SELF STUDY REPORT

FOR

1st CYCLE OF ACCREDITATION

PRIYADARSHINI COLLEGE OF ENGINEERING

PRIYADARSHINI CAMPUS, NEAR CRPF, HINGNA ROAD, NAGPUR 440019
www.pcenagpur.edu.in

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

April 2022

1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

Lokmanya Tilak Jankalyan Shikshan Sanstha (LTJSS) founded in 1983, today runs 28 Educational Institutions and is considered synonymous with excellence in Education. Sanstha derives its philosophy from the eminent mathematician, educationist and social reformer Lokmanya Bal Gangadhar Tilak.

Priyadarshini College of Engineering (PCE), Nagpur, is a flagship institution belonging to LTJSS established in 1990's and is one of the premier technical institutions in Central India. Set up on a hilly terrain, with unique features like number of elegant and spacious buildings, swimming pool, planned landscapes with lush green lawns good network of beautifully designed internal roads, street lightning and parking areas. The institute imparts technical education through fifteen undergraduate and eight postgraduate levels.

The Institute is a recognized center for PhD in four programs encouraging the faculty for research and development & has a strong faculty pool with 104 Ph.D. The institution is accredited by NAAC at 'A+' with 3.31 in 2019 and its eight programs 1) Electronics & Telecommunication 2) Electronics & Power (Electrical) 3) Civil 4) Mechanical Engineering 5) Biotechnology, 6) Chemical Engg, 7) Electrical Engineering and 8) Computer science Engg are accredited by NBA.

The institute has always envisioned instilling holistic education among the students balancing the knowledge, skill and behavioural aspects of students and have won several accolades at university level and state level. Various cell like Alumni, EDP, III, are strongly associated to reinforce profile of Training and Placement department to the leading edge.

Human Excellence Cell of the Institute works hard for all round development of the students. Different life skills and value added courses like Soft Skill Training (SST), Employability Enhancement Training (EET), LAKSHYA, Campus to Corporate (C2C), Campus Recruitment Training (CRT) are conducted throughout the year for students.

Women Empowerment cell of the institute takes care of gender related issues and institute has almost 50% female faculties and large number of girl students in the institute. The behavioral domain are strenghten through programs conducted by NSS, Rotaract Club and student forums.

Vision

To become one of the India's leading Engineering institutes in both education and research.We are committed to provide quality and state-of-the-art technical education to our students, so that they become technologically superior and in turn contribute for creating a great society.

Mission

We commit ourselves to the pursuit of excellence in technical education and promise to uphold the spirit of the professionalism to serve the humanity.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- State of Art Infrastructure and proactive management, leaders and administrators.
- Qualified and dedicated faculty members with good team work.
- Clear Vision, Mission, Goals and Objectives.
- Sponsored research projects from AICTE and other reputed agencies with funding more than 1 crore.
- The institute has developed narrow focused, short duration specialized courses of two types. Type one is academic oriented and type two is industry oriented.
- These courses are presented so for at around 50 institutions in Vidarbha, Western Maharashtra, Chatisgarh and Rajasthan.
- NBA Awarded 3 years Accreditation to 8 undergraduate programs i.e. 1) Electronics & Telecommunication 2) Electronics & Power (Electrical) 3) Civil 4) Mechanical Engineering 5) Biotechnology, 6) Chemical Engg, 7) Electrical Engineering and 8) Computer science Engg.
- MOUs with Industry and Institute of National Importance for curriculum enrichment, FDPS and Students Training Program
- Active Internal Quality Assurance Cell (IQAC) to ensure quality in Teaching learning process as well as in all area of operations.
- Teacher-Guardian scheme enabling the smooth implementation of continuous evaluation of academic process.
- The placement cell is dedicated to placing students with assisting resources like III Cell, EDP Cell, Alumni Cell, and Human Excellence Cell.
- Constituted various clubs and Professional society chapters to facilitate co-curricular and extension/outreach activities
- In house newsletters and magazines are published regularly
- Facilities available for various indoor and outdoor games and sports
- Financial support to participate in national and international level events.
- Center of Excellence for Software Training
- Green Initiatives and Waste management system
- Extension and service to society through NSS, Rotaract club and other Government bodies.
- Constant Endeavor to upgrade quality.
- EDP cell of the institute works to promote knowledge-based and technology-driven start-ups by harnessing young minds and their innovation potential in an academic environment.
- Entrepreneurship Awareness Camps are organized for students.
- III Cell of the institute has developed strong association with industries.
- The Institute has adopted outcome based eduction (OBE) model as prescribed by NAAC/NBA/AICTE

Institutional Weakness

- Lack of interest among students towards higher studies/research owing to financial commitments (to repay educational loan)
- Less number of Consultancy Assignment.
- Students with poor communication skill at entry level.

Institutional Opportunity

- To become an Autonomous Institution for industry and corporate ready graduates.
- Scope for consultancy and research projects.
- Tie-up with research laboratories to promote knowledge
- Strong Alumni Association – a chance for industry offered courses in Curriculum enhancement
- Setting up Multi-Disciplinary research Centres.
- **Increased focus on higher education:-** Govt. on India focusing more on higher education to provide quality education for UG and PG courses
- **Digitization:-** Digitisation will present a huge opportunity for educational institutions in terms of saving costs as well as reaching out to more students.
- **E-learning platform:-** Investment in e-learning and starting of Massive Online Open Course (MOOC's) is an opportunity waiting to be harnessed for quality education and to generate resources particularly through distance education mode
- NEP Implementation.

Institutional Challenge

- Majority of the students joining the institution are from rural background with poor language and communication.
- Most of the students joining the institution avail educational loans for their studies and hence lack interest towards higher studies/ entrepreneurship.
- Achievement of 100% completion rate Providing placements for students in core engineering areas.
- Securing funded research projects.
- The rigidity of academic structure & curriculum since our institute is affiliating institute.
- Improving consultancy.
- Diverse socioeconomic backgrounds of students.
- Coping up with rapidly changing technologies.
- Students' skills need to be enhanced through additional measures as per the continuously changing requirements of the industry.
- Placements in core industries.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

- Priyadarshini College of Engineering is affiliated to Rashtrasant Tukdoji Maharaj Nagpur University, Nagpur(RTMNU).
- The Institution takes utmost care in effective curricular planning and implementation as prescribed by the RTMNU.
- Institute adheres strictly to the Academic Policy and Calendar.
- Academic monitoring is a continuous process for maintaining quality of teaching and learning. Institute offers certificate and add on courses to the students every year.
- Many faculty members are involved in university work. Some are holding positions like Chairman/ members BOS, Co-opted positions etc. Faculty members also actively participate in the syllabus revision meeting.

- On the basis of feedback collected from the various stakeholders, faculty members give suggestions for curriculum enrichment.
- The curriculum gaps are addressed through various co curricular activities like bridge courses, guest lectures and experiental learning activities.
- Academic flexibility is provided to the students by offering elective courses prescribed by the University.
- Choice based credit system for both UG and PG programs have been introduced.
- In addition to the prescribed curriculum, institute gives lot of thrust on curriculum enrichment by offering additional skill oriented programs in terms of value added courses, seminars, workshops, industrial visits, internships, field projects for the overall development as well as enabling students for better job opportunities.
- Courses addressing issues like gender equality, environment and sustainability, human values and professional ethics are incorporated in the curriculum of Rashtrasant Tukdoji Maharaj Nagpur University.
- The institute takes care of gender equality and also inculcates ethical values and social responsibilities among faculties and students by conducting various activities.
- Structured feedback on Curriculum is collected from various stakeholders like students, teachers, alumni, Industry person/employer.
- Feedback collected is analyzed and action taken report is made available on institute website.

Teaching-learning and Evaluation

- Directorate of Technical Education (DTE), Maharashtra State regulates engineering admissions for UG and PG through centralized admission procedure.
- Admissions are based on the entrance examination conducted on National & State level.
- The institute is having a linguistic minority status.
- Students from Maharashtra and other states of India are admitted as per government norms.
- All admitted students are enrolled in Rashtrasant Tukdoji Maharaj Nagpur University.
- The institute is having well defined mechanism to assess the learning levels of the students. Advanced learners and slow learners are identified and appropriate measures are taken accordingly.
- For Advanced learners measures taken are, training program, guidance for Competitive Exams, publication of research papers etc.
- Measures like counseling for academic related issues, conduction of remedial classes , are taken for slow learners.
- Teaching learning process is student centric which is made effective by technologically enriching faculty members with the help of various training programs.
- Experiential and Participative learning are main focus in learning process.
- Most of the teachers use innovative teaching methods and ICT tools to increase the involvement of student in this process .
- Institute has implemented mentoring scheme named as Teacher Guardian Scheme.
- Counselors are also available for taking care of stress related issues.
- The institute has qualified and experienced faculty as per norms.
- Faculty members are encouraged to improve their qualification and to participate in research activities.
- Total 104 faculty members are having Ph.D. Degree and most of others are pursuing.
- College has given emphasis on implementing reforms in Evaluation Process.
- In Centralized Examinations and evaluation system, Internal examinations are conducted at central level and end semester examination is conducted on University pattern.

- The complete process is transparent and adhere strictly to the academic calendar.
- Course Outcomes (COs) are defined for all subjects and mapped with Program outcomes (POs) and Program Specific outcomes (PSOs) .
- Attainment levels of COs, POs and PSOs are calculated and if not satisfactorily attained, corrective measures are taken.
- As an outcome of implementation of student centric teaching learning process, more than 90% of students have completed their engineering program during assessment years.

Research, Innovations and Extension

- The Institute is actively engaged in making adequate resources available, encouraging active research involvement of teachers and scholars in research as well as recognizing any achievement of teachers through research.
- The Institute is approved Centre for Ph.D under Rashtrasant Tukdoji Maharaj Nagpur University.
- Many Sponsored Research Projects have been carried out, resulting into Product Development & Patents.
- The institute has developed Ph.Ds, Products, Collaborations established, Patents, Publications.
- Institute has 40 approved research guides for appropriate guidance to Ph.D Candidates.
- The faculty members submit research proposals to Government as well non Government agencies regularly.
- Research proposals have been sanctioned to many faculty members resulted in fetching grants.
- Institute has created an Ecosystem for Innovation by setting up Incubation Center for Transfer of Knowledge.
- Institute makes sincere efforts for Transfer of Knowledge by conducting Workshops, Faculty Development Program, Conferences etc.
- Institute has Intellectual Property Rights (IPR) Cell.
- The Institute conducts Workshops & Seminars on (IPR) & Industry -Academia innovative Practices.
- Large number of faculty have been awarded PhD and are recognized as supervisor.
- Faculty members and Students are motivated to attend Conferences, to Publish articles and for pursuing funded Research and Innovation. This has resulted in good number of publications in Conferences proceedings as well as in Journals.
- Large number of faculty have authored books. Faculty members of the Institute have traveled abroad for presenting their Research Work.
- For developing sensitivities towards community issues, gender disparities, social inequity etc. and to inculcate values and commitment to society National Service Scheme unit & Rotract Club college promotes Extension activities such as Swachh Bharat , AIDS Awareness, Gender Issue, blood donation camp, campus cleaning, educating school children awareness programs for environment, tree plantation etc in the neighborhood community.
- The college has Collaboration with Industries, Academic Institute and Professional Bodies for sharing research facilities and undertaking collaborative research and is benefited academically in a big way.

Infrastructure and Learning Resources

- Institute has state of art infrastructural facilities to support teaching-learning, research and administrative services as per the AICTE norms. The institution has adequate physical facilities like classroom, seminar halls, laboratories, tutorial rooms, computing equipment, etc.

- The adequate facilities for extra-curricular activities like outdoor and indoor games, cultural activities, and health & yoga are available.
- Adequate number of classrooms and seminar halls are available with ICT facilities to satisfy the curricular and co-curricular requirements.
- The college has well planned spacious computerized library with large number of books, e-books, e-journals, ePage materials and educational videos along with a browsing center.
- Library is automated using Integrated Library Management System software KOHA.
- The library has different sections along with multimedia room and reading room. Library is having book bank facility.
- Remote access to e-resources of the library is available to faculty members and students.
- The college is having **1315** computers exclusively for the students with LAN and Wi-Fi facilities, and licensed software as per curriculum requirements.
- The college is having language lab for improving communication skills of students in addition to computer centre. The college is having internet facility as per norms.
- A facility for e-content development is available.
- The college campus is under the surveillance of CCTV cameras. The institute has maintenance cell with well planned and systematic procedure for maintenance of physical, academic and support facilities. Enough budget is allocated for the same.
- The equipment, furniture, computers and generator are well maintained. The college campus is lush green with well-maintained lawns, trees and plants.
- Institute has all the facilities for specially challenged learners.

Student Support and Progression

- Institution takes utmost efforts to provide necessary assistance to students, to enable them to acquire meaningful experiences for learning in the campus and to facilitate their holistic development and progression.
- Students are benefited by scholarships and freeships from all central and state government schemes under SC/ST/VJNT/SBC/OBC and EBC categories.
- Institute also provides various scholarships to students under economically weaker class.
- Facilitating mechanisms like career guidance cell, placement cell, Health and Happiness cell, softskill development cell etc. are working hard for capability enhancement and development of students.
- Institution has a well structured, organized guidance and counseling system for different learning abilities and bridging the curriculum gap.
- Institute has a well defined mechanism for redressal of grievances of students through Grievance Redressal committee, Anti-ragging committee & Sexual Harassment committee.
- The Institute concerns for student progression to employability and/or to higher studies.
- The institution has a mechanism for career guidance and placement of the students.
- The institute conducts softskill development, career counseling, and personal enhancement sessions to ensure the success in placement.
- Through competitive exams cell, institute motivate & guide the students for higher studies, which has improved learners progression to higher studies.
- The institution has the required infrastructure and promotes active participation of the students in sports, social, cultural and leisure activities.
- The student exhibit their talent, managerial skills and creativity through participation and organizing in various co-curricular and extra curricular activities.
- Their participation at university, national and international level brought good number of awards to the

college. Institute has students council having active participation in academic and administrative decisions at institute level.

- There are professional societies and student chapters like CSI, ISTE, IEEE, ICHESS, IETE, ACM, ISHRAE etc.
- Departmental student's forum are available where students play an important role in decision making and organizing department level activities.
- College has a registered and active Alumni Association.
- Every year the college organizes alumni meet/meeting.
- Alumni contribute for the development of students through financial and non-financial means. Alumni help students for placement & career planning.

Governance, Leadership and Management

- Priyadarshini College of Engineering is a flagship institute run by Lokmanya Tilak Jankalyan Shikshan Sanstha (LTJSS) established in 1990.
- The institute strives to bring excellence with the involvement of the governing body and stakeholders to achieve the vision, mission and goals of the institute.
- Effective leadership has developed the organizational culture in the institute.
- The Local Management Committee / College Development Committee give guidelines for framing policies of the Institute in tune with the vision and mission.
- The institute believes in practicing decentralization and involves stakeholder's representatives in decision making.
- The vision and mission of the college is well articulated and drafted in tune with vision and mission of sanstha (LTJSS).
- The institute has developed the strategic plan to achieve the goals which is deployed in a transparent and effective manner.
- Principal & Heads of the department, plan and implement quality improvement strategies taking into consideration the feedback of all stakeholders.
- College has well framed statutory and non-statutory cells as per the norms of regulatory bodies like DTE / AICTE / UGC / University.
- Institute has different cells consisting of stakeholder's representatives.
- Committees/cells work effectively to meet the objectives.
- The college has implemented e-governance in areas like academics, administration, admission etc. to make the system effective.
- Institute has appraisal system to asses performance of teaching and non teaching staff.
- The institute believes that the success of the institute depends on the quality of human resources and focuses on employee performance.
- The Institute provides various welfare measures to the staff.
- Financial support is provided to faculty members for attending conference, workshop, STTPs etc. as per the institute policy.
- All finance and accounts are duly audited regularly.
- The resource mobilization strategy provide guidelines for mobilization and optimal utilization of resources.
- Internal Quality Assurance Cell (IQAC) monitors, reviews, and evaluate academic and administrative processes to ensure the quality.
- The eight programs namely CSE, EE, Civil Engg, BTE, ETC, ME, CHE, EP are NBA accredited.
- The institute is participating in NIRF and placed in gold category in AICTE-CII survey.

