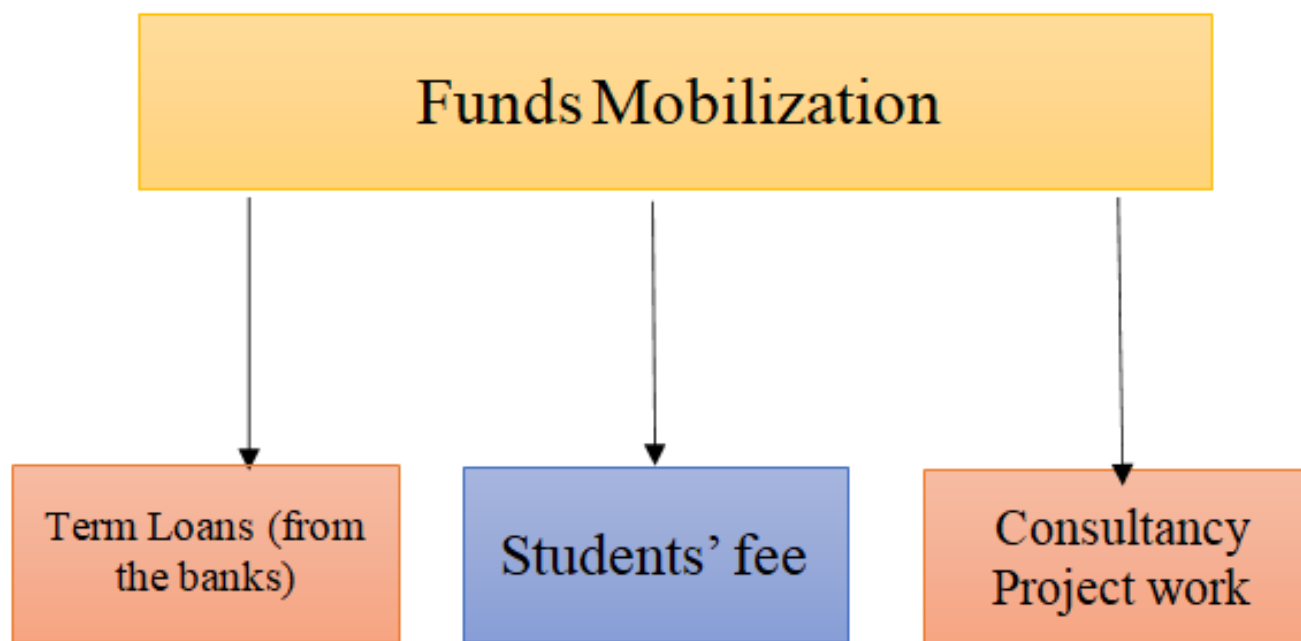
Budget Planning:

Heads of the departments would submit the budget requirements to the Director, at the beginning of every financial year. Budget committee analyzes the requirement of each department and prepares a consolidated budget and forwards it to the Management through the Director for approval. The Management allocates the funds under various heads such as upgradation of library resources, computers, network facility, sports facilities, publication incentives, salary, placement, campus maintenance, extension activities, etc. based on the need.

CEC-J provides the financial support to faculty & students to enhance their technical skills and attend online certification courses. CEC-J provides fund to organise conferences, guest lectures, expert talks and technical workshops and honorarium is paid to the resource person.

Utilization:

The administration and finance committee monitors and audits the budgets, utilization, expenses, accounts etc. They give recommendations for better handling of resources and effective mobilization of available funds. It ensures that the fund utilization is within the limit or allotted margin.

Financial Audit:

The finance team finally audits the documents at the end of every financial year. The audits are being carried out by an external auditor.

Internal audit is being conducted on a continuous basis by the finance team members every month. The audit procedure is shown below.

1. Expenses
2. Vouchers, supporting bills and invoices are verified.
3. Approvals and authorization are verified with Instructions
4. Accountings of expenses according to the nature of the expenses are verified.
5. Actual expenditure is compared with the budget allocated to evaluate the variation.
6. Statutory deductions such as TDS are verified
7. All the fees pay-in –slips are vouched with the bank statements.
8. Surprise cash verification is conducted to verify the petty cash transactions.
9. BRS Statements are verified on a weekly basis.
10. Statements of Sundry Creditors ageing are verified.
11. Payroll statements along with the attendance registers are verified on monthly basis.
12. Fees receivable statements are verified with the books of account.

External Audit is regularly conducted on an annual basis by the statutory auditors of the Trust. The Procedure is furnished below.

