

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

### TULSIRAMJI GAIKWAD-PATIL COLLEGE OF ENGINEERING AND TECHNOLOGY

TULSIRAMJI GAIKWAD-PATIL COLLEGE OF ENGINEERING AND TECHNOLOGY, KHASRA NO. 8/1, MOHGAON, WARDHA ROAD, NAGPUR-441108

441108

www.tgpcet.com

### **Submitted To**

# NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL BANGALORE

October 2019

### 1. EXECUTIVE SUMMARY

### 1.1 INTRODUCTION

Tulsiramji Gaikwad-Patil College of Engineering and Technology, Nagpur is located on National Highway No. 7. Though in infancy it is reckoned as an important and a prestigious institution which has been serving to empower the students and enable them to acquire knowledge and skill for a better tomorrow. There is wonderful fusion of all castes, creeds, communities and categories and the college caters to the educational needs of young men and women from the society at affordable cost. Vidarbha Bahu-uddeshiya Shikshan Sanstha, Nagpur espoused the cause of education in 2007 and since then the Foundation Society i.e. Vidarbha Bahu-uddeshiya Shikshan Sanstha, Nagpur has done illustrious work in the field of education. Vidarbha Bahuuddeshiya Shikshan Sanstha, Nagpur has under its umbrella an international school, two engineering colleges with UG & PG education, One college of Architecture and two second shift polytechnics. Tulsiramji Gaikwad-Patil College of Engineering and Technology, Nagpur has taken many strides in the years gone by and under the dynamic leadership of Secretary Dr. Mohan R. Gaikwad, an Academician and Administrator par excellence has almost reached the acme of glory and success. Dr. Mohan R. Gaikwad with the dedicated members of the Managing Committee has played a very vital and decisive role in the metamorphosis of the College and the result of their effort is that the College has acquired social accreditation. The college has been fortunate to have associations with distinguished academicians as the members of Managing Committee, dedicated members of the Teaching and non teaching staff who have shares in the popularity, achievements and the success of the college. The remarkable features of TGPCET are integrity, commitment to the mission of chiseling and building the capacities of young pupils. The endeavors of the College are aimed at enabling its students to create their own identity in the society. The College is approved by AICTE - New Delhi, Directorate of Technical Education ,Maharashtra and affiliated to Rashtrasant Tukadoji Maharaj Nagpur University,Nagpur. The college offers 7 BE(CSE,IT,ECE,ETRX,CE,ME,EE) Programs, 5 M.Tech/ME (CSE,ECE,WCC,SE,IPS), MBA and MCA Programs.

#### Vision

To make exemplary contribution to the progress and future of our country by enhancing the capabilities of our youth, by imparting world class education and training in science, technology and management; empowering them to seek and offer solutions to challenges faced by their brethren locally as well as globally.

#### **Mission**

- To impart world class education and training to our students by offering state-of-art to undergraduate, postgraduate and doctoral programs
- To develop dynamic engineers and managers comparable to the best in the world and capable of taking leadership role in future
- To generate new knowledge by developing cutting-edge research and world class scholarship, to effectively contribute to the future of country and global community.
- To establish and nurture long term symbiotic relationship with industry and institutions of higher learning within and outside our country in generating solutions for current and future issues of concerns
- To develop potential of all our stakeholders to its fullest extent and empower them to actualize it.

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

### **Institutional Strength**

- 1. Excellent Infrastructure, Geographical Location and Excellent Transportation
- 2. Lush Green Environment
- 3. ICT based Teaching-Learning
- 4. Qualified and experienced Faculty
- 5. Faculty Retention
- 6. Continual upgradation of Knowledge and Skill Development
- 7. Company specific training for enhanced employability
- 8. Decentralisation and transparency in Administration
- 9. Online Attendance, Term Exam Marks and Feedback
- 10. Enriched Curriculum towards Industrial readiness
- 11. Computational facility and connectivity
- 12. Active participation of student council in Academic and Administrative Bodies.
- 13. Facilities for extra-curricular activities
- 14. Yoga Centre
- 15. Well Defined Policy for Research promotion
- 17. Faculty Development and Skill enhancement Programmes.
- 18. Mentoring System
- 19. Proper Budgeting and Utilization of Fund
- 20. Round the clock CCTV surveillance for a safe and secure environment
- 21. Well defined Service Rules.
- 22. Solar systems and waste management

#### **Institutional Weakness**

- 1. Most of the students hail from villages. Their communication skill is not good.
- 2. Limited Scope for interaction with R&D organizations
- 3. Inadequate Collaboration with Foreign Universities
- 4. Lack of scope for Cultural Diversity.

### **Institutional Opportunity**

- 1. Collaboration with foreign universities
- 2. Enhanced R&D activities
- 3. To become Autonomous
- 4. To provide Exchange Programme opportunities for 100% Students
- 5. To continue to adopt ICT enabled practices in Teaching Learning
- 6. To Initiate start up programs
- 7. MOUs with Institute of National Importance

### **Institutional Challenge**

- 1. Motivating students for Research and PG Programmes in Engineering
- 2. Less number of students enrolled from other states/countries and less number of Faculty from diverse cultural background.
- 3. Less Scope for Cultural Diversity
- 4. Meagre scope for consultancy
- 5. Lack of Patent earning Level of Research
- 6. Global Competition
- 7. Motivating students towards employment in core Industries
- 8. Poor communicative ability of students from rural background.