- Institute is ISO certified as per 9001:2015
- Academic auidts are conducted regularly

Institutional Values and Best Practices

- Women Empowerment is facilitated by several activities, by which the Institute raises awareness about gender equality and ensures fair treatment for all.
- Safety and security of students and staff are the prime concern of the Institute.
- All essential security arrangements have been made by the institute, including Counselling cell, well-equipped medical room and girls' common rooms.
- The Institute takes conscious efforts to create awareness about energy conservation and renewable energy usage among students.
- LED fittings are installed at various locations in the campus.
- The institute spends a considerable amount of its budget towards Green Practices.
- These include Water conservation through various ways such as Rain Water Harvesting, safe and efficient disposal of all waste generated along with developing and maintaining a green campus which is free of single-use plastic.
- Green , Environment and Energy audits are conducted as per ISO 15000 and 14000 standards.
- Eco friendly transportation is promoted and public transport in encouraged to keep our air quality in check.
- Arrangements have been made to make the campus equally accessible to differently-abled persons.
- The institute has its core values and code of conducts adhered to by all within the campus.
- The Institute engages itself in various social activities for the benefit of the nearby communities, including sharing of infrastructure.
- All the major anniversaries of national importance are celebrated with fervour, which inculcates universal values and emboldens national identity and integrity amongst the students.
- A number of best practices have been explored and implemented, and have been found to have a positive impact upon the all-round performance of students and the Institute.
- Amongst the several practices, following are two which have been showcased here: I)Academic planning and Monitoring, II)Centralized examination and valuation system.
- **A good number of activities are held under the Specialized Course in Research methodology in Engineering and Technology including Applied Science, which highlight the Institute's distinctive performance towards its vision, priority and thrust.**

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	PRIYADARSHINI COLLEGE OF ENGINEERING
Address	Priyadarshini Campus, Near CRPF, Hingna Road, Nagpur
City	Nagpur
State	Maharashtra
Pin	440019
Website	www.pcenagpur.edu.in

Contacts for Communication					
Designation	**Name**	**Telephone with STD Code**	**Mobile**	**Fax**	**Email**
Principal	S.a.dhale	07104-299681	9822577961	07104-299648	principal.pce.ngp@gmail.com
IQAC / CIQA coordinator	S.s.shriramwar	0712-2286881	9975015984	07104-299648	sshriramwar2@gmail.com

Status of the Institution	
Institution Status	Private and Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular

Recognized Minority institution	
If it is a recognized minroity institution	Yes Minotrity status.pdf
If Yes, Specify minority status	
Religious	
Linguistic	Yes
Any Other	

Establishment Details	
Date of establishment of the college	25-07-1990

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

State	University name	Document
Maharashtra	The Rashtrasant Tukadoji Maharaj Nagpur University	View Document

Details of UGC recognition

Under Section	Date	View Document
2f of UGC	22-08-2016	View Document
12B of UGC	22-08-2016	View Document

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	03-07-2021	12	

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

Recognitions	
Is the College recognized by UGC as a College with Potential for Excellence(CPE)?	No
Is the College recognized for its performance by any other governmental agency?	Yes
If yes, name of the agency	AICTE CII Survey
Date of recognition	11-12-2021

Location and Area of Campus				
Campus Type	**Address**	**Location***	**Campus Area in Acres**	**Built up Area in sq.mts.**
Main campus area	Priyadarshini Campus, Near CRPF, Hingna Road, Nagpur	Rural	32.18	48980.95

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	BE,Mechanical Engineering	48	Intermediate	English	60	20
UG	BE,Mechanical Engineering	48	Intermediate	English	60	21
UG	BE,Electronics And Telecommunication Engineering	48	Intermediate	English	120	119
UG	BE,Computer Technology	48	Intermediate	English	120	120
UG	BE,Electrical Engineering	48	Intermediate	English	120	74
UG	BE,Civil Engineering	48	Intermediate	English	120	49
UG	BE,Aeronautical Engineering	48	Intermediate	English	60	58
UG	BE,Information Technology	48	Intermediate	English	120	120
UG	BTech,Chemical Engineering	48	Intermediate	English	60	60
UG	BE,Computer Science And Engineering	48	Intermediate	English	60	60
UG	BE,Computer Science And Engineering	48	Intermediate	English	60	60
UG	BE,Electroni	48	Intermediate	English	60	60

	cs And Communication Engineering					
UG	BE,Electronics And Communication Engineering	48	Intermediate	English	60	60
UG	BTech,Biotechnology	48	Intermediate	English	60	38
UG	BE,Industrial Iot	48	Intermediate	English	60	57
UG	BE,Robotics And Artificial Intelligence	48	Intermediate	English	60	60
UG	BE,Electrical Engineering Electronics And Power	48	Intermediate	English	60	5
UG	BE,Artificial Intelligence And Data Science	48	Intermediate	English	120	120
PG	Mtech,Mechanical Engineering	24	B.E.B.Tech	English	24	4
PG	Mtech,Mechanical Engineering	24	B.E.B.Tech	English	25	9
PG	Mtech,Electronics And Telecommunication Engineering	24	B.E.B.Tech	English	18	3
PG	Mtech,Chemical Engineering	24	B.E.B.Tech	English	18	4
PG	Mtech,Computer Science And Engineering	24	B.E.B.Tech	English	18	0

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PG	Mtech,Electronics And Communication Engineering	24	B.E.B.Tech	English	9	4
PG	Mtech,Electrical Engineering Electronics And Power	24	B.E.B.Tech	English	18	8
PG	Mtech,Electronics Engineering	24	B.E.B.Tech	English	18	8

Position Details of Faculty & Staff in the College

	Teaching Faculty											
	Professor				Associate Professor				Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				0				0				0
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit				0				0				0
Sanctioned by the Management/Society or Other Authorized Bodies				12				20				323
Recruited	10	2	0	12	6	14	0	20	145	178	0	323
Yet to Recruit				0				0				0

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Non-Teaching Staff				
	Male	**Female**	**Others**	**Total**
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				72
Recruited	61	11	0	72
Yet to Recruit				0

Technical Staff				
	Male	**Female**	**Others**	**Total**
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				57
Recruited	51	6	0	57
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.	10	2	0	6	14	0	27	45	0	104
M.Phil.	0	0	0	0	0	0	1	0	0	1
PG	0	0	0	0	0	0	117	133	0	250
UG	0	0	0	0	0	0	0	0	0	0

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

Details of Visting/Guest Faculties				
Number of Visiting/Guest Faculty engaged with the college?	Male	Female	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	3428	108	0	0	3536
	Female	1778	35	0	0	1813
	Others	0	0	0	0	0
PG	Male	44	2	0	0	46
	Female	36	1	0	0	37
	Others	0	0	0	0	0

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

Programme		Year 1	Year 2	Year 3	Year 4
SC	Male	217	307	214	271
	Female	104	183	93	138
	Others	0	0	0	0
ST	Male	7	20	8	10
	Female	6	16	6	6
	Others	0	0	0	0
OBC	Male	347	411	322	387
	Female	204	200	200	195
	Others	0	0	0	0
General	Male	136	214	164	210
	Female	82	86	60	83
	Others	0	0	0	0
Others	Male	74	114	61	88
	Female	51	44	40	53
	Others	0	0	0	0
Total		1228	1595	1168	1441

Institutional preparedness for NEP

1. Multidisciplinary/interdisciplinary:	• Innovation is essential for the education sector. The ways in which curriculum decision making is organised reflects different implicit approaches on how educational systems pertain to promote innovation in education. Curriculum holds an outstanding place when seeking to promote innovation in education, as it reflects the vision for education by indicating knowledge, skills and values to be taught to students. It may express not only "what" should be taught to students, but also "how" the students should be taught. Curriculum innovations can include new subjects, combinations of old subjects or cross-cutting learning objectives. They may also take a form of new content, concepts,

	sequencing, time allocation or pedagogy. • Being an affiliated college we follow the curriculum of affiliating University. • Interdisciplinary programs such as Biotechnology, Defence Technology. • Interdisciplinary projects and research work are carried out by faculty and students. • The Institute is in the process of applying for autonomy. • After getting academic autonomy the more interdisciplinary and multidisciplinary programs will be introduced.
2. Academic bank of credits (ABC):	The registration process in NAD portal and ABC will be completed after getting academic autonomy.
3. Skill development:	PCE aims at empowering and synergizing human resources to achieve excellence in one's life and in the process improve the quality of life of others. It acts as a catalyst in the journey of self-exploration to self-empowerment through its unique training programs for faculty members and students. The details are available in the website Priyadarshini College of Engineering | PCE Nagpur. The brief details are SOFT SKILLS TRAINING DEPARTMENT: Self empowered faculty is capable of improving not only the quality of education but also the quality of life of a student as they are actively engaged in building the human resource of the future. The current industry trend, the industry expectation and students requirement has always created a proof of thoughts for our colleges and has encouraged us to deliver better and better to cater and fulfill both, industry and students' expectation. Keeping this changing trend and demand, Priyadarshini Centre of Excellence has proposed the detailed training proposal for all engineering students of all years. Soft Skills Training SST : The objective of SST is to develop the overall soft skills of the students which are not only required in their corporate life but also during their day to day life. The complete module consists of various topics like confidence building, stage daring, accepting, change, etiquette and mannerism etc. which help them develop as a confident individual. Employability Enhancement training : The Module of EET is designed with the objective to introduce various skills and training required as required for being employable in any industry. Today the industry needs good people who are self starter employees. This program is designed from basics Resume, GD PI Self

	intro, stress management, team playing, etc. are topics for example. COUNSELING AND TESTING CELL During the last decade, university and colleges around the world have noticed the growing number of students seeking counselling services. The psychological counselling services were active from the initiation of Priyadarshini centre of excellence. With growing needs and spectrum of the concerned areas, the requirement of a formal body was sensed. Thus, the Counselling and Testing Cell, under the aegis of Priyadarshini Centre of Excellence was inaugurated on August 6th, 2015 in Priyadarshini Institute of Engineering and Technology. The event was manifested with a Mental Health Awareness Exhibition and was inaugurated by Dr Rupashree Khubalkar,Head P.G.Dept.Of Psychology,RTMNU. LAKSHYA : This is the newest member of the various training modules. This module is introduced with the objective of creating a platform for the eligible and interested students only where they can explore themselves and experience the actual recruitment drive scenario. CAMPUS TO CORPORATE : This module focusses and ensures that the EET Module Practiced and revised thoroughly so that the students should be ready for the big transition of their life. i.e. Campus to Corporate. Detailed practice on GD , KYC, Email writing etc. are some of the topics of the module. These topics help them to get through selection process of corporate/ industry.
4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):	• Language is an integral part of human life. It plays a vital role in the learning process and knowledge enhancement of students. • The RTMNU syllabus is having courses focusing on Indian constitution and culture • The Institute is in the process of applying for autonomy. • After getting academic autonomy the more interdisciplinary and multidisciplinary programs will be introduced.
5. Focus on Outcome based education (OBE):	• Outcome Based Education is an approach to education in which decisions about the curriculum, instruction and assessment are driven by the learning outcomes that the students should demonstrate at the end of a program or a course. • In outcome-based education, "product defines process". • It is the opposite of input-based education where the emphasis is on the learning and the system is happy to accept whatever is the result. • The Vision,

	Mission of the Institute as well as programs are framed through a well defined process involving all stakeholders. • The PEOs and POs of the programs are defined in line with the accreditation bodies and regulatory authorities. • The curriculum is OBE based. Faculty members are developing the COs for their courses based on the guidelines issued by IQAC and PAC. • There is a structured framework for attainment of COs and POs using Direct and Indirect assessment tools. • Every Department calculates the Program and Course attainment in order to understand the effectiveness of the program in imparting the Knowledge, Skills and Behavioral improvement. • The departments that could match the Program outcomes with the target plan methods to maintain the good performance in the future. • The Departments that fall short of the target find out the reason for the gap by analysing the Po-Co matrix. The corrective measures in terms of syllabus upgradation, teaching methodologies and any other necessary measures are devised to serve the target audience with more effectiveness and efficacy. Being the system in practice eight UG programs i.e. CSE, CE, ETC, EE, EP, CHE, ME and Biotech are accredited by NBA.
6. Distance education/online education:	• The Covid-19 pandemic has affected our lives in various ways. All the countries across the globe resorted to imposing lockdowns to contain the spread of the virus. Lockdowns in turn disrupted the normal way of life. Since schools and colleges had to be closed because of the lockdowns, students have been studying online. Teachers have been conducting classes online over various applications such as google meet, zoom etc. • India as a country had never taken to online education before but the pandemic forced us to resort to it sooner than we thought we were ready to adapt to it. This has had various implications for students and the education system. The fact that we have successfully managed to ensure that education is not hampered because of the pandemic is highly commendable, however, there are certain things that reflect the grey areas where we as a country need to work on. • During the pandemic year from march 2020 the Institute has successfully resorted to online education mode using sophisticated tools and techniques which has ensured academic justice to all the learners. The faculty members they

	moved ahead on the learning curve by achieving expertise in various teaching technologies such as Zoom, Google meet, WebEx to name a few. • The perspective plan of the Institute includes starting of vocational courses through ODL mode in the institution after the result of NAAC A&A process. • The institute practices blended learning.

Extended Profile

1 Program

1.1

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

2020-21	2019-20	2018-19	2017-18	2016-17
377	383	401	401	401

File Description	Document
Institutional data prescribed format	View Document

1.2

Number of programs offered year-wise for last five years

2020-21	2019-20	2018-19	2017-18	2016-17
11	12	16	16	16

2 Students

2.1

Number of students year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
2847	2922	3151	3230	3319

File Description	Document
Institutional data in prescribed format	View Document

2.2

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

2020-21	2019-20	2018-19	2017-18	2016-17
370	429	499	499	499

File Description	Document
Institutional data in prescribed format	View Document

2.3

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

2020-21	2019-20	2018-19	2017-18	2016-17
984	873	861	848	864

File Description	Document
Institutional data in prescribed format	View Document

3 Teachers

3.1

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

2020-21	2019-20	2018-19	2017-18	2016-17
204	170	202	235	266

File Description	Document
Institutional data in prescribed format	View Document

3.2

Number of sanctioned posts year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
204	170	202	235	266

File Description	Document
Institutional data in prescribed format	View Document

4 Institution

4.1

Total number of classrooms and seminar halls

Response: 52

4.2

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

2020-21	2019-20	2018-19	2017-18	2016-17
870.77	1257.36	1233.36	1493.36	1834.80

4.3

Number of Computers

Response: 794

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curricular Planning and Implementation

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

Response:

Curriculum delivery Planning (Academic Planning)

Academic Calender :-The institute is affiliated to Rashtrasant Tukadoji Maharaj Nagpur University and follows the curriculum prescribed by the university.The Academic Calendar is finalized in alignment with the University calendar.

Academic Policy:- Before the start of every academic session, Principal conducts meeting with Vice-Principal , Deans , Heads of all the Departments, and finalize Academic Policy which covers following points.

Teaching Load Distribution:-The teaching load (theory and practical) is appropriately allotted among the faculty members. Distribution of subjects is according to the choices given by the faculty and as per the requirement of the department.

Time Table:-Time table is prepared as per the teaching scheme of RTM Nagpur University and departmental requirement.

Preparation for Course Delivery:-

Teaching Plans (Theory & Practical) and Tutorial Plans are prepared by the subject teachers before the start of every semester.

Lesson plan is prepared by the subject teacher prior to the delivery of lecture. Course files are prepared by all faculty members which include Syllabus, Program Outcomes, Program specific outcomes and Course Outcomes, CO-PO(s), CO-PSO(s) Mapping & Attainment, Teaching Plan , Tutorial Plan, Tutorial Sheets, Academic calendar, Class Assessment Tests (CAT) question Bank, Assignment Questions, University Question Papers & model solution, CAT & Sessional examination question papers, etc.

Teaching Learning Process:- Each department has its own Vision and Mission which matches with the Institutional Vision and Mission. PEOs, POs, PSOs and COs are defined for each program. To complement the conventional teaching methods, the departments emphasize on following practices. Expert lectures, Video lectures of expert from IITs and NPTEL lectures The use of ICT tools Visit to industry for practical exposure. Conferences, Workshops, seminars and tech fests are organized. Study groups for courses are formed for peer-to-peer learning. Group discussion/Technical quiz/Surprise test. For the preparation of GATE, classes are conducted. Action plan for ensuring effective curriculum delivery Effective implementation of curriculum is periodically done by departmental and central academic committee. The continuous academic monitoring is done through academic review which is taken every fortnightly. Dean

Academics after reviewing the Academic report, communicates the discrepancies if found to Head of the department. HOD takes necessary action for the improvement.

Academic Audit is conducted at department and Institute level to verify the content of course file, Evaluation Process and Laboratory Conduction. Academic feedback is taken from the student on the basis of various parameters to improve teaching learning process. Feedback is communicated to the concern faculty for necessary corrective measures. The attainment of COs, POs and PSOs is calculated using direct and indirect assessment tools. Remedial classes are conducted for academically slow learners. For effective understanding of the course, ICT tools and other pedagogical practices are used. Guest lectures, workshops, seminars , industrial visits, training programs related to subjects are organized for effective understanding of the subject and attainment of POs Course end survey for every subject is taken from the students to analyze their understanding of the subject Laboratories have standard operating procedure.

File Description	Document
Link for Additional information	View Document

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

Response:

Before the commencement of each semester, the university publishes an academic calendar. The University calendar of events typically depicts important timelines like the commencement of Classes, Last working day, Commencement of Practical Examinations, Commencement of End semester examinations. Considering the start and end of the semester, as per the university calendar. The academic calendar is prepared by the Principal, Dean (Academics) in consultation with HoD(s). In the beginning of the academic session, the students are apprised of the academic calendar and the same is uploaded on the college website and displayed on notice boards and at strategic locations. Only the head of the institution can incorporate minor changes in the academic calendar which he may deem fit considering the unforeseen circumstances. The Schedule of all examinations is given in the academic calendar.

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

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

Internal Assessment Exams:

The course teachers announce the syllabus and display question bank for CAT-I, CATII, Assignment-I and

Assignment-II as per the schedule goven in academic calendar. Assignments are submitted by students as per the dates given in Academic calendar The slots of the CAT- I, CAT-II, Assignment-I, Assignment-II and sessional exam are mentioned in the Academic calendar. Examination schedule of these exams is announced and displayed in advance by Dean (Academics). Timely valuation of all examination is ensured as per the schedule given in Academic calendar. Display of marks is also as per the schedule given in academic calendar.

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

File Description	Document
Link for Additional information	View Document

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

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

Response: A. All of the above

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

1.2 Academic Flexibility

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

Response: 100

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

Response: 11

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

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

Response: 49

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

2020-21	2019-20	2018-19	2017-18	2016-17
06	09	12	11	11

File Description	Document
List of Add on /Certificate programs	View Document
Any additional information	View Document

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

Response: 36.04

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

2020-21	2019-20	2018-19	2017-18	2016-17
958	896	956	1561	1236

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

1.3 Curriculum Enrichment

1.3.1 Institution integrates crosscutting issues relevant to Professional Ethics ,Gender, Human

Values ,Environment and Sustainability into the Curriculum

Response:

Gender

Equal opportunities are given to both the genders in terms of admissions, employment, co-curricular and extra-curricular activities empowerment and carreer promotions etc., so gender issues do not arise. The institute has constituted various committees including Women Development Cell, Women Redressal Cell. These committees are formed to promote gender equity and also deal with related issues of safety and security of girl students and ladies staff.