1. All the Expenses Vouchers and their supporting documents are verified.
2. BRS Statements of financial year is verified to ensure the outstanding payables and receivables.
3. Original Fixed Assets Purchase Invoices are verified and physical verification of statements and payments are verified with the payroll reports provided by the HR Department

Financial statements are audited accordingly assets is also conducted.

1. Salary statements and payments are verified with the payroll reports provided by the HR Department
2. Analytical procedures are followed to assess the overall correctness of the books of accounts

File Description	Document
Upload Additional information	[View Document](#)
Provide Link for Additional information	[View Document](#)

6.5 Internal Quality Assurance System

6.5.1 Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes. It reviews teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals and records the incremental improvement in various activities

Response:

Since quality enhancement is a continuous process, the IQAC at CEC-J aims to become a part of the

institution's system and works towards realization of the goals of quality enhancement and sustenance. IQAC at CEC-J is meant for planning, guiding and monitoring Quality Assurance and Quality Enhancement activities of the College.

Objective:

1. To aim for being a institution with Academic Excellence.
2. To achieve internal quality assurance system for academic and administrative excellence.
3. To create a student - centric atmosphere for holistic learning.
4. To develop stronger Industry - Academia relation for benefit of staff and students.
5. To promote Interdisciplinary and collaborative research.
6. To enhance the quality of staff by promoting and encouraging overall faculty development.
7. To enhance Infrastructure for Teaching - Learning and Administration.

Quality Assurance Strategies:

1. To create a consistent and dynamic quality improvement system to achieve the goal of the college's faculty and students.
2. To encourage innovative methods for enhancing teaching-learning procedures & processes on a regular basis.
3. To provide a learner-centered environment furnished with the latest techniques and tools for education, research, and skills.
4. To make every effort to accomplish the college's mottos that is **'Building Careers, Transforming Lives',** through the best application of the management's, universities, and government's plans and policies for the creation and sharing of knowledge.

Quality Assurance Processes

1. At the beginning of every year an academic calendar is prepared as per PTU academic calendar and circulated to all stakeholders. College day and Sports day are conducted as per the calendar plan. Holidays and special working days   are also mentioned. Meetings with stake holders are conducted as per the mentioned schedule.
2. Orientation programmes are organized every year for the young and newly joined faculty members to adapt themselves to the systematic process of the institution.
3. Class and course committee meetings are scheduled and conducted at department level. The grievances and the comments given in the meeting are addressed by IQAC.
4. Periodic reviews and audits are conducted by the IQAC.
5. Feedback mechanism is scheduled periodically and collected in time. Based on the feedback from students, faculty members are directed properly to overcome the issues.
6. Internal assessment tests are periodically conducted as specified in the academic calendar. Question papers are audited periodically.

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

1. To help the students in clearing their reappears, remedial classes are conducted for selected subjects throughout the semester.
2. Based on the reappear and nature of the subjects, HoDs assign faculties based on the expertise.

3. Apart from the reappear subjects, doubt clearing sessions and special tests are conducted.
4. As the outcome of the remedial classes, the results have been improved and the students are clearing their reappear paper.
5. For special coaching classes (competitive exams: IELTS, CAT, GATE) have conducted beyond regular working hours by CCPD.

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); Feedback collected, analysed and used for improvements**
2. **Collaborative quality initiatives with other institution(s)/ membership of international networks**
3. **Participation in NIRF**
4. **any other quality audit/accreditation recognized by state, national or international agencies such as NAAC, NBA, ISO Certification etc**

Response: A. All of the above

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

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1 Measures initiated by the Institution for the promotion of gender equity and Institutional initiatives to celebrate / organize national and international commemorative days, events and festivals during the last five years

Response:

To promote gender equity, CEC-J established Women Empowerment Cell. All the students are encouraged to participate in various Technical Workshops, Seminars and Smart India Hackathon without any gender discrimination.

Dynamic Management is a driving force behind all the success of the Institution. Innovative approach in learning and knowledge acquisition are key factors which are implemented as Institutional Value. More than 50% of the faculty members are women who play key roles in various positions as coordinators of various club and various centre activities.

Safety measures.