Environment and Sustainability:

- In order to integrate the cross cutting issues relevant to environment and sustainability, University has included different types of courses in the curriculum to develop awareness among students about environment and Sustainability.
- All programs have a compulsory course of Environmental Studies in second year curriculum . In this subject, students study basic components of environment and its application to tackle issues such as pollution control, green gases etc.
- In Civil Engineering program, students learn Environmental Engineering 1 and 2 as core subjects . Students opt as electives from Environment and sustainability , Air pollution and solid waste management, Water and waste water treatment. Many Projects are undertaken by final year students relating to environmental issues like climate change, water pollution, sewage treatment, air pollution, rain water harvesting, runoff modeling, flood prediction, green concrete etc.
- Sustainability issues such as use of natural resources in building construction, materials, energy conservation etc. are also dealt with projects.
- Electrical Engineering Program has Non Conventional Energy Source subject in III semester which deals with study of different Non Conventional Energy Sources. Mechanical Engineering Program has elective course Energy Conversion –III.

Human values and professional ethics:

- In order to integrate the cross cutting issues relevant to human values and professional ethics, University has included different types of courses in the curriculum.
- First year curriculum is common for all the programmes, which includes a compulsory subject on Ethical science. Syllabus of Information Technology includes a subject on Social and Ethical aspects of IT which helps the students to understand and find an ethical solution for the workplace and society issues which hinders the society at large. This creates an awareness on business ethics and human values in students.

- Even though it is in academic curriculum the college takes efforts for integration of ethical and human values through extracurricular activities such personality development, yoga, meditation etc.
- The institute is organizing various programmes under NSS and YRC to inculcate human values among students.
- Different activities like guest lecture, seminar and workshops relating to the professional ethics and human values have been organized for students.
- Different social activities have been initiated by the college like Health and Hygiene awareness

- programmes, Medical check-up camps, AIDS awareness programmes, Blood donation camps, etc.
- Apart from this, industrial visits are arranged for the students to know about the work culture and practices in the industries. Every year, in summer and winter vacation, the students are encouraged to undergo internship and training in leading organizations. This facilitates the students to get an exposure to a professional environment by solving problems and designing solution professionally.

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

Response: 1.02

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

2020-21	2019-20	2018-19	2017-18	2016-17
4	4	4	4	4

File Description	Document
MoU's with relevant organizations for these courses, if any Average percentage of courses that include experiential learning through project work/field work/internship	[View Document](#)
Any additional information	[View Document](#)

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

Response: 0.77

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

Response: 22

File Description	Document
List of programmes and number of students undertaking project work/field work/ /internships	[View Document](#)
Any additional information	[View Document](#)

1.4 Feedback System

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

Response: A. All of the above

File Description	Document
Any additional information (Upload)	View Document
URL for stakeholder feedback report	View Document

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

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

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

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

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Average Enrolment percentage (Average of last five years)

Response: 65.55

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

2020-21	2019-20	2018-19	2017-18	2016-17
409	478	650	712	799

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

2020-21	2019-20	2018-19	2017-18	2016-17
739	859	997	997	997

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

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

Response: 83.78

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

2020-21	2019-20	2018-19	2017-18	2016-17
288	330	445	417	456

File Description	Document
Average percentage of seats filled against seats reserved	[View Document]
Any additional information	[View Document]

2.2 Catering to Student Diversity

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

Response:

The admission of first year B.E./B.Tech. Students are through a single window system as per state government of Maharashtra. The induction program organized for the first year students aims at enhancing the language skills, motivation, personality development and preparing them to align with Ethos and RTMNU curriculum. The students are prepared to make the best use of the time. A special training is imparted during the induction programme to fine tune learners language skills to harness their special talent to channelise their core competencies. This special emphasis leads to improvement in the overall academic performance of the learners. Apart from the induction programme, the students also learn about the tradition, organisational skills, leadership qualities, team work during their active participation in various curricular and co-curricular activities from various clubs.

For the lateral entry students, admitted directly to the second year with good practical knowledge may find some difficulty in analytical subjects, hence to bridge the gap special Mathematics classes are conducted.Fundamentals of computer are taught to students who belongs to non computer and mathematica background during their higher secondary education to help them to learn the programming and software related courses in forthcoming higher semester.

Our faculty of English has been supporting our students to make the transition from vernacular to English, as the medium of instruction is English. The language proficiency training as an intiative of the college is well-received and appreciated by students and parents. During first semester, students are categorized into advanced and slow learners based on their academic performance in internal assessment examinations, model exams and university examination.

Advanced learners : Advanced Learners (bright students) are those students who are ahead on the learning curve and require advanced technical know-how. Advanced learners are identified based on their performance in University Examination of previous semester and internal examinations.

Following activities are conducted for Advanced Learners:

i) Guiding for career planning.

ii) Research paper reading and discussion or seminar on the advanced topic

iii) Guiding and encouraging communicating research papers in conferences/Journals

iv) Guiding the students for competitive examinations.

v) Training programs for gaining advanced technical know-how.

vi) They are encouraged to participate in various symposiums like quiz, poster presentation, Conferences, inter institution competition etc.

Slow Learners: The connotation of academically slow learner (Weak Students) means those who could not keep pace with the classroom teaching needs extra attention so as to bring such students at same level with the rest of the students of the class. Slow learners are identified based on their performance in University Examination of previous semester and internal examinations. Faculty members take following measures for improving academic performance of these students.

(i) Remedial or Extra classes are conducted with appropriate focus on the subject/topic codes in which the students are found to be slow learners

(ii) Individual academic counselling is done by concerned subject teacher .

(iii) Student help desk.

(iv) study groups of students are formed for peer-to-peer learning.

(v) Individual counselling is done through mentoring scheme/Teacher guardian scheme.

File Description	Document
Past link for additional Information	[View Document](#)

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

Response: 14:1

File Description	Document
Any additional information	[View Document](#)

2.3 Teaching- Learning Process

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

Response:

PCE adopts student centric methods to make the Teaching Learning process more effective for the holistic development of students through Experiential learning, Participative Learning and Problem solving Methodologies. Faculty of the institute imparts subject knowledge as per the syllabus and curriculum and foster self management and usage of knowledge, holistic development and skill development through participatory learning activities.

The following activities have been adopted by the faculty and they adorn student-centric methods:

Experiential learning:

Laboratory sessions

Curriculum was designed in such a way that sufficient emphasis is laid on hands-on experiments required for comprehensive understanding of the subjects. The laboratories, software and model experiments are beyond curriculum and oriented towards R & D.

Industrial visits

Study without practical approach is not considered as worth in this challenging and competitive environment. Putting that aim in mind we always take our students to various industries in order to make them understand the classroom concepts in a better way.

Field works and Internships

The main motto of Field works/Internships are educational and career development opportunities, providing practical experience in a field/discipline.

Industry Oriented Mini Projects

Students are encouraged to take up any industry oriented application in his/her field of interest in their respective branch/field.

Community outreach programme

Students are taken to community visits under social innovation and practise. We will make them to understand real world societal problem. After visit they should understand and design solutions for at least one problem.

Participative Learning:

Expert Talks, Workshops and seminars

Students are encouraged to participate in workshops expert talks and seminars organized by various professional societies, esteemed institutes and industries.

Group Discussions and Role plays

The purpose of a group discussion is not to win an argument but it is to help each group member explore and discover personal meanings of a text through interaction with other people. In the Language lab students will get an opportunity to participate in group discussions. To improve the students presentation skills and communication skills our language lab makes students to do role plays

MOOCs: MOOCs committee encourage students to do online courses to explore beyond the curriculum

Problem Solving Methodologies:

Developing Models in Engineering and Science:

Science often involves the construction and use of a wide variety of models and simulations to help develop explanations about natural phenomena. Models make it possible to go beyond observables and imagine a world not yet seen.

Project Based Learning :

Project Based Learning is a teaching method in which students learn actively by engaging in real-world and personally meaningful projects. Students work on a project over an extended period of time from a week up to a semester that engages them in solving a real-world problem or answering a complex question.

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

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

Response:

Education around the world is experiencing major paradigm shifts in educational practices of teaching and learning under the umbrella of ICT enabled learning environment. Whereas learning through facts, drill and practices, rules and procedures was more adaptive in earlier days, learning through projects and problems, inquiry and design, discovery and invention, creativity and diversity, action and reflection is perhaps more fitting for the present times. The major hallmark of this learning transition is from teacher centered to learner focus paradigm. During the last three decades, the changes in educational environment have been phenomenal. The model, focus, role of the learner and technology has been changed drastically from traditional instruction to virtual learning environment by integrating ICT. PCE emphasis on ICT infusion in pedagogy to improve learning, motivate and engage learners, promote collaboration, foster enquiry and exploration, and create a new learner centered learning culture. It permits the move from reproductive model of teaching and learning to an independent, autonomous learning model that promotes initiation, creativity and critical thinking with independent research. Learners are expected to collect, select, analyze, organize, extend, transform and present knowledge using ICT in authentic and active learning paradigm. Teachers are expected to create a new flexible and open learning environment with interactive, experiential and multimedia based delivery system. The adaptation of ICT tools help to open up opportunities for learning by enabling four major key processes in transforming teaching and learning as follows:

- **Access** ideas and information from diverse sources through searching, locating, selecting, and authenticating material in a wide range of multimedia forms;
- **Extend** ideas and information through processing, manipulating, analyzing & publishing material in different multimedia forms;
- **Transform** ideas and information into new or different forms through synthesizing, modelling, simulating and creating material in many multimedia styles and formats; and
- **Share** ideas and information across local, national and international networks by interacting electronically with others in actual and/or delayed time.

Faculties utilize three types of ICT tools such as

1. **Generic tools for learning :** Starting from productivity tools to simulation & modelling to access, extend, transform and share information e.g. Licensed and open source software for lab and Projects, APSSDC Certification courses
2. **Content-based resources :** to access a vast source of educational resources that effectively can be integrated with the curriculum objectives e.g MHRD-NMEICT, NPTEL-SWAYAM, Blogs, NDL, SPOKEN TUTORIAL
3. **Interactive instructional courseware**: Self-paced learning materials e.g Google Class Room, MOODLE/ LMS, Video Lecture, Course material in website etc

The integration of ICT with teaching and learning has produced some of the significant positive gains in learners' knowledge, skills and attitudes by providing the following key advantages:

• Explore and represent information dynamically and in many forms

• Become socially aware and more confident

• Increase motivation

• Communicate effectively about complex processes

• Develop better understanding and broader view of processes and systems

• Greater problem solving and critical thinking skills.

File Description	Document
Provide link for webpage describing the ICT enabled tools for effective teaching-learning process	[View Document](#)

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

Response: 14:1

2.3.3.1 Number of mentors

Response: 204

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

2.4 Teacher Profile and Quality

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

Response: 100

File Description	Document
Year wise full time teachers and sanctioned posts for 5years(Data Template)	View Document
Any additional information	View Document

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

Response: 22.03

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

2020-21	2019-20	2018-19	2017-18	2016-17
53	46	43	48	41

File Description	Document
List of number of full time teachers with Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. and number of full time teachers for 5 years (Data Template)	View Document
Any additional information	View Document

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

Response: 9.36

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

Response: 1910

File Description	Document
List of Teachers including their PAN, designation, dept and experience details(Data Template)	View Document
Any additional information	View Document

2.5 Evaluation Process and Reforms

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

Response:

Centralised Examination and Evaluation System : The institute has adopted Centralised Examination and Evaluation System to improve the Continuous Internal evaluation process.

Objectives of evaluation System are:

(a) To make the system of evaluation adequate and comprehensive.

(b) To provide a feedback: 1. to the students regarding their strengths and weaknesses; and 2. to the teacher as to how far she/he has been able to benefit the students and to modify his/her approach and teaching methods.

The Practice: Centralized Tests Two centralized Class Assessment Tests and one end semester examination (Sessional Examination) per semester are conducted. Class Assessment Test-I is based on Unit 1 and Unit 2 and Class Assessment Test-II is based on Unit 3 and Unit 4 of syllabus. Sessional Examination is conducted once at end of the session based on University exam pattern which covers complete syllabus.

Two Assignments are given in a semester. Assignment-1 is based on first 3 units and Assignment-2 covers remaining 3 units of syllabus. Unit wise question banks are provided for all subjects.

The question bank is moderated by faculty members of respective subject groups at department level .

Teacher Assessment: Subject teacher conduct various academic activities like surprise test, objective type test, Technical quiz, open book test etc for assessing the students.

Evaluation Process: A general thrust is given on the external element in the end semester examinations, such as external paper setters, moderators of the question papers and evaluators of the answer scripts. Three sets of question papers are prepared by different teachers with marking scheme and are moderated by teachers of respective subject groups at central level. After moderation of question papers, the Moderation committee handovers the papers to printing Committee.

Printing committee handovers the required number of copies of question papers to the Exam Incharge one hour before the scheduled time of the paper.

Model Answers and marking scheme is prepared by every subject teacher before valuation. Class

Assessment Test: Valuation of Class Assessment Test is done by the respective subject teachers within two days from the exam. Marks are displayed on dates mentioned in the academic calendar by faculty members. Assessment copies are shown to the students. Assignments are evaluated by the respective subject teachers within two days after submission date. Proper remarks are mentioned on assignment copies.

Sessional Examination: Valuation is done by the respective subject teacher within two days through centralised valuation system. Sample Answer sheets are moderated by external moderators. Answer sheets are shown to all the students and answers are also discussed with the students . After satisfaction students put their signatures on the answer sheets. Some questions have specific remarks of the valuer regarding deduction of marks .

Impact of the Practice· Students' involvement in the process has improved Students get acquainted with the University pattern of examination This practice has helped in time management and optimization of resources Uniformity in valuation is maintained because of the availability of marking scheme Transparent and fair valuation is done

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

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

Response:

Mechanism of Internal Assessment and Transparency in Evaluation System

- Schedule of Class Assessment Test & Sessional Examination and assignment is given in Academic calendar which is displayed well in advance before commencement of session.
- The course teachers display question bank in advance for CAT-I and CAT-II which is conducted for one hour as per academic Calendar.
- Evaluation method comprises of internal examinations held progressively during the semester and is designed to check and report the periodic performance of the student.
- All the records and data bank of attendance in internal Examinations, Question papers, valued answer sheets/copies, summary of marks sheets, are properly maintained by the teachers for academic monitoring/academic audit.

There is complete transparency in the internal assessment for each assessment method as described below.

Model Answers and marking scheme is prepared by every subject teacher before valuation.

Class Assessment Test:

- After Valuation, marks are displayed on dates mentioned in the academic calendar by faculty members.

- Assessment copies are shown to the students. Some questions have specific remarks of the valuer for awarding less marks.

Sessional Examination:

- A general thrust is given on the external element in the end semester examinations, such as external paper setters, moderators of the question papers and evaluators of the answer scripts. Three sets of question papers are prepared by different faculty members, which are moderated by faculty members of respective subject groups at central level.
- After moderation of question papers, the Moderation committee hands over the papers to printing Committee.
- Printing committee hands over the required number of copies of question papers to the Exam Incharge one hour before the scheduled time of the paper

Practical Examination: Evaluation is done with transparency based on different parameters like Teachers Assessment, Practical Records, Performance and Viva-Voce.

Assignments: Assignments questions are discussed with students. The students submit two assignments .

Internal Assessment Marks: Internal Assessment Marks which comprises teacher assessment, CAT-1, CAT-2, Assignments and sessional exam marks are conveyed to students. Evaluation parameters and weightage

Mechanism at College Level:

- If a student is not able to appear for examination due to medical or any genuine reason , examination is conducted for that student as per norms, provided that he/she submits application with proper documents.
- If any student scores less marks and wants to improve in that subject,he/she can appear for the improvement examination.
- The grievances of the students with reference to assessment are made clear by showing his/her performance in the answer sheet.
- Any corrections in the total of marks or assessment of answer books as identified by students are immediately done by the faculty members.
- Any student who is not satisfied with the assessment and award of marks may approach the concern HOD who can intervene and seek opinion of another course teacher.
- The Institute follows open evaluation system where the student performance is displayed on the notice board and the same is informed to the parents.

University level: As per the guidelines given by the University time to time.

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

2.6 Student Performance and Learning Outcomes

2.6.1 Programme and course outcomes for all Programmes offered by the institution are stated and displayed on website and communicated to teachers and students.

Response:

Mechanism of Communication of Program outcomes, program specific outcomes and course outcomes

The Vision, Mission, PEOs, POs and PSOs of all departments are published at :

1.College website http://www.pcenagpur.edu.in

2.HOD cabins , Meeting rooms , Departmental Library ,Department corridors

3.Departmental Notice Boards, Class Rooms, Laboratories Notice Board

4.Course Files ,Laboratory Journals

5.Departmental News Letters & Departmental Magazines

Course Outcomes are published at

1.College website http://www.pcenagpur.edu.in

2.Communicated by course teachers to the students.

3.Available in Course files

4.Available in lab manuals and practical records of students.

Process of dissemination of Vision, Mission and POs / PSOs among the stakeholders and it's awareness:

1) The Vision, Mission and POs / PSOs are published on college website, departmental website through which it is disseminated to those stake holders who visits these websites.