- E-Surveillance system with camera is installed throughout the campus and hostel to monitor the students and for safety purpose.
- Adequate security personnel are posted round the clock in the gates and inside the campus and canteen.
- There are separate hostels for boys and girls in the college campus with residential wardens to look after all the needs of the students
- The hostel has pre-defined policy for hostelers availing leave during the hostel stay.
- CEC-J has very good counseling System.
- CEC-J has 18:1 student faculty ratio to counsel students.
- The girl students can contact their counsellor for any counseling support. The time table has a counseling period.
- Apart from counsellor, general counseling is arranged for students every semester and a lady counsellor is appointed as staff member to counsel the students
- Girl students have a common room along with girls rest room and separate room in college Health Centre. If needed students can also use hostel room with proper approval.
- Women Empowerment Cell aims to empower girl students and female faculty to enhance their understanding of issues related to women safety and hygine and to make the college campus a safe place for girls and women. The cell brings advancement, development and empowerment of women through guest lectures, seminars, awareness programs and other welfare activities since its formation.

Since its establishment, institution organizes National Festivals and Birth and Death Anniversaries of great Indian Personalities. CEC-J celebrates these events with great enthusiasm to commemorate the ideology of nationalism and to pay tribute to our great National Leaders.

Events & Festivals.

Gandhi Jyanti is celebrated every year on 2nd October to understand the ideology of our great leader Mahatma Gandhi.

The college celebrates International Yoga day on 21st of June every year by conducting a camp or workshop on how Yoga embodies unity of mind and body. Keeping its Indian values intact, the college imparts right kind of education based on moral values and ethics which makes our students responsible global citizens.

15th August Independence day is celebrated every year with patriotic fervor. The air is filled with patriotic feelings that emit from various songs aired on the campus radio. The programme consists of patriotic songs sung by students and speeches eulogizing the great sacrifices made by our freedom fighters.
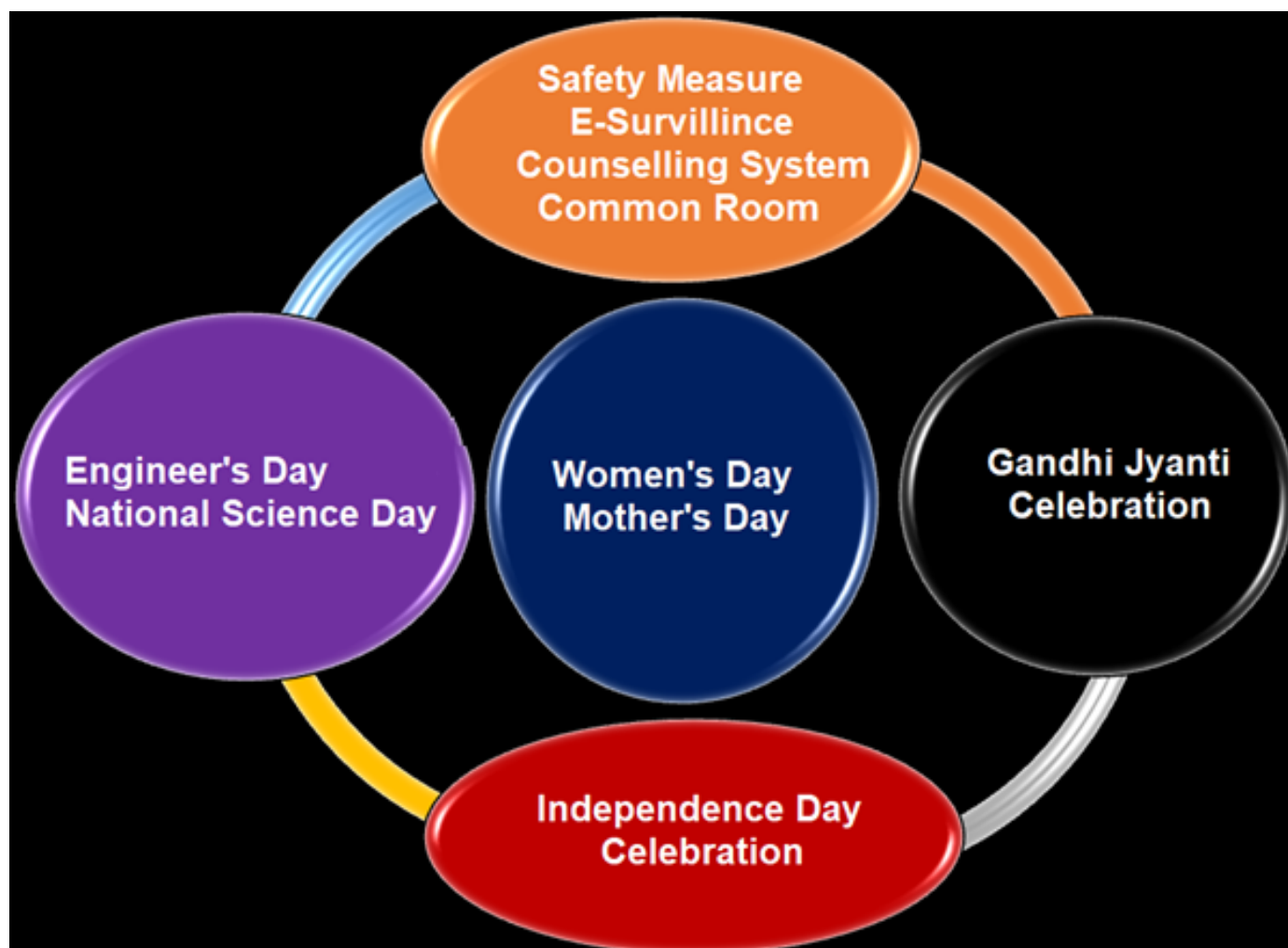
Institution Initiated Gender Equality, Organize Events & Festivals