2) The Vision, Mission and POs / PSOs are displayed on flex board in HoD cabin, meeting room, departmental library, department corridors, Departmental Notice Boards, Class Rooms, and Laboratories Notice Board etc. This also is one of the way of conveying these to stake holders particularly students, faculty, parents, visitors etc.

3) The Vision, Mission are published in Laboratory journals, and page containing POs / PSOs is attached in practical journal by the students. This is circulated among the students and hence is also one of the way of conveying these to students, faculty, parent and other stake holders.

4) Department conducts meeting of External stakeholders like industry persons, employer, alumni, parents

and Internal Stakeholders i.e. students, faculty etc. once/twice in a year. Tentative schedule of these meeting is prepared by department in the faculty meeting. Procedure for conduction of these meeting is also discussed with senior faculty members of the department. In each meeting Vision, Mission and POs / PSOs of the department are conveyed to all the internal and external stakeholders. This way all the stakeholders who attend meetings become aware of Vision, Mission and POs / PSOs of the department. Process of dissemination of COs among the students: Newly admitted students are informed about COs in induction program. Every teacher, before start of his/her first lecture, informs course objectives and course outcomes. After completion of each unit of the course, teacher again informs about the CO. COs are mentioned in Assignment , CAT question bank and laboratory experiment manuals.

File Description	Document
Past link for Additional information	[View Document](#)

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

Response:

Attainment of COs

- Course outcomes (COs) are defined for each subject based on the different units of the syllabus.
- The CO attainment is calculated based on students' performance in various internal examinations and University examination in the scale of 1-3.
- It is observed that the attainment varies depending upon the difficulty level of the subject and may be in range of 1 to 2 for some subjects, which increases as students get accustomed to the Engineering curriculum and may increase in the range of 2-3 by the time they reach final semester.

Method of Measuring Attainment of CO:

- CO attainment is measured in terms of actual percentage of students getting set (target) percentage of marks. If targets are achieved then all the course outcomes are attained for that year.
- If targets are not achieved, the Programme put in place an action plan to attain the target. The attainment levels are set considering average performance levels in all examinations throughout the semester or year.
- Attainment level is measured in terms of student performance in internal assessments with respect to the COs of a course and the performance in the University examination.
- Attainment levels are stated in terms of percentage of students getting more than the targeted average marks.
- Assessment Tools, process, and levels for CO attainment used are given in additional information.

Attainment of POs and PSOs

1. Program Outcomes are defined by National Board of Accreditation, New Delhi while the Program Specific Outcomes (PSOs) are defined by individual programs. COs are mapped with Program outcomes and Program Specific Outcomes (PSOs).
2. The PO and PSO attainment is calculated for complete batch of students which progresses through

all the courses of a particular program including Co-curricular and Extra-curricular activities and the project work. The attainment is calculated based upon the association level, i.e., low-moderate-high, of a particular course/ CO/ activity with respect to the PO or PSO in the scale of 1-3.

3. Method of Measuring Attainment of PO and PSO: The process for assessing program outcomes and Program Specific Outcomes is given below. Direct and indirect assessment tools are given in additional information.

The program assessment committee reviews all course outcomes of the courses which are relevant to the particular PO or PSO. Specifically, the task is to review the course outcome assessment results towards PO assessment for each course and to draw some conclusions on how the program outcomes are attained. Direct PO attainment is calculated from CO attainment of the courses addressing the particular PO or PSO.

The average CO attainment level of all courses addressing the particular PO or PSO is calculated. Indirect PO attainment is calculated using impact of assessment tools like graduate survey, alumni survey extra-curricular and co-curricular activities etc. Finally, direct and indirect assessment is combined with 80% weightage to direct tools and 20% weightage to indirect tools to calculate the attainment level for that particular PO or PSO.

File Description	Document
Paste link for Additional information	[View Document](#)

2.6.3 Average pass percentage of Students during last five years

Response: 95.08

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

2020-21	2019-20	2018-19	2017-18	2016-17
976	873	774	783	812

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

2020-21	2019-20	2018-19	2017-18	2016-17
984	873	861	848	864

File Description	Document
Upload list of Programmes and number of students passed and appeared in the final year examination (Data Template)	[View Document](#)
Upload any additional information	[View Document](#)

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Response: 3.79

File Description	Document
Upload database of all currently enrolled students (Data Template)	[View Document](#)

Criterion 3 - Research, Innovations and Extension

3.1 Resource Mobilization for Research

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

Response: 123.06

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)**

2020-21	2019-20	2018-19	2017-18	2016-17
33.0	68.14	19.82	0	2.1

File Description	Document
List of endowments / projects with details of grants	[View Document](#)
Any additional information	[View Document](#)

3.1.2 Percentage of teachers recognized as research guides (latest completed academic year)

Response: 7.84

3.1.2.1 **Number of teachers recognized as research guides**

Response: 16

File Description	Document
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)

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

Response: 32.5

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

2020-21	2019-20	2018-19	2017-18	2016-17
3	5	4	0	1

3.1.3.2 **Number of departments offering academic programes**

2020-21	2019-20	2018-19	2017-18	2016-17
8	8	8	8	8

File Description	Document
List of research projects and funding details	[View Document](#)
Any additional information	[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:

PCE has dedicated Innovation and Incubation Centre, that provides a platform for students, research scholars, researchers, field experts and industry personals to interact and work in partnership to initiate breakthroughs: fusing the uncommon, taking risks and thinking big.

Innovation Centre:

With the rapid development in science and technology, PCE-INNOVATION CENTRE has been established. A distinct office for the innovation activities was setup. The main objectives are to:

- Invoke innovative ideas and increase job opportunities.
- Motivate students to participate in technology transfer management.
- Increase effectiveness and utilization of resources on research and development activities.

The MOUs established helps broadening the scope of research, its utilization and intellectual property rights.

Incubation Centre:

The Incubation Centre was setup and it provides creative atmosphere where new ideas and projects can flourish. Incubation centre offers

- A Platform on business incubation and innovation to provide spaces for incubation, counselling services on business management and technological solutions. Interaction with the industries and other peers, finding the workable issues and provide appropriate solutions.
- A systematic process designed for innovators to convert their concepts, ideas into product. The centre works on the growth of staff and students, identifying the tools, devices, technologies and constructing a network for commercializing the products or services. Innovators and entrepreneurs are benefited in technology, expertise and facilities.

Entrepreneur Development Cell: The ED Cell was established with a faculty Coordinator and in the individual department a faculty as a committee member. The key vision of the cell is to shape the future entrepreneurs to transform the world for a better living. The mission statement for the cell is to create and foster entrepreneurial culture among students by identifying, training and motivating students to become entrepreneurs. The Cell has the objective to create awareness of opportunities and benefits on entrepreneurship for students and make their dream business through innovative products and to develop entrepreneurial culture. Further, the cell strives to create sustainable start-up business and provide awareness among students on industrial business and availability of financial assistance to start ventures.

Overall Objectives:

1. Transfer of knowledge, methodology and practice of technology-based entrepreneurship and support to students with creative thoughts and ideas.
2. Encourage students and faculty to participate in innovation, idea generation and product development.
3. Create awareness on patents among faculty, students and researchers.
4. Link higher educational institutes and industries.
5. Create platform to share knowledge and implement real time research and applications Motivate and create a permanent network among the students and researchers for knowledge exchange and technology transfer.

The key idea is to connect/link companies, investors, researchers and innovating minds under one roof.

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

Response: 41

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

2020-21	2019-20	2018-19	2017-18	2016-17
10	12	9	6	4

File Description	Document
List of workshops/seminars during last 5 years	[View Document](#)
Any additional information	[View Document](#)

3.3 Research Publications and Awards

3.3.1 Number of Ph.Ds registered per eligible teacher during the last five years

Response: 1.15

3.3.1.1 **How many Ph.Ds registered per eligible teacher within last five years**

Response: 23

3.3.1.2 **Number of teachers recognized as guides during the last five years**

Response: 20

File Description	Document
List of PhD scholars and their details like name of the guide , title of thesis, year of award etc	[View Document](#)
Any additional information	[View Document](#)

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

Response: 1.15

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

2020-21	2019-20	2018-19	2017-18	2016-17
54	49	75	44	25

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

3.3.3 Number of books and chapters in edited volumes/books published and papers published in

national/ international conference proceedings per teacher during last five years

Response: 0.8

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

2020-21	2019-20	2018-19	2017-18	2016-17
45	23	42	21	41

File Description	Document
List books and chapters edited volumes/ books published	[View Document](#)
Any additional information	[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:

National Service Scheme (NSS):

- The NSS Unit of Priyadarshini College of Engineering, Nagpur, organized different societal activities. These activities are conducted in the coordination with the NSS unit of Rashtrasant Tukadoji Maharaj Nagpur University.
- The college has very vibrant NSS unit having 100 students from various departments. It is monitored by NSS Program Officer and Departmental faculty coordinators.
- The activities are undertaken by the students like Rural Development, Health Checkup, Blood Donation, Help to needy, Poor and Old people, Tree Plantation, Environment Awareness, Village Development and A wareness of Swaccha Bharat Abhiyan, Health Awareness, women safety, gender equality, etc, every year.
- The unit is approved under government scheme. Promotion of health awareness and Yoga is regular activity of the college.
- Regular health awareness programmes are undertaken for faculty and students.
- The social outreach programs includes awareness programs such as Gram Swachhta Abhiyan (to clean the village), Water Conservation, Computer Literacy, Blood Donation Camps, Educating Rural populace, awareness a gainst the Plastic Bag, Elocution and Drawing competition on BETI BACHAO BETI PADHAO, a Program on Women Safety organized in association with MIDC Poli ce Station, Traffic Safety awareness Program etc.
- The institute is undertaking its extension activities in nea rby adopted Issasani village.
- The NSS unit works on sensitising the students on various societal issues and how to involve their

self for the growth and development of Nation.

PCE Rotaract Club (Supported by Parent Rotary Mihan Town District 3030)

- The PCE Rotaract Club has been installed by Parent club Rotary Mihan Town District 3030). This Club has many industrialists as its members.
- This gives the club to work in close collaboration with Industry on various social projects.
- The Rotaract Club ensures that the students finds themselves as responsible individual of the society and contribute towards various issues in the country.
- The club ensures to inculcate a account ability within the student.
- The various projects we undertake are as follows:
- **Rotary Sankalp :** Rotary Club of Nagpur Mihan Town conducts a two day residential Camp as Rotary Sankalp a State Level program for Village Empowerment in association with Vishwa Yuwak Kendra (VYK) and Indian Institute of Youth Welfare (IIYW).
- **Mega Blood Donation Camp :** Mahavir Boys hostel in collaboration with GMC Compound
- **Wall Painting :** PCE canteen wall
- **Sanskriti Celebration:** with Mihan town at Bajaj Nagar
- **Nirmalya Collection** : At Futala lake Nagpur on the occasions of Ganesh Visarjan and Durga Visarjan
- Old age home Visit at Pratap Nagar
- Tree plantation at College campus
- Motivational guest Lectures by eminent Personalities
- Spread Happiness : within the vicinity of the city to distribute clothes ,blankets ,food and small utility items to needy people within the vicinity of the city etc

There are some special projects, like Prosthetic limb project for people who have lost their hand in some mishap

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

Response: 0

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

2020-21	2019-20	2018-19	2017-18	2016-17
0	0	0	0	0

File Description	Document
Number of awards for extension activities in last 5 year	[View Document](#)

3.4.3 Number of extension and outreach programs conducted by the institution through NSS/NCC, Government and Government recognised bodies during the last five years

Response: 104

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

2020-21	2019-20	2018-19	2017-18	2016-17
36	26	19	18	5

File Description	Document
Number of extension and outreach Programmes conducted with industry, community etc for the last five years	[View Document]
Any additional information	[View Document]

3.4.4 Average percentage of students participating in extension activities at 3.4.3. above during last five years

Response: 47.54

3.4.4.1 **Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations such as Swachh Bharat, AIDs awareness, Gender issue etc. year-wise during last five years**

2020-21	2019-20	2018-19	2017-18	2016-17
1967	2587	975	1177	422

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

3.5 Collaboration

3.5.1 Number of Collaborative activities for research, Faculty exchange, Student exchange/

internship per year

Response: 265

3.5.1.1 **Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship year-wise during the last five years**

2020-21	2019-20	2018-19	2017-18	2016-17
65	35	44	86	35

File Description	Document
Details of Collaborative activities with institutions/industries for research, Faculty exchange, Student exchange/ internship	View Document
Any additional information	View Document

3.5.2 Number of functional MoUs with institutions, other universities, industries, corporate houses etc. during the last five years

Response: 39

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

2020-21	2019-20	2018-19	2017-18	2016-17
4	7	8	4	16

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

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

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

Response:

Priyadarshini College of Engineering (PCE) is stretched over an area of 32.18 acres in a green, clean, neat and spacious environment. It is a fully self-contained campus with requisite infrastructure based on AICTE norms and a facilitator for effective teaching- learning process. The PCE has state of art classrooms, laboratories, seminar halls, meeting rooms and are adequate in numbers providing a good learning ambience to students through modern teaching aids and ultramodern facilities. To enhance learning and to provide a high standard in technical education, the college provides a wide array of sophisticated equipment in all the laboratories in various departments. The college has Internet bandwidth of BSNL 500 Mbps , TATA 50 Mbps and 500 Mbps from JIO is locally networked and connected through Wi-Fi. There is a separate server room which provides all administrative services, computing facilities to all the computer systems inside the campus. Entire campus is wifi enabled with secure log in mechanisms that ensures the learning through ICT.

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

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

File Description	Document
Paste link for additional information	[View Document](#)

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

Response:

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

·   Cricket Ground

·   Football Ground

·   Volleyball Court

SPORTS DEPARTMENT: The College promotes both indoor and outdoor sports activities for the students to bring out the talents of the students in sports. The head of the sports department identifies the specific talents and skills of the students and accordingly provides training to them. The campus has the required facilities to play Throw ball, Chess, Carrom, Table Tennis, Volleyball, FootBall, Cricket, Kho-Kho, and Kabaddi. All dimensions of these play areas are maintained as per national and international standards.

The College periodically organizes inter-Departmental sports tournaments to build up the sports talent and sporting spirit among the young minds. Students are trained and encouraged to participate in the Inter collegiate tournaments, zonal and inter-zonal sports events. PCE students have brought many laurels to PCE in various sports events. Every year, sports day is celebrated where winners of the sports activity are felicitated.

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

Other Clubs:

To extend the services of PCE to the society there are Service Oriented Clubs like National Service Scheme (NSS) and Rotaract club. Also, each department has student's forum. The students volunteer their services to the society. Notable services like Blood donation camp, Planting tree saplings, raising funds and materials during emergency situations like flood, cyclone, earthquake etc. are conducted through these clubs and forums.

File Description	Document
Paste link for additional information	[View Document](#)

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

Response: 100

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 52

File Description	Document
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	View Document
Upload any additional information	View Document

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

Response: 14.27

4.1.4.1 **Expenditure for infrastructure augmentation, excluding salary year-wise during last five years (INR in lakhs)**

2020-21	2019-20	2018-19	2017-18	2016-17
192.33	183.45	173.48	47.95	319.26

File Description	Document
Upload Details of budget allocation, excluding salary during the last five years (Data Template)	View Document
Upload audited utilization statements	View Document

4.2 Library as a Learning Resource

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

Response:

The Priyadarshini College of Engineering has well equipped, spacious central library of carpet area 1530.06 square meters with the rich collection of engineering books including national, international journals, periodicals, and magazines. The central library is fully automated with KOHA open access online Library Management System. The reading room facility is available for students. The reading room is 391.2 sq.mtr. with a seating capacity of 250 students. It has about 25967 titles, 106204 volume, e-resources (like as IEEE ASPP, DELNET, N-LIST INFLIBNET for e-journals, springer link for e-books), 188

National journals and 13 magazines along with 11 newspapers. All books are bar-coded and bar-code laser scanners are used in circulation counter for book transaction.

Web OPAC is available on college web site for users to search by title or author. The link is PCE Library catalog › Log in to your account (ltjss.net) for acess from the campus and lib1-pce.ltjss.net:8002 from outside campus. Students can also access physically in the stack area. The user visit records has been made in the entry gate. As per the Regulation of statutory and affiliating authorities the text books and reference books are made available in the library. The college central library has various institutional memberships for e-resources and e-Journals. The college has memberships for National Digital Library, NPTEL Active local chapter and browsing centre with 1.05 Gbps shared leased line connected computers in the library. Direct Accesses to online journals are made available for staff and students such as IEEE ASPP to learn the latest research and developed techniques in engineering. The library provides Urkund Anti-Plagiarism Software service. Library facility is open to all students and faculty members and is continuously updated with latest books and journals. The institute always strives to provide latest and best collection of books, journals, online e-resources to the students

Total area of the library (in Sq. Mts.)	1530.06	
Total seating capacity	250	
Working hours (on working days, on holidays, before examination days, during examination days, during vacation)	Academic working days	10.15 AM to 5.35 PM
	Academic weekend	10.15 AM to 5.35 PM

Average number of walk-ins	107 per day
Average number of books issued/returned	85 per day
Ratio of library books to students enrolled	1:5
Average number of books added during last three years	200/ year
Average number of logins to WEB OPAC	20 per day
Average number of logins to e-resources	20 -30 per day

Average number of e-resources downloaded/printed	15
Number of information literacy trainings organized	Library Orientation Program Yearly once : No
Details of "weeding out" of books and other materials	No

WEB OPAC (Online Public Access Catalogue)	Yes
Electronic Resource Management package for e-journals	Yes
Federated searching tools to search articles in multiple databases	Yes
Library Website	https://pcen agpur.edu.in /
In-house/remote access to e-publications	Yes
Library automation	Yes (partially)
Total number of computers for public access	18
Total numbers of printers for public access	01
Institutional Repository	Yes
Content management system for e-learning	No

File Description	Document
Paste link for Additional Information	[View Document](#)

4.2.2 The institution has subscription for the following e-resources

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

Response: A. Any 4 or more of the above

File Description	Document
Upload any additional information	[View Document](#)
Details of subscriptions like e-journals, e-ShodhSindhu, Shodhganga Membership , Remote access to library resources, Web interface etc (Data Template)	[View Document](#)

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

Response: 12.04

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

2020-21	2019-20	2018-19	2017-18	2016-17
10.02	9.74	9.89	10.55	19.99

File Description	Document
Details of annual expenditure for purchase of books/e-books and journals/e- journals during the last five years (Data Template)	[View Document](#)
Audited statements of accounts	[View Document](#)

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

Response: 5.11

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

Response: 156

File Description	Document
Details of library usage by teachers and students	[View Document](#)

4.3 IT Infrastructure

4.3.1 Institution frequently updates its IT facilities including Wi-Fi

Response:

Institute has always eagerly taken an initiative to upgrade itself in providing IT facilities to students and faculty. The institute now has **1315** computers of high configuration. The latest configuration of computer available in the institute is Dell Desktop Vostro 3670 Intel® Core™ i3-8100 CPU @ 3.60GHz × 4 1TB HDD 4GB RAM. Each department has its own computing facility. All **1315** computers used for academic and administrative purpose are LAN connected.

List of Licensed software

S.No.	Software (Application/System)	Licensed / Open Source
Operating Systems		
1	Ubuntu 16.04 LTS	Open Source
2	Ubuntu 20.04 LTS	Open Source
3	Winpro 10 SNGL QLP NL Legalization Get Genuine	Licensed
Application Software		
1	Multisim 7	Open Source
2	Orcad Capture ii) Orcad Pspice A/D iii) Orcad Plus	Open Source
3	Active VHDL 61	Open Source
4	Tonner Tool Box	Open Source
5	Multisim 10	Open Source
6	ULTI BOARD	Open Source
7	Matlab Version 6.5.1	Open Source

8	MS-VISUAL FOX-Pro	Open Source
9	FPGA 6.2 LS	Open Source
10	MS Windows 2000	Licensed
11	Turbo C++	Open Source
12	Oracle	Open Source
13	LTSPICE	Open Source
14	Masm	Licensed
15	NASM	Open Source
16	Nstools	Open Source
17	Plash Magic	Open Source
18	Xilinx	Open Source
19	Wireshark	Open Source
20	Unity	Open Source
21	Weka	Open Source
22	TC	Open Source
23	Microwind	Open Source
24	Mono	Open Source
25	KEIL	Open Source
26	ANSYS Academic Teaching Mechanical and CFD	Licensed
27	DONC Simulator CADEM Software	Open Source
28	MTAB OT&OM Software	Open Source
29	ARISTO ROBOT 6 axis software	Open Source
30	CREO Software	Licensed

31	CCW Software (PLC Simulator)	Open Source
32	RS logic Software	Open Source
33	Eclipse	Open Source
34	STAADPRO	Open Source
35	Anaconda IDE for Python	Open Source
36	MATLAB 17 B	Licensed
37	MS WINHOME 10	Licensed
38	MS WINPRO 10 SNGL	Licensed
39	CAD FEKO	Licensed

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

 Wi-Fi & Internet

The college has Internet bandwidth of BSNL 500 Mbps, TATA 50 Mbps and 500 Mbps from JIO is locally networked and connected through Wi-Fi. All the Laboratories of different department are having Internet facility connected through intelligent switches / firewall. The entire college campus covered with Wi-Fi Access points to access Internet and Intranet educational resources. The Wi-Fi facility has been extended to all the hostels.

File Description	Document
Paste link for additional information	[View Document](#)

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

Response: 4:1

File Description	Document
Upload any additional information	[View Document](#)

4.3.3 Bandwidth of internet connection in the Institution

Response: A. ?50 MBPS

File Description	Document
Upload any additional Information	[View Document](#)
Details of available bandwidth of internet connection in the Institution	[View Document](#)

4.4 Maintenance of Campus Infrastructure

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

Response: 33.7

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)**

2020-21	2019-20	2018-19	2017-18	2016-17
213.83	422.27	525.02	466.88	670.10

File Description	Document
Details about assigned budget and expenditure on physical facilities and academic support facilities (Data Templates)	[View Document](#)
Audited statements of accounts	[View Document](#)

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

Response:

- All the Departments and various functioning units of the college are provided with all the required infrastructure facilities like class rooms, faculty rooms, wash rooms, common rooms, laboratories etc. The effective usage of all the facilities is ensured by introducing exclusive hours for sports and Central Library. Students can also avail the facility of yoga training.
- The college has Maintenance Cell that oversees the overall maintenance of buildings, classrooms and laboratories and Campus.
- The Maintenance Cell is headed by the Sr. Faculty member who in turn monitors the work. The maintenance Supervisor is accountable to the Maintenance Cell In-charge and functions as the coordinator. He is maintaining details about individual floor - wise responsibilities, timings, leave etc. of housekeeping and gardening staff. The maintenance officer conducts periodic checks to ensure the efficiency / working condition of the infrastructure.
- The maintenance cell has three major groups i.e maintenance of E-resources, Civil maintenance and

Electrical maintenance. Each one is headed by the expert person.

- The maintenance of E resource team is responsible for maintenance and manage repair of CCTV & security, internet, ERP, Computers, Printers, and all computer peripheral.
- Civil Maintenance In-charge and his team is responsible for the maintenance of infrastructure facilities. This team looks after the regular maintenance of civil works such as masonry and plaster works, painting, carpentry, plumbing and general house-keeping etc.
- Electrical maintenance In-charge and his team is responsible for maintenance and repair of power supply, LCD, EPBX, AC, Water cooler, various fixtures, lighting, etc. To Monitor electrical equipment such as Generator, UPS, Batteries, EPABX, monthly preventive inspection/checking is carried out. In case of major fault, the Supplier is called (belonging to equipment). The supplier analysis the fault and submit the report. If the replacement of any part is necessary then the quotations are called & purchased as per centralized purchase procedure.
- Adequate inhouse staff is employed to maintain cleanliness of the campus so as to provide a congenial learning environment. Classrooms, Staff rooms, Seminar halls and Laboratories, etc are cleaned and maintained regularly. Wash rooms and common rooms are well maintained. Dustbins are placed on every floor at identified places. The Green Cover of the campus is well maintained by a fulltime gardener and his team.
- Optimum working condition of all common facility in the campus is ensured through annual maintenance contracts (AMC). The AMC includes maintenance of Lift, Generator, Air Conditioners, CCTV cameras and Water Purifiers.
- Periodic reporting on requirements of repairs and maintenance are submitted by the HODs to the maintenance cell and it is solved as early as possible
- The maintenance/repair issue is identified by concern Laboratory in-charge/faculty, a request will be raised through a maintenance requisition note. The maintenance cell receives the maintenance requisition note and review the request. The maintenance cell in-charge organizes the inspection of the maintenance issues. If the issue requires to be attended to on an immediate basis, the issue is prioritized and the cell in- charge delegates resources to carry out the maintenance.
- Pest control in all the buildings is done as and when required.

File Description	Document
Paste link for additional information	[View Document]()

Criterion 5 - Student Support and Progression

5.1 Student Support

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

Response: 74.66

5.1.1.1 **Number of students benefited by scholarships and free ships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years (other than students receiving scholarships under the government schemes for reserved categories)**

2020-21	2019-20	2018-19	2017-18	2016-17
2263	2273	2332	2366	2283

File Description	Document
upload self attested letter with the list of students sanctioned scholarship	[View Document](#)
Upload any additional information Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years (Data Template)	[View Document](#)

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

Response: 28.75

5.1.2.1 **Number of students benefited by scholarships and free ships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years (other than students receiving scholarships under the government schemes for reserved categories)**

2020-21	2019-20	2018-19	2017-18	2016-17
1065	1084	1030	686	509

07-09-2022 12:54:53

File Description	Document
Upload any additional information	
Number of students benefited by scholarships and freeships institution / non- government agencies in last 5 years (Date Template)	

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

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

Response: A. All of the above

File Description	Document
Details of capability building and skills enhancement initiatives (Data Template)	
Any additional information	

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

Response: 76.78

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

2020-21	2019-20	2018-19	2017-18	2016-17
2003	2312	2867	2311	2386

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

5.1.5 The Institution has a transparent mechanism for timely redressal of student grievances

including sexual harassment and ragging cases

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

Response: A. All of the above

File Description	Document
Upload any additional information	[View Document](#)
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	[View Document](#)
Details of student grievances including sexual harassment and ragging cases	[View Document](#)

5.2 Student Progression

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

Response: 27.16

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

2020-21	2019-20	2018-19	2017-18	2016-17
257	180	296	235	233

File Description	Document
Upload any additional information	[View Document](#)
Details of student placement during the last five years (Data Template)	[View Document](#)

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

Response: 0

5.2.2.1 **Number of outgoing student progression to higher education during last five years**

Response: 00

File Description	Document
Details of student progression to higher education (Data Template)	

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

Response: 100

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

2020-21	2019-20	2018-19	2017-18	2016-17
10	2	7	11	1

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

2020-21	2019-20	2018-19	2017-18	2016-17
10	2	7	11	1

File Description	Document
Number of students qualifying in state/ national/ international level examinations during the last five years (Data Template)	
Any additional information	

5.3 Student Participation and Activities

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

Response: 8

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

2020-21	2019-20	2018-19	2017-18	2016-17
0	1	1	2	4

File Description	Document
Number of awards/medals for outstanding performance in sports/cultural activities at university/state/ national/international level during the last five year	[View Document](#)
Any additional information	[View Document](#)

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

Response:

The Institute creates a platform for the active participation of the students in the various academic and administrative bodies. It empowers the students to gain leadership qualities, understanding rules & regulations, and developing execution skills. The institute has an active Student Council, Students Chapters, Student Associations and are actively participating as well as organizing various activities related to academics, co-curricular and extra-curricular activities, with the guidance of faculty. The Institute also promotes participation of students on academic and administrative bodies. They are providing support to college-related academic/administrative work with the help of other students. They are actively involved in motivating the other students to participate in various activities conducted by the college. Students are encouraged to participate in co-curricular and extra-curricular activities in inter-college, inter-university, and National level competitions.

1. Presence of an active Student Council:

The SRC of PCE consist of President, Vice President, General Secretary, Joint Secretary, Treasurer, Event Incharge, & various Heads like Academic, Technical, Cultural, Sports, Social Media, Grievance & Redressal, Women Empowerment, Discipline, Editor, Executive Members. The Duties & Responsibilities SRC:

- Smooth Conduction of the Sports and Cultural activities every year.
- Prevention of ragging on the campus through counseling students, helping the administration whenever necessary.
- Suggesting Administration to improve student amenities to improve their career & personality building.

- Guiding junior & needy students to improve their technical, organizational & managerial skills by organizing seminars/workshops etc.
- Organize the programs to improve cleanliness & greenery in campus.
- Maintenance of peace & harmony on campus in general & student community in particular.

2. Representation on the academic committees:

Student Chapters: Student Chapters are established for professional bodies such as ACM, CSI, IEEE, ISHRAE, ISTE, IETE. ICHE. They conduct activities in alignment with respective professional bodies.
Students Forums: There are 9 forums such as EESF, TELEERA, FORCE, SCOOP, MESA,VAINATEYA, DIGITS IN-TECH, EAGLE, EXESS with a faculty convenor and students. They organize various technical workshops, invited talks, skills/knowledge enhancement programmes etc.

3. Representation on the administrative committees:

NSS: Institute has set up NSS to sensitize students towards societal issues and community services.
Alumni Association: Alumni Association is in place to strengthen the relationship amongst alumni.
Anti-Ragging committee: One student and one Parent are nominated as Member of Anti-Ragging committee. This facilitates to promotion of an ambiance conducive for PCE to be a ragging-free campus.

Apart from the above the student representatives are included in IQAC, Canteen Committee, Hostel Committee, Training & Placement Committee.

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

Response: 14.4

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

2020-21	2019-20	2018-19	2017-18	2016-17
2	21	21	21	7

File Description	Document
Upload any additional information	[View Document](#)
Number of sports and cultural events/competitions in which students of the Institution participated during last five years (organised by the institution/other institutions (Data Template)	[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 PCE Alumni Association (aims to link the alumni to the institution, develop synergistic plans to support the institution and achieve its vision, and to enable the institute to add value to all its stakeholders. The Institute established alumni cell in 2012 to maintain a good linkage between institute and alumni. The alumni association was registered in 2004 with register no. MAHA 738/04 dated 30/11/2004. The main objective is to enroll all alumni as members of the association and facilitating active participation of the alumnae in appropriate activities, events, and initiatives of the Institute. The alumni association helps in building a network of the alumni and helps in being in touch with the corporate world. Every year Alumni meet will be hosted by the Alumni association and supported by the Management where the alumni from different branches are invited to share their views and suggestions on the scope of their course and also to create awareness about the professional world. This paves an opportunity for the alumni to meet other alumni and cherish their past experiences and moments. The Alumni Association provides an avenue for sharing their intellectual, career and professional experience not only with the teachers but also with the present students.

The Following are the activities carried out with the help of Alumni.
Curriculum Enrichment: Alumni are involved for curricular gap identification and development of value added course module.

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

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

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

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

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

Generosity: The association also plays a significant role in contributing scholarships to deserving students. Major visible additional activity of the alumni is by providing donations to the college.

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

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

Response: A. ? 5 Lakhs

File Description	Document
Upload any additional information	[View Document](#)

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

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

Response:

The Vision of the Institute:

To become one of the India's leading Engineering Institute in both Education and Research. We are committed to provide quality and state of art technical education to our students, so that they become technologically superior and in turn contribute for creating a great society.

The Mission of the Institute:

We commit ourselves to the pursuit of excellence in Technical Education and promise to uphold the spirit of professionalism to serve humanity.

Nature of Governance:

The institution has established Board of Governance (Governing Body) as a statutory body. Decision related to recruitment of staff, variation in intake, new courses, use of space, and building etc are taken by submitting the proposal and getting the approval from GB after discussion. The Institution has also established Internal Quality Assurance Cell (IQAC) cell. Representative of Stake holders are included in IQAC. IQAC takes all decision related to academics and administration by discussion with LMC/GB. The institute has adopted best practices in Governance & Leadership, by way of having clear Vision & Mission policies. These are translated into **organizational goals and objectives**. Accordingly necessary organizational arrangements are made available to achieve goals and objectives. The institute involves faculty members in different committees of the institute.

The policy and action plans are prepared to meet the institute's mission.

Strategic/Perspective Plan:

The institute has designed its perspective plan on following points:

- Academic growth of the institute
- Research and Development
- Incubation centre and Entrepreneurship Development Programs
- Improving Students Placement
- Infrastructural Development
- Go green Campus
- NEP Implementation

Participation of the Teachers:

The Institutional Head is a part of the decision-making with the discussions and decisions of GB/LMC. The Principal holds meeting with Heads of the various departments. All the decisions and policies to improve academic activities are reviewed and discussed in the meeting before implementation. The Head of the departments, as the representatives of the faculty, are involved in the institutional decision-making.

Teachers are the core members who are directly dealing the students. Their participation in decision making plays a vital role. There are various committees for institutional activities in which faculty members are included. Hence they are involved in all major decision makings.

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

File Description	Document
Paste link for additional information	View Document

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

Response:

The Board of Governors (BoG), CDC and Principal as a member of CDC (and senior faculty) have a discussion in the design and implementation of the policies and plans of the college. The Board Members (members of the management committee) meets periodically to discuss the developments with regard to the decisions to be taken. Thus the BoG is closely associated with the decision-making at the institutional level.

Functions of Administrative Heads:

The functions and responsibilities of administrative heads include following points:

·   Administrative heads act in accordance with the authority and power bestowed upon them by the management for the welfare of the Institute.

·   Administrative heads follow all rules, regulations and norms of the governing agencies like UGC/AICTE/DTE/RTMNU etc.

·   Administrative heads look into curricular/ co-curricular/extra- curricular activities of the institute in addition to academics.

Decentralization in Working: Institute has a mechanism for delegating authority and providing operational autonomy to all the various functionaries to work towards decentralized governance system.There is decentralization in working and Administrators / Decision makers are:

- Principal, Vice Principal

- Dean Academics / Dean R& D / Dean Students affairs

- Heads of the Departments

- Registrar

The institutional administration is participative and decentralized. Teaching and non teaching staff are member of various committees which are formed at institutional level.

l Student committees are formed for most of the student's activities and they have representation on departmental advisory board, Internal Quality Assurance Cell (IQAC) and various committees at department level.

l FORUM (SRC) - for all students' activities (by nomination) are available in each department.

l Calendar for all activities is prepared.

l Every decision is taken by all Deans and Heads of the Department. Based on the recommendation of the individual committee, Principal takes action.

Case Study:

Internal Exams Conduction

To work towards decentralized governance system, Principal constitute following three committees 1.Moderation committee for Question paper moderation, 2.Printing committee for Question Paper Printing and 3.Examination Committee for Conduction of examination. Dean Academics is overall in-charge of internal exams conduction. Dean academics monitors the functioning of these committees and ensures successful completion of the work. The power of decision making and autonomy of working is delegated to these committees.

Outcome: Effective, efficient use of resources is achieved. Democracy in decision-making is enhanced.