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
Upload supporting document	[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
Upload supporting document	[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 diversity and Sensitization of students and employees to the constitutional obligations: values, rights, duties and responsibilities of citizens (Within 500 words)

Response:

India is a diverse country in the universe. Students will remember an important day only if they are told what the occasion signifies. Celebrating events and festivals in our college has become an integral part of learning and building a strong cultural belief. These celebrations bring the students closer to each other's traditions and cultural beliefs and develop respect and understanding for each other's customs and traditions. There are three types of celebrations, namely seasonal, national and religious.

The objectives of celebrating these festivals are:

National festivals will heighten the patriotic spirits in students, enabling them to grow into better citizens. Celebrating a seasonal festival changes student's attitude towards mother earth and nature. Religious festivals teach students about the importance of family, tradition and values. It gives an insight into the culture and its principles. International festivals will create an increased cheerful ambiance and deepen the bonds with other races.

In order to attain the above mentioned objectives, Chandigarh Engineering College (CEC-J) Jhanjeri

provides an inclusive environment for everyone with tolerance and harmony towards cultural, regional, linguistic, communal socio economic and other diversities. Different sports and cultural activities organized inside the college promote harmony towards each other. India is a diverse country where people belonging to various cultural backgrounds reside. Therefore, all through the year, our college witnesses a variety of festivals and occasions. Few celebrations are:

Gandhi Jyanti Celebration:

This day is celebrated as the "International Day of Non violence" in world wide. The main objective of celebrating this day is to remember the man who showed the world that nonviolence is an effective and lasting way of defeating injustice. He is a great inspiration of truly embodying the principles of tolerance and peace.

Communal and Socio-Economic Diversities:

The college encourages self-help and local non-profit organizations to set up booths on the campus grounds. The college runs distinctive events like rallies to support an environment that unites the diverse student populations. Every year, a blood donation drive is held, and the blood that is collected is then delivered to the local hospitals and blood banks. CEC-J offers free medical camps to all stakeholders as well as neighbouring villages. CEC-J along with Majra Dispensary organized a Covid Vaccination Drive camp in the college premises and in the government primary health centre.

Foreign-born students can stay in separate floor in the hostel, that is available. To meet their demands, Food festivals are arranged and continental and Chinese foods are included in the canteen menu. Foreigners receive special consideration and guidance.

NSS volunteers collect groceries and clothes during Diwali to cater the needs of poor people and celebrate in old age homes. The NSS conducts tree plantations, temple pond cleaning in the local area and plastic cleaning activities. Safety Aid Programmes are conducted for bus drivers, students, teaching and non-teachning staff members. Health awareness camps and seminars, road safety awareness camp, green and energy initiative awareness rallies are conducted by NSS .

Types of Celebrations
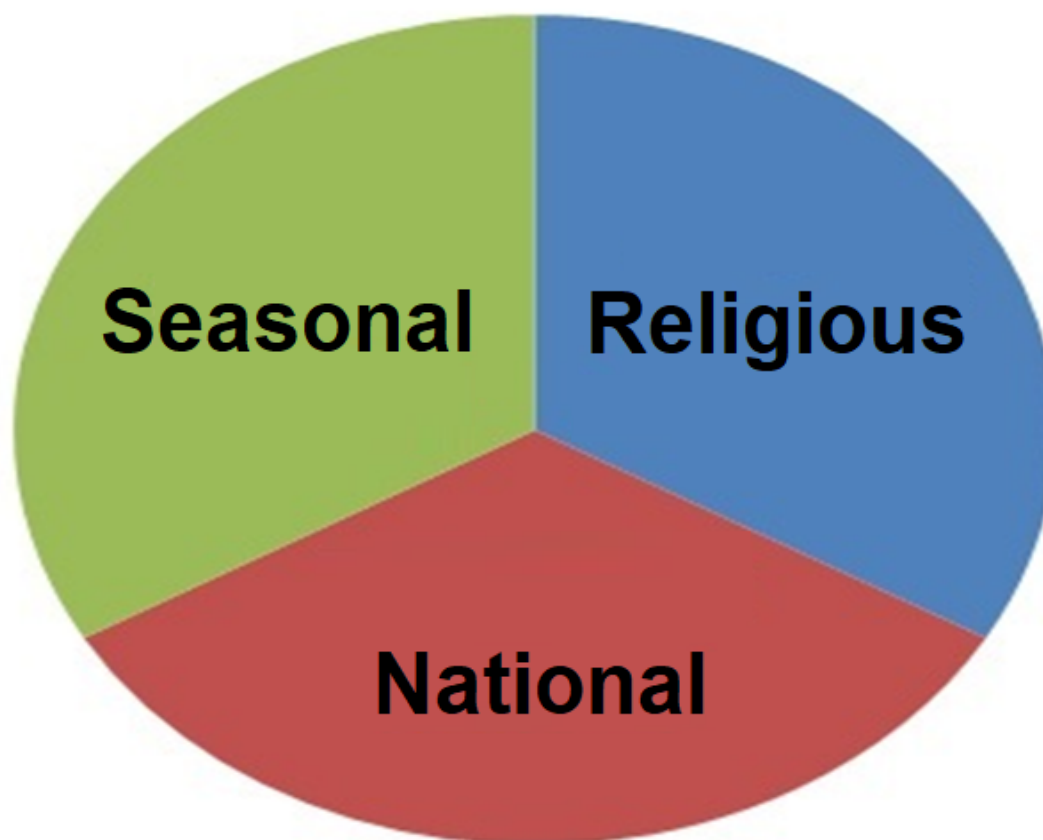
Types of Celebrations

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 Practices of the college.

Best Practice I

1. Title of the Practice: E-Management: for effectiveness and Transparency.

2. Goal:

To use E-management tools for effective:

i. Teaching and Learning

ii. Monitoring and Administration

iii. Transparency

iv. ERP based students feedback

v. Grievance resolution within 24 hours.

3. The Context: The use of information technology in management in any organization can augment the productivity and quality. The use of information technology in the domain of education can accord help to the students. The help is extended to the students by ready availability of subject resources, time tables, performance, attendance schedule related to all examinations and other programmes/activities. Moreover it offers transparency which is most important aspect of the management. Similarly e-management systems are extremely helpful in providing aids to the Members the teaching staff and it accords a great help to create a culture of transparency which is very significant and consequent for healthy and un-biased working atmosphere.

4. CEC has resorted to uses of information technology in management of several systems for the students, members of the teaching and non teaching staff through following practices:

i. Website:

a) Availability of complete information beginning from departments, courses and faculty details.

b) Complete details about the course structure, syllabi, subject details, time table, the rules and regulations and the examination procedure.

ii. Internet for effective dissemination of information and strong space (N: Drive) accessible to everybody, everywhere in the college campus.

iii. Study material for uploading programme/ subject/ contains by 24x7 teaching.

iv. Web kiosk: Different persons and professional activities/ aspects related to the college can be entered and retrieved for making the system transparent.

These activities are related to

a) Personal: salary of employees, details of benefits, kinds of leaves, attendance, details in case of emergency, and help in tax information.

b) Teaching: student attendance, information about the students who bunk the classes, classroom booking.

c) Examination: the Entry of marks, grade entry, result, invigilation duty.

d) Counseling and mentoring: To view grades of the students and performance of the students by parents and teachers.

e) Provide feedback: e.g. IQAC.

5. Evidence of success: the practice followed by CEC has laid to the creation of healthy and transparent work culture.

- The transparency and dissemination of knowledge/information in easy manner through IT enabled system starting from the classroom experience to examination has accorded great help to the students and the parents concerned. The policy to view examination copies, mechanism to redress issues/ problems along with engagement has provided unbiased and effective mechanism.
- For employees the information about salaries, benefits kind of leave, income tax deduction, etc are available online. This type of transparency along with healthy policy for promotion and help in career advancement makes CEC an alluring place to work. CEC has good rate of faculty and staff retention. The confidence of faculty reposed in system has laid to long term thinking and planning.