File Description	Document
Paste link for additional information	View Document

6.2 Strategy Development and Deployment

6.2.1 The institutional Strategic / Perspective plan is effectively deployed

Response:

The development of the college is a constant ongoing process. This is made possible with the help of

perspective/strategic plans that chalk out the necessary actions to be taken to grow and develop. The strategic plan is prepared to meet objectives, short term goals and long term goals. Process is regularly reviewed for its implementation.

Strategic/Perspective Plan:

 The institute has designed its perspective plan. Following are the main points of the plan:

1. Academic growth of the institute

- To provide effective teaching learning environment.
- To make necessary proposal for accreditation and autonomy to the institute.
- To ensure that stockholders are involved in various academic process to make it effective.
- To get recognized by National Institutional Ranking Framework with high ranking.
- To inculcate moral integrity in students and make them socially responsible good human beings.

2. Research and Development

- To extend research facility and also to provide Industry Institute Interaction for the benefit of student, faculty and society.
- To establish the centre of excellence by signing MoUs with highly reputed Industries/ Organization.
- To setup industry institute collaboration programs.

3. Incubation centre and Entrepreneurship Development Programs.

- To establish incubation centre
- To create entrepreneurs by inculcating entrepreneurship skills in the students.

4. Improving Students Placement

- To develop professionalism, leadership quality, an ability to work in a team and to develop human resources to achieve academic and administrative excellence.
- To provide career counselling and skill development programme for the students
- To provide opportunity for overall development of students by providing platforms for various co-curricular, extra-curricular and entrepreneurship skill development.

5. Infrastructural Development.

- To provide good infrastructure facilities with well equipped laboratories along with centralize computer centers.
- Making available adequate infrastructure for the institute for the various courses.
- To construct new auditorium.

6. Go green campus

- To adopt various eco freindly practices in the campus.
- To creat eco freindly rules in the campus.

- To encourage use of electronics and avoide use of paper.

7. NEP Implementation

- To provide multidisciplenary and interdesciplenary programs to the students.
- To encourage faculty members and students to carry out Interdisciplinary projects and research work.
- To run skill development programs for the students.

File Description	Document
Paste link for additional information	[View Document](#)

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

Response:

All important policy decisions are taken by Governing Body. Administrative set up of the institution is as per the organization chart of the institution. The decision making procedures are made at appropriate levels in the organizational hierarchy. The structure of the same is as given in figure below. Principal is the academic and administrative head of the institution.

Service rules have been formulated as per the guidelines of competent authorities like affiliating university and approval body and institutional values

The Organizational Structure is attached

Following Statutory committees/cells are available in the institute:

- Board of Governors / Governing Body (GB)
- College Development Committee (CDC)
- Internal Quality Assurance Cell (IQAC)

- Anti Raging Committee
- Grievance Redressal Cell

In addition to the statutory committees, the college is having the following non-statutory Committees/Cells:

- Placement Cell
- Human Excellence Cell
- Entrepreneurship Development Program (EDP) Cell
- Alumni Cell

- Industry Institute Interaction (III) Cell
- Research and Development Cell
- Intellectual Property Right (IPR) Cell
- Internal Complaint Committee –Mahila Takrar Nivaran Samiti
- Women Development Cell
- Corporate Social Responsibility Cell- NSS, Rotract Club
- Waste Management and Rain Water Harvesting Cell
- Maintenance Cell
- Green Practices and Renewable Energy Sources Cell
- Student Welfare and Counselling Committee
- Library/ Learning resources committee
- Health & Happiness Cell
- Higher Studies and Competitive Exam Cell
- SC – ST Committee

The duties and responsibilities are attached as additional information.

File Description	Document
Upload any additional information	[View Document](#)
Paste link for additional information	[View Document](#)

6.2.3 Implementation of e-governance in areas of operation

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

Response: A. All of the above

File Description	Document
Details of implementation of e-governance in areas of operation, Administration etc	[View Document](#)
Any additional information	[View Document](#)

6.3 Faculty Empowerment Strategies

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

Response:

Faculty Empowerment

Institute is always striving to motivate and empower the faculty to create sense of direction and positive awareness. Institute does think about development and welfare of its employees, and support them in all possible ways. Institute takes action to give sense of motivation and encouragement to enhance development in academic, professional, personal and organizational goal. So the institute takes care of following for its faculty

- Academic & Professional Growth
- Financial Support
- Motivation
- Welfare Measures

Following is the list of existing welfare measures:

Teaching

Following is the list of existing welfare measures for Teaching Faculty:

1.   Reimbursement of claim for attending conference/FDP/STTP/Workshop, Membership fee for professional society for teaching staff and Incentives to faculty for award/recognition.

2.   Employee Provident Fund (EPF).

3.   Group Insurance Scheme.

4.   Grant of Maternity Leaves to female staff.

5.   Advance against salary facility.

6.   Fee concession to the wards of staff members for taking admission.

7.   Lien facility.

8.   Centralize reprographic facility (Xerox).

9.   Facility of Wi-Fi in campus.

10.   Ph.D. Increments.

11.   Study leaves for part time PhD.

12.   Early going and late coming facility.

Non Teaching

Following is the list of existing welfare measures for Non- Teaching Faculty:

1.   Employee Provident Fund (EPF).

2. Group Insurance Scheme.

3. Fee concession to the wards of staff members for taking admission.

4. Maternity Leaves to female staff.

5. Advance against salary facility.

6. Centralize reprographic facility (Xerox) for staff.

7. Facility of Wi-Fi in campus.

8. Early going and late coming facility.

File Description	Document
Paste link for additional information	[View Document]

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

Response: 31.73

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**

2020-21	2019-20	2018-19	2017-18	2016-17
53	115	69	39	38

File Description	Document
Upload any additional information	[View Document]
Details of teachers provided with financial support to attend conference, workshops etc during the last five years	[View Document]

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

Response: 21.2

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

2020-21	2019-20	2018-19	2017-18	2016-17
25	21	22	21	17

File Description	Document
Upload any additional information	[View Document](#)
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff	[View Document](#)

6.3.4 Average percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP)during the last five years (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course).

Response: 38.16

6.3.4.1 **Total number of teachers attending professional development Programmes viz., Orientation / Induction Programme, Refresher Course, Short Term Course year-wise during the last five years**

2020-21	2019-20	2018-19	2017-18	2016-17
98	85	65	85	65

File Description	Document
Upload any additional information	[View Document](#)
Details of teachers attending professional development programmes during the last five years	[View Document](#)

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

Response:

There exists Performance Appraisal System in the institute for Professor, Associate Professors & Assistant Professor. The Institute strictly follows all the basic recruitment and promotional policies as stipulated by AICTE and University. Each and every faculty member completes the self-appraisal procedure every year. Performance appraisal of teaching staff is done on the basis of self appraisal format and annual confidential report. Performance appraisal of non teaching staff is done on the basis of a confidential report.

A) Performance appraisal of teaching staff

Performance appraisal of Regular Professor / Associate Professor & Assistant Professor is evaluated on following points annually:

1. Engaging Theory Lectures
2. Engaging Practical* / Tutorial Classes
3. Attendance in Theory Classes
4. Attendance in Practical / Tutorial Classes
5. Result Analysis of Theory Subjects
6. Marks scored by students in Theory Subjects
7. Comparison with 3 years-Average Results
8. Students Feedback
9. Professional Endeavour
10. Functional Performance: (To be evaluated by Reporting Officer only. Mark Evaluation by HOD)

The information is furnished by the faculty. HoDS submit the self appraisal format with remarks to the principal. Principal then takes necessary action. HoD also submits annual confidential report (ACR) of faculties of respective department to the principal. Parameters are Industriousness (How busy keeps himself/herself), Application of mind, Administrative capacity, To extract work from subordinates, Relation with colleagues, General Intelligence, Decision making, Natural Aptitude towards initiative in carrying out assignment, integrity, Involved in private tuition/business, Royalty to organization, Tendency to go on leave, Involvement in malpractices, Fitness to continue in present post, Fitness for promotion.

The performance appraisal of Head of Department is evaluated on the performance of the entire faculty in their respective department.

1. **Performance appraisal of Non-Teaching Staff**

The annual confidential report of non teaching employee is submitted by HOD to the Principal. If there is any adverse remark then it is reported to the concern staff by the Principal.

Performance Assessment of non-teaching staff is based on following parameters

Technical Adequacy: Industry, Application, Initiative, Technical Ability, Level of knowledge, Methodical and Systematic working, Promptness in disposal, Dependability, Capacity to get work done

General Impression: Neatness, Leadership qualities, Accuracy, Punctuality in work, General Impression and Grasp, Regularity in attendance, Relations with Superiors, Relations with Colleagues, Relations with Members of Public, Special Complementary aptitude qualities etc. Other than job requirements

File Description	Document
Paste link for additional information	[View Document](#)

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

Every year, the budget is prepared well in advance by taking into consideration the financial requirements of every department. Each department prepares the budget based on the recurring and non-recurring requirements such as equipment, consumables required and maintenance of equipment for the next academic session. The budget proposed by the department is reviewed and forwarded by the Principal to CAFO LTJSS. After making necessary changes, CAFO forward it to management The Principal monitor the purchase as per the sanctioned budget.

Budget is planned under the careful supervision, and considerations of need of all the departments.

Priorities are made on basis of the needs to fulfill various requirements to upgrade the development of the department. In every financial year the college conducts internal audit as well as external audit by the statutory Auditors.

Chief Accounts and Finance Officer (CAFO) arranges financial audit of the institute.

While verifying entries, if any mistakes/ short comings / objections identified/noticed, the same is rectified with the discussion and permission from CAFO at the same time. The report of audit is then submitted by auditors to the management.

Chartered Accountant and Financial Officer (CAFO) conducts internal financial audit of the institute. The dates of internal audit and external audits are:

Area/Enumeration of audit	Internal Audit Date	
Ledger Scrutiny Fees Reconciliation, Statutory Compliance Fee Proposal (Shikshan Shulk Samiti Submission), Cash vouching, Bank vouching, Salary checking	15/09/2021	

File Description	Document
Paste link for additional information	[View Document](#)

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

Response: 0

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

2020-21	2019-20	2018-19	2017-18	2016-17
0	0	0	0	0

File Description	Document
Details of Funds / Grants received from of the non-government bodies, individuals, Philanthropers during the last five years	[View Document](#)

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

Response:

RESOURCE MOBILIZATION STRATEGY AND IMPLEMENTATION PLAN

The resources mobilization strategy and implementation plan, seeks to guide the Priyadarshini College of Engineering towards sustainable financing of its various programs. It reviews college funding patterns, provides guideline and proposes strategies for mobilizing resources to support the college strategic plan and the ultimate fulfillment of its vision and mission. The strategy makes a vital link between external funding challenge and the continued internal improvements necessary to achieve the objectives There are different sources of funds for the institution

- The major source of the funding is Tuition fee from students (Government supports Backward class students in terms of scholarships)
- Funding projects from Government – There are faculty who are eligible to take up research projects and submit proposals to AICTE, UGC and DST of government of India for getting funds to enhance the quality of learning. The funds are used for purchase of advanced equipment and conduct research in the specific areas proposed.
- Funds/Grants received from non-government bodies and individuals. This includes revenue generated from Testing and consultation, Charges for conducting online/offline examination from outsiders, Sponsorship received from various activities/pr
- Contribution from Alumni – Some alumni contribute their time and finances to support existing students to make their careers.

Since this is a self financing institution, funds so generated are utilized for salary and other expenses of the institution. Fee of students is decided and approved by the Fee Regulating Authority (FRA) as per the norms. Salary expenses include salary paid to teaching; non teaching and guest lecturers and non salary expenses include purchase of equipment, maintenance, infrastructure maintenance, furniture, repair and maintenance, office expenses, printing & stationary and miscellaneous expenses, etc. The funds are utilized in accordance with the budgetary provisions made by the management with prior approval. So long as practicable the simple tools and equipment, furniture are fabricated in institute's labs/workshops.

OPTIMAL UTILIZATION OF RESOURCES

The resources should be most efficiently used. Our institution generate money from optimum utilization

specialized services like centralized purchase system, centralized admission, etc.

Our institutions take care that their facilities are not underused. The Institute has a well-defined procedure to monitor effective and efficient utilization of available resources for infrastructure, development and teaching learning process. All the major financial transactions are monitored by the account section.

Adoption of streamlined purchase procedures in the case of expensive service and materials by calling for tenders and quotations is one of the best practices adopted by our institutions.

Comfortable shifts are one way, without compromising the principles of collegiate education. Supplementary programs are another way, those that are also available to the regular students and designed to impart them training, for instance, in computer or in career-oriented fields. A third way is by sharing with sister organizations and agencies

In addition to this, the account of each financial year of the institute is audited by Chartered Accountant.

File Description	Document
Paste link for additional information	View Document

6.5 Internal Quality Assurance System

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

Response:

To establish the standards in academics as well as in administration, it is essential to monitor functioning. To achieve this objective, Internal Quality Assurance Cell (IQAC) has been set up. The quality assurance mechanisms are framed in accordance with the requirements of National Assessment and Accreditation Council (NAAC) /National Board of Accreditation (NBA)

The Internal Quality Assurance Cell (IQAC) of the institute has been trying to develop a system for conscious, consistent and catalytic action to improve the academic and administrative performance of the institution and to promote measures for institutional functioning towards quality enhancement through internalization of quality culture and institutionalization of best practices.

Quality Assurance Strategies and Processes:

- Assessing the quality parameters and providing required suggestions for the improvement.
- Conducting seminars / workshops, FDPs on emerging technologies for faculty.
- Conducting Guest Lectures from Industry/Experts.
- Arranging regular training programs/workshops for students and supporting staff.
- Encouraging R&D and Consultancy.
- Action plan for enhancing quality of student projects (outcome based approach)

Contribution of IQAC for institutionalizing the quality assurance strategies and processes:

- Regular academic monitoring of all the classes
- Weekly compliance of teaching plan by heads
- Monthly Compliance of Teaching plan by Dean Academics
- Fortnightly Academic Reports
- Monthly performance Review
- **Initiatives in teaching learning**
- **Academic audit**
- Students feedback
- Development of Smart Classroom Facility in all the departments
- Sensitizing quality assurance policies, mechanisms and outcomes to the various internal and external stakeholders by teaching and non - teaching members, general meetings, notices, college Website and through Alumni meet, parent teacher meeting.

Examples of best practices institutionalized as a result of IQAC initiatives (Following work has been done by IQAC Committee):

1) IQAC in its meeting also discussed about **Initiatives in Teaching Learning:**

For the effective delivery of theory and practical subjects various initiatives are taken throughout the session to support teaching learning process. Different Initiatives taken are as below:

- Use of Real world Examples: Industrial visits, Working models, Real time applications, PPT with animation
- Collaborative learning: Group discussion, Student groups formed in theory classes by concern subject teachers, Student groups formed during practical conduction, Mini projects and Major projects
- Improving instruction methods: Technical quiz, Use of E-resources like NPTEL Surprise test/ Open book test, workshops, Value added course, Add-on courses, Guest Lectures, Seminars, use of virtual lab etc.

2) IQAC in its meeting discussed about conduction of **academic review and audit** at department level as well as at institute level at least once in a semester. With IQAC initiative, the academic review is conducted by all the departments at department level and then at the institute level. At the end of each semester, academic audit is conducted by the committee consisting of internal and external faculty members. All the related documents are prepared and maintained by IQAC.

Odd semester academic audit of all the departments was conducted during 07/12/2020 to 10/12/2020

Even semester academic audit of all the departments was conducted during 22/07/2021 to

File Description	Document
Paste link for additional information	[View Document](#)

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

Response:

IQAC takes continuous review of teaching learning process in the Institute. Before commencement of the term, academic calendar is prepared and it is ensured that the activities are conducted as per schedule. This cell monitors class wise, faculty wise and subject wise instruction delivery. Students feedback is collected at the institute level. Feedback reports are generated in HoD panel of ERP. The HoDs discuss feedback with the faculty for improvement in performance if required. Result analysis of all the semester is done. HoDs then ask faculty to submit action plan for improvement of result in case if the result of subject is poor. This is then submitted to IQAC.

Review of Teaching-Learning Process and its Outcomes:

Various departments of the college takes feedback from its stake holders and these feedback are discussed in Program Assessment Committee meetings. Action plan is prepared based on the suggestion given by stakeholders. Also the curricular gaps are identified.

The institute has created an environment of participative learning where students 'learn by doing'. This is accomplished with the help of Teaching Learning activities.

- Every teacher prepares their course file before the commencement of next semester.
- Academic Review committee verify the content and completion of course file and report it to higher authorities.
- Suggestions (if any) are communicated to the respective teacher and its fulfillment is ensured by HoD.
- Teacher gives monthly attendance which is displayed for the students for their verification and their queries are solved, if any.
- Teacher feedback is taken in a semester to ensure the quality of teaching and teachers are counseled if required.
- Regular reviews for the timely completion of syllabus are taken and accordingly remedial actions are suggested.
- This process ensures the transparent structure of the institute through different parameters for the evaluation of teachers and students simultaneously.
- Learning levels of the students are assessed based on their performance in internal examinations and university examination.

Methodologies:

- Academic review/audit is a regular feature in the institute for continuous monitoring of the teaching learning process.
- Schedule of all academic activities is mentioned in the academic calendar.

Academic Calendar covers the schedules such as entry of teaching plan, classes to begin, CAT, Sessional to be conducted, academic audit to be conducted, guest lectures and industry visit slots, etc.

Two examples of institutional reviews and implementation of teaching learning reforms facilitated by the IQAC:

1. Review of attendance of students:

Attendance of students is monitored regularly. Student's cumulative attendance is displayed monthly. Students having less attendance are informed to improve their attendance. This is also informed to their parents. Students having less attendance are required to attend remedial classes.