6. Problems encountered and resources required: The change from paper work to paperless work is not easy. Since many years the employees have engaged themselves in traditional letter writing, report writing, etc. The mindset of the employees has been mandating them to resort to paper to express their opinions, views and remarks on paper only. Change from paper work to paperless works needs change in mindset. Moreover it is the matter of training. The senior employees traditionally involved in the paper work initially are reluctant to receive training to change to correspondence. CEC has senior as well as young and enthusiastic members of teaching and non teaching staff. Though it took time to change the mindset of the senior employees, with the passage of time, after learning the simplicity and effectiveness of new method gradually they shifted themselves to new methods. Now all employees in the college are able to implement several aspects of engagement successfully.

Best Practice II

1. Title of the Practice: Creation of Awareness among Faculty and Students about their social responsibility.

2. Goal: To develop ethical and moral values in faculty and students. To create harmony and peace in the faculties and students and non-technical staff. To develop emotional quotient and spiritual quotient along with intelligent quotient. To imbibe education among the Faculties and students for the development of the society and community. To create sense of belonging and social awareness in the employees and the students.

3. The Context: To develop society, the institute has decided to create engineers having social, ethical and moral values. The need of the society today is to develop budding engineers having research mindset, ethical values and entrepreneurship skill. The young generation is very volatile and it is the necessary to bring awareness in them regarding their social responsibilities.

4. The Practice: Institute conducts the program under the aegis of National Service Scheme. The efforts are made to enable the students understand their social responsibilities. Institute understands the

importance of learning the life skills & organizes co-curricular, cultural programs, tours, and visits, conferences to develop interpersonal skill, decision making and values clarification. Free distribution of motivational books to school students. Institute arranges spiritual lectures on different idolized thoughts.

5. Evidence of success: By organizing blood donation camp, tree plantation, save girl rally etc., community activity is promoted in the neighborhood of the institution. NSS activities also give the social and ethical awareness among students. Stress management lectures are helpful to students and staff for relieving stress and maintain peace.

6. Problems encountered and resources required: Going to the villages and convince them that the institute is working for their betterment is a herculean task. More budget provision needs to be made for carrying out social work.

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:

CEC-J has the vision set as "To emerge as an institution of technical excellence imparting professional education for sustainable development of society". Senior leadership and governance has laid down mission and values of the institution which is visible in actions and plans to reinforces the activities & developments. Decentralized and participative management has led to open-culture, driven creativity and innovations of stakeholders in the institution.

Institutional Distinctiveness: Career Planning & Development

1. Objectives of the Practice

- To make the curricula more robust, enhance the skill component of the syllabi and to introduce career planning & development to empower students to be job worthy/ create entrepreneurial ventures.

This was implemented –

- To provide career education and develop skills in students interested in directly entering the workforce.
- To support students in the vocational exploration, identification, pursuit and integration of personal

and professional career goals.

- Incorporation of skilling in the curriculum is to provide opportunities for quality long and short term skill training.
- To develop courses of interest for personal and community development.
- To broaden the skill-base of the students and to empower them for alternative vocations.
- To connect students directly to opportunities for employment, internship /on the job training.
- To develop professionals with global competencies viz. soft skills, information and communication technologies etc.,

2. The Context

- The specific objective of the placement based training is to train and expertise the students to meet the present day requirements in the market for the survival. This includes the personality development, resume writing, communication skills, aptitude, personal interview and group discussion
- The institution's philosophy is to develop a student centric, rigorous, flexible curriculum which is relevant for the individuals, the country's economy and the society at large
- It motivated to look beyond traditional pathways of 3 Es viz. Education, Employability and Employment and think of strategies to bridge the gap between skill and knowledge
- To incorporate vocational & skill component in the regular courses
- To offer short-term skill-based courses along with traditional degree courses
- To offer vocational and industry-aligned professional courses
- To promote interdisciplinary programmes that prepare students for diversified career opportunities
- These courses focus on real-world application, with many programs including internships or projects in their field of study
- To offer value added courses based on the recent advancement
- This placement based training helps students to improve the academic standards and to provide all the academic facilities to the students based on today's need of the software industry/hardware Industry into which the students enter after they complete the course

3. The Practice

- We Practiced skill based training courses which cater to the requirements of various professional fields.
- They provide opportunities to students for enhancing their career development & exploratory learning through hands-on practice, classroom sessions, self-study, understanding of the job market, skill development and decision-making.
- Students from second year to final year are eligible to take up this training alongside their regular course of study.
- They are characterized by multiple exit options, credit system, unit-based syllabi, outcome-based assessment, input and output-based credit criteria for general education and skills respectively.
- At the end of four years, the students are equipped with soft skill training along with conventional degree in Engineering.
- They are designed to be interdisciplinary in nature and promote horizontal mobility.
- A dedicated slot of one hour to four hours in a week is reserved in the timetable for each of the courses.
- Internships, projects, on the job training, practical seminars, presentations by the students forms' an integral part of the syllabi of most of these courses.

- The campus maintains a robust industry-academia interface to bridge the gap and make the content of these courses industry relevant.
- Students are constantly motivated through counseling to increase their morale.
- Students are also informed and advised on the importance of maintaining good academic scores as these play a major role during recruitment. The cell helps students improve their academic scores through a series of programs and workshops.
- We also promote students to visit various industries pertaining to their disciplines so that they get the right exposure.
- Students are assessed through various online testing methodologies so that the right set of students is channelized towards the right profile.
- The following training programmes are conducted for the students by proper planning prior the academic start.

Soft Skill Training Programme:

This helps students develop effective communication skills and presentation capabilities in academic and professional settings. These interactive activities focus on work environment and real life situations. Individual attention is given and even shy students are encouraged and empowered to develop their public speaking, interactive and interpersonal skills. This includes the enhancement of following skills

- Presentation Skills
- Group Discussion
- Resume Preparation
- Interview Preparation
- Just a Minute
- Leadership Qualities
- Goal Setting
- Time Management
- Team Player, etc

Aptitude Skill Trainings:

It includes to increase the following abilities in the students –

- Reasoning
- Data Interpretation
- Logical

Analytical Technical Skill Trainings:

The students are trained in advanced techniques of the following languages

- C
- C++
- Core JAVA
- Advance JAVA
- PHYTHON
- HTML

- Web Technologies
- DBMS

4. Evidence of Success

- The placement based training programme has improved the success rate of the students in the final placement interviews to an appreciable extent.
- These courses have proved to be effective in student's overall progression and in seeking employment or to set up own start-ups.
- The multi-faceted and multi-disciplinary learning experiences have facilitated the scope for better employment which is reflected in the placement.
- Students have developed multiple skills through the field experiences/practical training/ summer internships and are able to apply theoretical knowledge in practical situations.
- Skill development enhances the proficiency of a student in their particular area of interest.
- Skill enhances to build the professional network, better communication, time management and so on.

File Description	Document
Appropriate web in the Institutional website	[View Document](#)
Any other relevant information	[View Document](#)

5. CONCLUSION

Additional Information :

We at **Chandigarh Engineering College Jhanjeri (CEC-J)** believe that academia along with research and practical work gives a wider perspective to the students learning. Therefore, we involve our students in project-based and interdisciplinary work that help them understand the complexities of the real-world environment. We shall achieve this by

- Produce Industry-ready Professionals through training in Soft-Skills and Personality development.
- Undertaking networking with Industry, Academic and Research Institutions.
- Provide adequate and furnished infrastructure for academic and research activities.
- Organize national and International Seminars/Conferences.
- Promote Creativity and Innovation among students.
- Ensure Placements for eligible students.
- Conduct Career -Vision program to facilitate right career choice by students.
- Encourage Entrepreneurship among students.
- Motivate the students to participate in Co-curricular and Extra-curricular activities.
- Train teachers in modern instructional methodologies to improve their teaching skills.
- Motivate the faculty to publish papers in National/International Conferences and Journals.
- Provide Hostel and Residential accommodation to all students and staff.
- Develop and promote Green Environment.
- Provide quality environment and services to all Stakeholders.
- Both teach and follow Ethical, Environmentally responsible Engineering practice.
- Attention to issues of national relevance.
- Responding to the changes in both technology and applications.
- Provide systems, resources, and opportunities for continuous improvement.

AN INSTITUTE WITH A DIFFERENCE

- Where we believe that education should stimulate the minds of the young and inflame their intellect.
- Where global citizens of tomorrow are groomed by dedicated and trained faculty.
- Where the focus is on teaching not just to make a living but how to make a life.
- Where there is symbiosis of technological development and human values.
- Consistent institutional growth with respect to student intake, faculty, infrastructural, facilities, etc.
- Students performance at university examination.
- Campus placement for eligible students.
- Increase in number of students planning for higher studies.
- Organization of successful national and international level events.
- Conduct of university curriculum with full effectiveness and performance monitoring.
- Mock test to boost confidence and performance in campus placement.
- Emphasis on extra-curricular and co-curricular activities for overall growth of personality.
- The Leading Institution for Placement in Chandigarh and Punjab.
- Student grooming by our Career Counseling and Professional Development (CCPD) Cell.