2. Teaching learning reforms and its outcome:

- Our curriculum is fixed by RTMNU and hence there is very less scope of making any changes in the curriculum. Institute takes feedback from its stake holders and these feedback are discussed in the meetings. Curricular gaps are identified and accordingly action is taken to bridge the identified curricular gaps. Group discussions, industry visits, expert lectures, technical quiz etc are organized for the students where they showcase and increase their understanding level.
- Learning outcomes are reviewed periodically through different activities like project review, result of Class Assessment Test, result of sessional examination etc
- In case if particular Program Outcome is not met then corresponding action is taken like co-curricular/ extracurricular activities such as workshop, seminar, guest lectures, industry visit, NSS activities etc. are conducted.

File Description	Document	
Paste link for additional information	[View Document]()	

6.5.3 Quality assurance initiatives of the institution include:

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

Response: B. 3 of the above

File Description	Document
Upload e-copies of the accreditations and certifications	[View Document]()
Upload details of Quality assurance initiatives of the institution	[View Document]()

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

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

Response:

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

- To promote gender equity, our institution established Women Empowerment Cell with the motto of "*Helping women discover their wings*". The cell aims to empower girl students and faculty to enhance their understanding of issues related to women and to make the college campus a safe place for girls and women and to address the practical issues related to the welfare and equal opportunities for Women Faculty and Students All the students were encouraged to participate in various Technical Workshops, Seminars and Smart India Hackathon without any gender discrimination.
- The ratio of 50:50 has been reflected among Staff and students. Women faculty are heading the dept and member in the all statutory as well as decion making bodies.
- With a view to take up women's issues and problems, the cell aims at creating awareness of their rights and duties. It also provides a platform for women to share their experiences and views regarding their status in the society. Added to it suggestions for solving the problem themselves has been given through counseling. Aiming at intellectual and social upliftment of the female students, the cell stands for facilitating women's empowerment through Guest Lectures, Seminars, Awareness Programs and other welfare activities.
- To promote gender equity, our institution conducts Women's Sports day every year in connection with Women's day.

1. **Safety and Security:**

- Workshops were conducted on "Women self-defense addressing the need for knowing self-defense mechanism to protect themselves". The woman communities were given exposure on types of attack such as rear attack, ground reversal, boundary setting. The rescue mechanism and strategies were taught for the students by demonstrations. Also the benefits of learning self-defense for protecting themselves and their family were highlighted.
- Campaigns were conducted on Women health and hygiene. It emphasizes the need for health and hygiene practices to be followed. Awareness about menstrual hygiene and diseases caused by the lack of it was stressed.
- Seminars were organized for the girl students and women faculty members to generate awareness about legal rights for women and girls.
- CCTV cameras are installed in class rooms and throughout the college premises to ensure women safety and security in all aspects.
- Active ICC and women grievance redressal mechanisms.
- Sanitary vending machine is installed in washroom.

2. Counseling for Girls by Female faculties:

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

3.Common Room

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

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

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

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

Response: A. 4 or All of the above

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

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

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

Response:

SOLID WASTE MANAGEMENT

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

LIQUID WASTE MANAGEMENT

- Smart toilets installed in the campus also help in water conservation. Liquid waste are handled as per municipal corporation guidelines

E-WASTE MANAGEMENT

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

WASTE RECYCLING SYSTEM

- Awareness by the community service on the usage of toilet and safe sanitation has tremendously improved the standard of living of the nearby village.

File Description	Document
Link for Relevant documents like agreements/MoUs with Government and other approved agencies	[View Document](#)

7.1.4 Water conservation facilities available in the Institution:

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

Response: A. Any 4 or all of the above

File Description	Document
Any other relevant information	[View Document](#)
Link for any other relevant information	[View Document](#)

7.1.5 Green campus initiatives include:

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

Response: A. Any 4 or All of the above

File Description	Document
Various policy documents / decisions circulated for implementation	View Document
Any other relevant documents	View Document
Link for any other relevant information	View Document

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

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

Response: A. Any 4 or all of the above

File Description	Document
Reports on environment and energy audits submitted by the auditing agency	View Document
Any other relevant information	View Document
Link for any other relevant information	View Document

7.1.7 The Institution has disabled-friendly, barrier free environment

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

Response: A. Any 4 or all of the above

File Description	Document
Policy documents and information brochures on the support to be provided	View Document
Any other relevant information	View Document
Link for any other relevant information	View Document

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

Response:

Tolerance and Harmony towards Cultural & Regional factors

The institute puts lot of efforts/initiatives in bringing an inclusive environment. The students and staff of this institute are from different cultural background and from different states. The staff and students belong to different communities like Hindus, Muslims, Christians Sikh etc. being their mother tongues different the institution has a very effective approach to maintain tolerance and harmony even though they belong to different communities and with different culture by organizing the events which bring the harmony and integrity among the students. Yoga, guided meditation sessions, seminars on human values are organized every semester to create coherent environment and respect for individual. Organizing youth day, republic day, womens day, science day, engineer's day, Independence Day, matra bhasha divas, state formation day etc. promotes nationalism and patriotism among the students and staff community.

Linguistic factors: For linguistic tolerance and harmony once in a year we conduct essay competitions in their own languages in which they can write in their mother tongues also as directed by MHRD we started conducting Matra bhasha divas. Also, institute organizes events and campaigns by the NSS, like plantation, blood donations, greenery importance awareness programmes Environmental day, Swachh Bharath Abhiyan, Constitution day, Sadh bhavana day, Jal divas etc. also the women empowerment cell of the institute organizes Ethnic day, Women's day programmes to empower the women/girls of all sects. Students and staff demonstrates communial harmony by celebrating the festival Dewali, Eid, Christmas and Holi collectively irrespective of religious, racial, cultutral and lingual identities.

Socio-economic & other diversities: The students admitted in the college are from various economic background. The students from economically backward family are supported with scholarships to keep on same pace. The objective of the Institute is to make the professional education available for all. The Institute puts effort to make the students employable.

File Description	Document
Link for supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	View Document
Link for any other relevant information	View Document

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

Response:

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

1. National Identities and Symbols: The College has always taken various direct and indirect steps which promote the awareness about various National Identities and Symbols. The college celebrates the Independence Day and Republic Day with great pomp and vigour. The college also organizes and celebrates the Constitution Day on an annual basis and thus contributes to the spreading of Constitutional values and ideals.

1. Engineers Day is celebrated annually on 15th September as a tribute to greatest Indian Engineer Sir. M Visvesvaraya every year. Essay competition is also conducted in the campus on this occasion to make the young minds to think the role of engineers in developing India.
2. Gandhi Jayanti is celebrated every year on 2ndOctober to mark the occasion of the birthday of Mohandas Karamchand Gandhi, who is called the "Father of the Nation".
3. Independence Day is annually celebrated on 15 August, as a national festival commemorating the nation's independence with flag hoisting and several other cultural programmes.
4. Republic Day honors the date on which the Constitution of India came into effect on 26 January 1950.
5. The most loved President APJ Abdul Kalam's birthday is celebrating as Students' day on 15th October.
6. National Mathematics Day is celebrated in remembrance of Dr.Srinivasa Ramanujan on 22ndDecember.
7. Teacher's day (5th Sept.) is marked in the fond memory of Dr. Sarwapalli Radhakrishnan every year in the college campus.

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

3. Constitutional Obligations: The students have participated in various activities. All these have been organized to promote the awareness about various constitutional and legal obligations.

The students have enthusiastically participated in various programs like:

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

b. Various activities like poster making competition, etc.

c. Organizing Annual Competitions on various contemporary legal issues.

d. Organizing various forms of legal aid and legal awareness camps to impart awareness of such issues.

File Description	Document
Link for any other relevant information	View Document

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

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

Response: A. All of the above

File Description	Document
Details of the monitoring committee composition and minutes of the committee meeting number of programmes organized reports on the various programs etc in support of the claims	View Document
Code of ethics policy document	View Document
Any other relevant information	View Document

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

Response:

At PCE the National anthem is played in all the functions. The festivals like Independence day, Rebublic day, Constitution day are celebrated with great enthusiasm to inculcate a sense of patriotism in the

students. Every year students come together and perform cultural programs like dance, skits highlighting societal problems. The students also prepare videos and speeches to share their thoughts on these days. Every year educationists are invited to share their experience and inspire and motivate young minds to contribute in building the nation. National flags are distributed to faculty, staff and students to instil sense of pride amongst them. The NSS unit and the students' council organise many cultural programs to address prevailing social issues. The student staff and alumni participate and rejoice during this celebration with great patriotic fervor.

The Institution also commemorates the birth / death anniversaries of great Indian personalities like Dr.A.P.J Abdul Kalam, Mahatma Gandhi .The students share the teachings of these eminent personalities through speeches and posters. On Teachers day too, the students'council puts up a show to express their love and gratitude for their teachers and salute the great Teacher Dr.Radhekrishnan.

The annual technical festival of the college is celebrated on February every year to expose student technical knowledge. The institute organizes project exhibitions and also conducts technical events as a tribute to the greatest Indian engineers. Institute takes special efforts to promote technical culture by organising activities under various professional communities.

Women's day is celebrated on International Women's day i.e. March 8 to show respect towards women in all the efforts taken by them to manage the personal and professional life and for their contributions.

Apart from these, many events like guest lectures, college day , fresher day national tree day,engineering day seminars, workshops and faculty development programs are regularly organized to instil a sense of national pride and gratitude towards sacrifices of great leaders of our country.

7.2 Best Practices

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

Response:

Best Practice 1:

1. Title of the Practice: Academic Planning & Monitoring (APM)

2. Objectives of the Practice

Academic planning and monitoring help in the smooth conduction of academic activities. Academic planning and monitoring also helps:

- To create and maintain programs of high quality and offer a distinctive experience for the students.
- To deliver courses effectively, in a planned and systematic manner.
- To create and maintain a sustainable learning environment in campus that supports the students and the staff to practice active learning.
- To allocate human resources strategically.

3. The Context

This Academic Plan(AP) provides clarity to our strategic direction: eg, portfolio development, progression management, staff development. It also seeks to build on what we already have. We are distinctive in academic offer and promote best practices that are clearly found across the length and breadth of our campus.

Good quality AP is an essential ingredient in providing a coherent response which will ensure a sustainable future for the institute. Naturally it is important that planning from academic departments help in monitoring overall performance. The planning process needs to be open and transparent in order to improve dialogue and understanding between the institutional center and academic departments.

Academic Monitoring(AM), therefore, facilitates institutional foresightedness over departmental activities, engages in constructive dialogue, provides an institutional steer on certain issues and facilitates the allocation of resources. This links the financial, planning and budget processes which ultimately aids in the creation of a more sustainable organization. This goes on to enhance the students' learning experience and research profile and overall development.

4. The Practice

(A) Academic Planning:

Academic Calendar: For smooth conduction of academics, the institute prepares academic calendar before the commencement of every session by considering the academic calendar of University and academic policy of the institute. This academic calendar is discussed in the departments for its implementation. Also, it is displayed on notice board for the students.

Teaching Load Distribution: The teaching load (theory and practical) is appropriately allotted among the faculty members as per the cadre, experience & specialization.

Time Table: Time table is prepared as per the teaching scheme of RTMNU and Departmental requirement. The Time table is circulated among the staff members and displayed well in advance for the students.

Commencement of Classes: The date of commencement of classes as per academic calendar is communicated to the students by displaying notice on the notice board prior to the commencement of classes. Messaging is also done through email, telephonic conversation, SMS etc.

Course Planning: All subject teachers prepare teaching plan, tutorial plan and lesson plan for their respective subjects. For the effective content delivery of practical subjects, faculty members conduct the experiments as per the teaching plan with the help of laboratory manual.

Project work: At the entry of seventh semester, students initiate project work with a defined group. Formation of project groups and allotment of guide is done as per guidelines given in academic policy. Project work is carried out by the group of students and evaluation is done by the project review committee and project guide. Progress seminars are conducted as per schedule in academic calendar. The review committee evaluates its work with respect to the rubrics defined by the departments.

(B)Academic Monitoring (AM)

To carry out AM, Principal constitutes the committee for academic monitoring of various programs. This committee visits department to take review of academic process and verifies the academics related documents. Such visits and reviews are carried out **twice** in a semester.

AMC is also formed at the department level which continuously monitors and verifies the academics related documents. The adherence and compliance of academic calendar is also monitored. The continuous academic monitoring is done and fortnightly academic review is conducted. Class in-charges are assigned for every class and academic coordinator for each department is appointed by the head of department to monitor the conduction of classes as per time table.

Academic Coordinators keep academic record of all faculty members which includes the syllabus coverage, conduction of classes, strength and other academic related issues. The record is then submitted fortnightly to HoD for his/her observations, suggestions and improvements.

The HoD submits the Academic report to Dean Academics. This report shows lagging/ leading record of syllabus coverage. Accordingly, action plan is prepared for the extra classes for lagging syllabus. Updated academic documents like Lesson Plan and Tutorial Plan are checked by Academic Monitoring Team.

Cumulative attendance and the   provisional detention list of the students are displayed on the notice board. Remedial classes are also conducted for academically slow learners and for the students having less attendance.

5. Evidence of Success

- APM ensures completion of targeted teaching plan.
- Program Assessment Committee (PAC) at the Department level & Internal Quality Assurance Cell (IQAC) at the Institute level ensures that the Objectives and Outcomes are attained, leading towards attainment of Vision & Mission of the Department & Institute.
- The practice helps in the timely completion of 100 % Syllabus coverage.
- Thus, the faculty members find enough time to conduct revision sessions.
- Our students are among the **1st ten rank holders of the University**. The table below gives an overview of the meritorious positions bagged by the students of various semesters in **R.T.M.N.U.(Summer-2019) Examination**. The contribution of all the departments is noteworthy in bringing laurels to the institute.

Summer 2019

Semester	No of Rank holders Semester wise	
4th to 8th	41	

Continuous monitoring and use of pedagogical methods in teaching learning process has proved very useful in enhancing student's learning interest. Special practice sessions and remedial classes where students solve University question papers, have helped in improving overall result. Measures taken for slow learners have proved helpful for increasing results.

Following table shows that results of all semesters has increased progressively from 2017 TO 2019

College Results in R.T.M.N.U. Winter Examinations

Semester	Winter-2019	Winter-2018	Winter-2017	
1st Semester	68	61	70	
3rd Semester	57	49	55	
5th Semester	62	68	73	
7th Semester	81	78	85	
Average College Results	**67**	**64**	**70**	

College Results in R.T.M.N.U. Summer Examinations

Semester	Summer-2020	Summer-2019	Summer-2018	
2st Semester	98	69	65	
4rd Semester	98	59	56	
6th Semester	98	70	74	
8th Semester	100	90	93	
Average College Results	98	72	71	

- The overall sense among the students for attending classes has strengthened, so average attendance has improved.
- More number of classes are engaged by the teachers.
- More number of pedagogical methods are used by the teachers in teaching learning process.
- This practice helped in Attainment of COs, POs and PSOs.
- Four programs got accreditation from NBA.

During Covid-19 which gave way to the pandemic situation, the examination system was switched to online mode from offline mode.This system also helped us to test the subject knowledge of the students in the online system which eliminated logistical hassles and drawbacks in the traditional mode of the pen-and-paper examination.The online exam replaced the conventional system of assessment. The flexibility associated with computer-based tests reduced exam anxiety among test takers as they could take the exam at any time of the day.The outcome was:

i.The institute encouraged the students for switching to online examination in pandemic situation.

ii.Students successfully adapted the Online Examination System.

iii.The MCQs were prepared by the faculty members based on the bloom's Taxonomy levels following Examination reforms which were useful to the students for competitive Examinations.

iv.The attendance of the examination was around 98%.

6. Problems Encountered and Resources Required

- Availability of External Experts and mutual consent on the dates for adjunct/visiting faculty.
- Preparing action plan for extra classes because of unavailability of vacant slots in the time table.
- Faced difficulties in bringing students for remedial classes.
- Because of unexpected holidays it is difficult to adhere to the schedule of Academic Calendar.

Best practice 2

1. Title of the Practice: Centralized Examination and Evaluation System

    1. **The Objectives of Practice:**

The examination reforms in the Institute, is not merely a technique to improve the evaluation system but to be viewed as an objective at improving the education process itself. The main objectives of evaluation procedures are:

(a) The system of evaluation should be adequate and comprehensive.

(b) The system should provide a feedback:

1. to the students regarding their strengths and weaknesses; and

2. to the teacher as to how far she/he has been able to benefit the students and to modify his/her approach and teaching methods.

3. The Context:

The teaching, learning, and evaluation are integrated and indissoluble components of education. In general, the internal examinations are conducted at department level and valuation is done by the course teachers at department level, while we do this practice at institute level.

The institute ensures that the evaluation system serves as a resource in the process of learning. The evaluation system, along with teaching, act as an integral part of facilitating learning by the student. The evaluation process should include continuous internal evaluation, the conduct of examination, the evaluation of answer scripts and displaying the performance of the students. It is in this context that the evaluation practices are chosen and introduced.

4. The Practice

    1. *Question Bank:*

Every Course teacher prepares Question Banks for various courses taught at UG level. These question banks are used for setting the question papers. Question Banks are updated by the teachers from time to time. Objective type questions are prepared by the teachers for some subjects.

(B)Centralized Tests

Two centralized Class Assessment Tests and one end semester examination (Sessional Examination) per semester are conducted.

- **Class Assessment Test-I** is based on Unit 1 and Unit 2 and **Class Assessment Test-II** is based on Unit 3 and Unit 4 of syllabus.
- **Sessional Examination** is conducted once at the end of the session based on University exam pattern which covers complete syllabus.

- Two **Assignments** are given in a semester. Assignment-1 is based on first 3 units and Assignment-2 covers remaining 3 units of syllabus.
- Unit wise question banks are provided for all subjects. The question bank is moderated by faculty members of respective subject groups at department level.