Concluding Remarks :

Right from its inception, **Chandigarh Engineering College Jhanjeri (CEC-J)** has grown leaps and bounds both in its size as well as stature till this day and promises to continue in its progressive mode of placing at the hands of our nation, Engineers with knowledge, skill as well as human values. CEC-J has been constantly refining its focus as well as modus operandi in achieving the Vision it has set for itself. The descriptive summaries and the accompanying data under each criterion are a proof of the sincere efforts of the Institution in this direction. It is a firm belief as well as the perception of the Management of this Institution that the growth in infrastructure, academics,

research, co-curricular and extracurricular activities, activities on social and national issues for creating awareness as well as mitigating the problems, contributions in terms of activities of relevance to local community around the Institution.

- The placed students along with the management and faculty rejoiced "Placement Day- 2022" at Chandigarh Engineering College Jhanjeri. The primary motive to organize this event was to honor and inspire the students who made their aspirations clear and spirits high to participate in the placement drive. It was with their hard work that even the pandemic could not stop them from grabbing lucrative placements in their dream companies listed among Fortune 800+ companies. Some of these include Capgemini, Infosys, Google, Accenture, etc.

The expedition of providing indispensable learning through continuous upskilling at Chandigarh Engineering College, Jhanjeri has completed a decade. Carrying this bequest, we aim to change lives through quality higher education.

6.ANNEXURE

1.Metrics Level Deviations

Metric ID	Sub Questions and Answers before and after DVV Verification
1.2.1	**Number of Add on /Certificate/Value added programs offered during the last five years** Answer before DVV Verification : Answer After DVV Verification :22 Remark : DVV has made the changes as per shared report of add on programs.
1.2.2	**Percentage of students enrolled in Certificate/ Add-on/Value added programs as against the total number of students during the last five years** 1.2.2.1. **Number of students enrolled in subject related Certificate/ Add-on/Value added programs year wise during last five years** Answer before DVV Verification: 	2021-22	2020-21	2019-20	2018-19	2017-18
---	---	---	---	---
1673	1681	1821	1842	1831 | Answer After DVV Verification : | 2021-22	2020-21	2019-20	2018-19	2017-18
---	---	---	---	---
1211	1521	1325	1654	1451	 Remark : DVV has made the changes as per 1.2.1
3.1.1	*Grants received from Government and non-governmental agencies for research projects / endowments in the institution during the last five years (INR in Lakhs)* 3.1.1.1. **Total Grants from Government and non-governmental agencies for research projects , endowments, Chairs in the institution during the last five years (INR in Lakhs)** Answer before DVV Verification: 	2021-22	2020-21	2019-20	2018-19	2017-18
---	---	---	---	---
17.5	1	0	0	3 | Answer After DVV Verification : | 2021-22	2020-21	2019-20	2018-19	2017-18
---	---	---	---	---
17.5	1.00	0	0	3.00	 Remark : DVV has converted the value into lakhs.
3.3.1	*Number of research papers published per teacher in the Journals notified on UGC care list during the last five years*

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
249	34	21	11	18

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
196	23	16	08	11

Remark : DVV has made the changes as per considered upto calendar year publication only.

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**

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:

2021-22	2020-21	2019-20	2018-19	2017-18
404	10	8	4	9

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
402	9	7	3	8

Remark : DVV has not consider ISSN no. in this metric.

3.4.3 | **Number of extension and outreach programs conducted by the institution through NSS/NCC/Red cross/YRC etc., (including the programmes such as Swachh Bharat, AIDS awareness, Gender issues etc. and/or those organised in collaboration with industry, community and NGOs) during the last five years**

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
14	8	9	11	7

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18

7	4	3	5	4

Remark : DVV has not considered day activities.

| 4.4.1 | **Percentage of expenditure incurred on maintenance of infrastructure (physical 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:

2021-22	2020-21	2019-20	2018-19	2017-18
141.5	104.7	177	183.8	132.4

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
141.5	104.7	177.00	183.8	132.4

Remark : DVV has converted the value into lakhs. |
| 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:

2021-22	2020-21	2019-20	2018-19	2017-18
7	0	7	9	5

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
0	0	7	5	0

Remark : DVV has not consider certificated of appreciation. |

2.Extended Profile Deviations

Extended Profile Deviations

No Deviations