After the first test (Test one) each staff meets the students who score less marks and they are counseled and given remedial coaching. The course teacher of each subject distributes the valued end semester answer scripts to the students for their scrutiny. Students are given the chance to clarify with the staff if they have any doubt regarding the mark allotment.

(C)Transparency in Evaluation System

Class Assessment Test:

After Valuation, marks are displayed on dates mentioned in the academic calendar by faculty members. Assessment copies are shown to the students.

Sessional Examination:

- A general thrust is given on the external element in the end semester examinations, such as external paper setters, moderators of the question papers and valuers of the answer scripts. Three sets of question papers are prepared by different faculty members, which are moderated by faculty members of respective subject groups at central level.
- After moderation of question papers, the Moderation committee hands over the papers to printing Committee. Printing committee hands over the required number of copies of question papers to the Exam In charge one hour before the scheduled time of the paper.
- **Model Answers and marking scheme is prepared by every subject teacher before valuation.**
- Valuation is done by the respective subject teacher within two days. Sample Answer sheets are moderated by external moderators.
- Teachers of other institutes are also appointed for moderation of question papers and answer scripts.
- Answer sheets are shown to all the students and answers are also discussed with the students. After seeing the papers students sign the answer sheets.

Procedures of Evaluation and Guidelines for Faculty

For evaluating students' performance, the teacher of a course will apportion marks to the Class Assessment test, semester-end examination, two assignments and teacher assessment based on a, periodical quizzes, laboratory work, seminars or any other assignment that the course teacher considers necessary for assessing the student's performance. The distribution of weightage, to the various components of assessment is as given in following tables.

Mark Distribution of Theory Subjects

Sr. No.	Evaluation Parameters	Weightage
1	Class Assessment Test-I (CAT-I)	2
2	Assignment _I	2

3	Class Assessment Test-II (CAT-II) 2	2
4	Assignment -II	2
5	Sessional Examination	8
6	Teacher Assessment	4
	Total	**20**

Mark Distribution of Practical Subjects

Sr. No.	Evaluation Parameters	Weightage
1	Practical Record	10
2	Practical Exam	5
3	Viva-Voce	5
4	Teacher Assessment	5
	Total	**25**

During Covid-19 which gave way to the pandemic situation, the examination system was switched to online mode from offline mode.This system also helped us to test the subject knowledge of the students in the online system which eliminated logistical hassles and drawbacks in the traditional mode of the pen-and-paper examination.The online exam replaced the conventional system of assessment. The flexibility associated with computer-based tests reduced exam anxiety among test takers as they could take the exam at any time of the day.The outcome was:

i.The institute encouraged the students for switching to online examination in pandemic situation.

ii.Students successfully adapted the Online Examination System.

iii.The MCQs were prepared by the faculty members based on the bloom's Taxonomy levels following Examination reforms which were useful to the students for competitive Examinations.

iv.The attendance of the examination was around 98%.

5. Evidence of Success

- Continuous assessment being an important component of semester system, encourages the students to work systematically throughout the semester.
- Students have the opportunity to discuss their answers through all accepted tools of internal evaluation. This has added to reliability and also transparency of the system.
- There is increased rapport and relationship between the teachers and the students.
- Holding of examinations is quite simplified and regularized and results are declared as per the predetermined date specified in the academic calendar.
- This practice is effective for providing a feedback to the students and an opportunity to learn the subject more accurately and adequately.
- The system can also be credited for its efficiency; consequently, wastage of manpower is negligible.

Impact of the Practice

- The Centralized Examination and Evaluation System has opened and strengthened a transparent

communication channel between students, teachers and administrators of various departments.
- Students' involvement in the process has improved. The overall sense of belonging to the institute among the students and the teachers has strengthened.
- Students get acquainted with the University pattern of examination.
- This practice has helped in time management and optimization of resources.
- Uniformity in valuation is maintained because of the availability of marking scheme.
- Transparent and fair valuation is done.
- Every faculty evaluates answer scripts irrespective of seniority and cadre.
- The overall procedure being centralized is better controlled and convenient in implementation.

6. Problems Encountered and Resources Required

Problems Encountered

1) Inability by external moderators, to report for moderation due to some unavoidable circumstances.

2) Some faculty members are busy with other assignments or on leave. Making alternate arrangement for valuation is quite difficult.

3) Formatting of question papers is a time-consuming task.

Resources Required

No additional resources are required except deploying the available manpower at the college. Sufficient number of computers and printers are available for taking printouts of question papers.

File Description	Document
Link for Best practices in the Institutional web site	[View Document](#)

7.3 Institutional Distinctiveness

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

Response:

Enhancing Research and Innovation through Research Methodology in Engineering and Technology including Applied Sciences

Context

At any stage of civilization in society, social life has remained mainly tradition based and contribution of established lifestyle. However, in every activity of human life, a need is always felt of improving upon the existing practices.

In view of this every country has to think of research and development activity in all its spheres of life. Accordingly, India has setup Council Of Scientific and Industrial Research. Among the 50 laboratories,every laboratory focuses of development in specific activity of society, for example National Chemical Laboratory of Pune is meant for all indigenous investigations in regards to chemical reactions which should be executed in the context of industrial development of India.

Obviously these CSIR labs will need human resource which has undergone basic training in research. All the national institutes, state levels institutes and private institutes have concentrated on training of human resource, capable of executing research programs.

In today's day and age, the world has become severely competitive, and so has education. In order to stay on top, educational institutes must have a distinctive vision and mission, and must focus their efforts towards excelling in their own unique niche. This is an exhaustive process which includes constant development of best practices, continuous innovation and thorough analysis of its key areas of excellence. These activities define and set-apart leading institutions from the rest. We have devoted our time and energy towards research methodology which has proven to be a distinctive feature of the Institute, strengthening its vision and mission.

Objective

In view of the same our Institute wanted to establish a research-oriented environment for its academicians. The key objectives are:

- Instill in the teachers and students of the Institute, the mindset of research.
- Improve the communication between the industry and the institute by addressing practical problems through academic research and analysis.
- Develop extensive training programs to improve Human Resource Development.
- Develop new approaches to solving various problems faced by the industries, as well as the society in general.
- Provide the faculty of the Institute a platform on which they can upgrade their skills, get in touch with industry insiders and groom them into even more effective educationists.
- Develop an understanding towards the various approaches of effective and useful research in Engineering and technology.
- Train beginners in research to the various approaches for solving complex problems which require extensive research and development.

Practice: Obviously if human resource is to be trained for research activity the faculty members must know the process of execution of research. It is exactly for this purpose, the institute has developed this specialized course of **"**Research Methodology in Engineering and Technology including Applied Sciences**"**

These courses are two folds

1. A general approach to research
2. A specific training specializing human resource in specific focused areas.

These areas are identified through detailed discussion with industry personal, studying relevant literature published in relevant technical journals, executing sponsored research programs, executing industrial

consultancy assignments and developing various test rigs. For example a course is developed on machinery alignment as it was indicated by industrial personnel that they are handicapped in executing modern alignment techniques as they are not appropriately informed and trained for the execution of these techniques. Then the teachers in the institutes executed extensive studies of the subject machinery alignment. These studies were conducted after extensively referring to relevant journals, research papers and print publications. As a result of all these practices, the course which was designed has proven to be very valuable and well accepted by the industrial and educational fraternity equally.

In the November of 2004, Ram Meghe Institute of Engineering and technology, Badnera, State of Maharashtra, requested the Institute to develop a course around these ideologies and present it for their own faculty. Dr. S.V. Bansod, one of the senior faculty at College of Engineering, Badnera, approached Dr. J. P. Modak regarding the same, owing to their previous academic connections. Subsequently, Dr. Modak assembled a team of experts, prepared course material, and presented a major part of the course by himself while proficiently handling the team from the Institute by grooming the team on all of their individual areas of expertise. The first course was organized as under:

	Lecture 1	Lecture 2	Lecture 3	Lecture 4	Lecture 5
	10:00-11:00	11:00-12:00	12:00-13:00	14:00-15:00	15:00-16:00
Day 1	Research process 1 Dr. J. P. Modak	Research process 1 Dr. J. P. Modak	Introduction to Mathematical Modelling Dr. J. P. Modak	Experimental Data Based Research-1 Dr. V. S. Deshpande	Experimental Based Research- Dr. M. P. Singh
	Lecture 1	Lecture 2	Lunch	Lecture 3	Lecture 4
			Break		
	10:00-12:00	12:00-13:30	14:30-16:00	14:30-16:00	16:00-17:30
Day 2	Artificial Neural Network Dr. Mrs. A. A. Khurshid	Exp. Data Base Mod.-1 Dr. Mrs. M. P. Joshi		Exp. Data Base Mod.-1 Dr. R. V. Deshpande	Discussion Participants All Speakers

Evidence of Success: At the end of every program we gather our feedback which seeks the opinion of the attendees of the course in terms of:

1. Quantum of knowledge of the speaker. Depth of knowledge of the speaker.

2. Presentation skill of the speaker oral. Presentation skill of the speaker aids. Response of speakers to queries.
3. Overall impression of attendee about the speaker.

- The average feedback of all speakers so far from 50 presentations is in the range of 80%-95% of excellence in presentation of the information in the course.
- Since then the Institute has been invited to present this course at nearly **50 institutions in Vidarbha, Western Maharashtra, Chhattisgarh and Rajasthan.**
- In all around **100 faculty members have participated** in the courses conducted.
- The course also provides a steady stream of revenue for the institute.
- One week online FDP on Research Methodology in the year 2019-20 was organized by IQAC in which more than 500 research scholars and teachers from all over India participated. All aspects related to research methodology which are required for aspiring researchers were included in this FDP.
- More than **3000 trainees benefited** from the above programs.

File Description	Document
Link for appropriate web in the Institutional website	[View Document](#)

5. CONCLUSION

Additional Information :

- LTJSS approach to education is an uncompromising pursuit towards achieving excellence through Human Resources, and infrastructure to generate peak synergy among academicians, professionals, technocrats and students for the task of nation-building.
- Our thrust areas are all-round personality grooming of the students, rigorous practical training in laboratories and workshops, co-curricular activities and personal attention to student counseling. The college is known for its quality of students, its praise-worthy technical support to industries and for its well-qualified faculty possessing post graduate and doctoral qualifications.
- The institution has collaboration with reputed R & D organizations & Industrial houses for the purpose of taking up joint sponsored research projects.
- The Institute has organized number of National and International level conferences.
- Institute motivate all faculty members, staff, Undergraduate, Postgraduate students, Ph.D. Research Scholars to register for patents for their innovative concept.
- Remedial classes are conducted for the students to improve the performance of students in all subjects.
- These classes are conducted for students having poor performance i.e. for slow learners.
- During remedial classes subject content are again taught with more simplification and related difficulties are solved. These classes facilitate one-to-one interaction between teacher and students. Advanced teaching-learning tools are used for content delivery of syllabus.
- Industry persons are also called for delivering some of the topics of few courses.
- Content delivery of syllabus is blended with NPTEL, Google Classrooms, Virtual Labs, NMEICT etc.
- Activity/ creative laboratory is included which is additional and apart from the curriculum in which some technical activities are conducted as per the interest of the students and need.

Concluding Remarks :

The Institute has lush green campus with world class facilities to support all functional developments required for higher performing institute. The institute is one of the leading institutes in the region and has completed 31 years of excellence. Institute focuses on academic excellence to improvise quality of teaching learning process in a conducive environment. This enables in acquiring desired skill and knowledge base required to withstand in a highly competitive environment. The institute encourages students to organize and participate in co curricular and extracurricular activities which help in overall personality grooming. Institute also motivates faculty for their R&D work and provide healthy atmosphere by conducting sports and cultural activities for staff. Institute is continuously putting all out efforts for tie-ups in various fields like summer school trainings, industrial internship etc. Institute is striving hard for Placements, consultancy and sponsored research projects.

6.ANNEXURE

1.Metrics Level Deviations

Metric ID	Sub Questions and Answers before and after DVV Verification
1.2.2	**Number of Add on /Certificate programs offered during the last five years** 1.2.2.1. **How many Add on /Certificate programs are offered within the last 5 years.** Answer before DVV Verification: 	2020-21	2019-20	2018-19	2017-18	2016-17
---	---	---	---	---
14	15	17	14	14 | Answer After DVV Verification : | 2020-21	2019-20	2018-19	2017-18	2016-17
---	---	---	---	---
06	09	12	11	11	 Remark : DVV has excluded repeated programs.
1.2.3	**Average percentage of students enrolled in Certificate/ Add-on programs as against the total number of students during the last five years** 1.2.3.1. **Number of students enrolled in subject related Certificate or Add-on programs year wise during last five years** Answer before DVV Verification: 	2020-21	2019-20	2018-19	2017-18	2016-17
---	---	---	---	---
1155	1211	1271	2649	1851 | Answer After DVV Verification : | 2020-21	2019-20	2018-19	2017-18	2016-17
---	---	---	---	---
958	896	956	1561	1236	 Remark : DVV has given the value as per metric 1.2.2
1.3.2	**Average percentage of courses that include experiential learning through project work/field work/internship during last five years** 1.3.2.1. **Number of courses that include experiential learning through project work/field work/internship year-wise during last five years** Answer before DVV Verification: 	2020-21	2019-20	2018-19	2017-18	2016-17
---	---	---	---	---
338	338	336	338	339	

Answer After DVV Verification :

2020-21	2019-20	2018-19	2017-18	2016-17
4	4	4	4	4

Remark : DVV has made the changes as per SSR.

1.3.3	**Percentage of students undertaking project work/field work/ internships (Data for the latest completed academic year** 1.3.3.1. **Number of students undertaking project work/field work / internships** Answer before DVV Verification : 1392 Answer after DVV Verification: 22 Remark : DVV has made the changes as per shared report by HEI.
2.1.2	**Average percentage of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy) during the last five years (exclusive of supernumerary seats)** 2.1.2.1. Number of actual students admitted from the reserved categories year-wise during the last five years Answer before DVV Verification: _(table below)_ Answer After DVV Verification : _(table below)_ Remark : DVV has made the changes as per actual students admitted from the reserved categories by HEI.
2.3.3	**Ratio of students to mentor for academic and other related issues (Data for the latest completed academic year)** 2.3.3.1. Number of mentors Answer before DVV Verification : 175 Answer after DVV Verification: 204 Remark : DVV has made the changes as per shared EP- 3.1
3.3.3	**Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five years**

2.1.2.1 Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
332	380	512	504	518

Answer After DVV Verification :

2020-21	2019-20	2018-19	2017-18	2016-17
288	330	445	417	456

3.3.3.1. **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:

2020-21	2019-20	2018-19	2017-18	2016-17
57	35	59	27	59

Answer After DVV Verification :

2020-21	2019-20	2018-19	2017-18	2016-17
45	23	42	21	41

Remark : DDVV has excluded books and chapters without ISBN number.

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

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

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
9	4	3	2	2

Answer After DVV Verification :

2020-21	2019-20	2018-19	2017-18	2016-17
0	0	0	0	0

Remark : DVV has given 0 as per HEI clarification.

3.4.3	**Number of extension and outreach programs conducted by the institution through NSS/NCC, Government and Government recognised bodies during the last five years**

3.4.3.1. **Number of extension and outreached Programmes 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:

2020-21	2019-20	2018-19	2017-18	2016-17
53	26	24	18	6

Answer After DVV Verification :

2020-21	2019-20	2018-19	2017-18	2016-17

36	26	19	18	5

Remark : DVV has not consider days activities.

3.4.4	**Average percentage of students participating in extension activities at 3.4.3. above during last five years**
	3.4.4.1. **Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations such as Swachh Bharat, AIDs awareness, Gender issue etc. year-wise during last five years**

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
2567	2587	1775	1177	522

Answer After DVV Verification :

2020-21	2019-20	2018-19	2017-18	2016-17
1967	2587	975	1177	422

Remark : DVV has not consider those students participated in days activities.

4.2.4	**Percentage per day usage of library by teachers and students (foot falls and login data for online access) during the latest completed academic year**
	4.2.4.1. Number of teachers and students using library per day over last one year
	Answer before DVV Verification : 782
	Answer after DVV Verification: 156
	Remark : DVV has made the changes as per average of teacher and students using library per day on (dates)

5.2.2	**Average percentage of students progressing to higher education during the last five years**
	5.2.2.1. **Number of outgoing student progression to higher education during last five years**
	Answer before DVV Verification : 115
	Answer after DVV Verification: 00
	Remark : DVV has given 0 as per HEI clarification.

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

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
0	2	4	5	6

Answer After DVV Verification :

2020-21	2019-20	2018-19	2017-18	2016-17
0	1	1	2	4

Remark : DVV has considered only awards/medals for outstanding performance in sports/cultural activities at inter-university/ state/ national / international level

| 6.3.4 | **Average percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP)during the last five years (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course).**

6.3.4.1. **Total number of teachers attending professional development Programmes viz., Orientation / Induction Programme, Refresher Course, Short Term Course year-wise during the last five years**

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
110	118	80	99	76

Answer After DVV Verification :

2020-21	2019-20	2018-19	2017-18	2016-17
98	85	65	85	65

Remark : DVV has excluded FDPs less than 5 days. Teachers undergoing multiple online/ face-to-face Faculty Development Programmes (FDP) in a academic year to be counted as one. |

| 6.5.3 | **Quality assurance initiatives of the institution include:**

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

Answer before DVV Verification : A. All of the above
Answer After DVV Verification: B. 3 of the above
Remark : DVV has select B. 3 of the above as per shared report by HEI. |

2.Extended Profile Deviations

Extended Profile Deviations
No Deviations