### 1.3 CRITERIA WISE SUMMARY

### **Curricular Aspects**

• Tulsiramji Gaikwad Patil College of Engineering and Technology (TGPCET) is affiliated to RTM

Nagpur University. The Institution takes utmost care in effective curricular planning and implementation.

- Institute prepares academic calendar adhering strictly to the regulation and academic calendar prescribed by University.
- Academic monitoring is a continuous process for maintaining quality of teaching and learning.
- Institute offers industrial certificate courses to the students every year.
- Many faculty members are involved in university work.
- 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.
- New courses are introduced as per the directions given by RTMNU time to time. Academic flexibility is provided to the students by offering elective courses prescribed by the University.
- 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 university curriculum.
- 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, parents, alumni, employer. Feedback collected is analysed and action taken report is made available on institute website.

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

- The Institute gets Students admitted for different programs through the CAP conducted by the CET cell of Govt of Maharashtra. The admission process ensures inclusion of Students from all categories through social reservations defined by State Government of Maharashtra.
- 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 Mentoring 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 teaching learning process.
- Most of the teachers use innovative teaching methods, Learning Management System, ERP and ICT tools to increase the involvement of student in this process.
- Institute has implemented mentoring scheme 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.
- 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.

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• 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.

### Research, Innovations and Extension

- Mohan Gaikwad Invention & Research Centre (MGIRC) promotes active research involvement of teachers and scholars in research as well as recognizing any achievement of teachers through research
- The faculty members submit research proposals to Government as well as non Government agencies regularly. The research proposals have been sanctioned to faculty members resulted in fetching grants.
- Institute has created an Ecosystem for Innovation by setting up **Aakash Incubation Center** for Transfer of Knowledge. Institute makes sincere efforts for Transfer of Knowledge by conducting Workshops, Faculty Development Program, International Conferences etc. Institute has Intellectual Property Rights (IPR) Cell. The Institute conducts Workshops & Seminars on (IPR) & Industry -Academia innovative Practices.
- Institute has stated Code of Ethics to check malpractice and Plagiarism in Research. The institute provides incentives to faculty members who receives Recognition/ awards.
- Faculty members and Students are motivated to attend Conferences, to Publish articles, Books and for pursuing funded Research and Innovation. This has resulted in good number of publications in Books, Conferences proceedings as well as in Journals
- For developing sensitivities towards community issues, gender disparities, social inequity etc. and to inculcate values and commitment to society. National Service Scheme unit 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 neighbourhood community in collaboration with government and nongovernment units.
- 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 remarkable way.

### **Infrastructure and Learning Resources**

- Institute has state of art infrastructural facilities to support teaching-learning, research and administrative services as per and above 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, open air auditorium, cultural activities, Music room 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, e- materials and educational videos along with a browsing centre. Library is automated using Integrated Library Management System software. The library has different sections along with multimedia room and reading room. Remote access to e-resources of the library is available to faculty members and students.
- The college is having computers in 4:1 student to computer ratio 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.

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• 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.

### **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/OBC and other categories. Institute provides scholarships to students under economically weaker class and meritorious students.
- Facilitating mechanisms like career guidance & placement cell, soft skill development cell, Finishing School, etc. are working hard for capability enhancement and development of students. Institution has a well-structured, organized guidance and counselling system for different learning abilities and bridging the curriculum gap. Institution promote students for Vocational Education & Training.
- Institute has a well defined mechanism for redressal of grievances of students through Grievance Redressal committee, Anti-ragging committee & Anti-Sexual Harassment committee.
- The Institute concerns for student progression to employability and/or to higher studies. AICTE funded PRERANA scheme for GATE coaching is active.
- The institution has a mechanism for career guidance and placement of the students. The institute conducts soft skill development, career counselling, and personal enhancement sessions to ensure the success in placement.
- Through skill development cell, institute motivates & guides the students for higher studies, which has improved 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.
- The students actively participate in academic and administrative decisions at institute level. 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

- Tulsiramji Gaikwad-Patil College of Engineering and Technology (TGPCET) was established in the year 2007 by Vidarbha Bahu-uddeshiya Shikshan Sanstha (VBSS), a registered society. 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 Governing Body 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

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decision making. The vision and mission of the college is well articulated

- The institute has developed the strategic plan to achieve the goals which is deployed in a transparent and effective manner. Principal & Heads of the departments, 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 AICTE / UGC /DET/ RTMNU.
- 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 assess 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 welfare measures like Group Insurance, Lien facility, and study leaves etc. 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.

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

- Women Empowerment is facilitated by several activities, which raises awareness about genderequality and ensures fair treatment for all.
- Safety and security of students, 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, renewable energy usage among students. LED fittings are installed.
- The institute spends a considerable amount of its budget towards Green Practices. These include Water conservation through various ways likes 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.
- 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.
- The institute has its core values and code of conducts adhered to by all within the campus.
- The locational advantage has been explored and is being reaped by the Institute. Similarly the disadvantages have been identified and steps have been taken to overcome.
- The Institute gets engaged in various social activities for the benefit of the nearby communities.
- Anniversaries of stalwarts national importance are observed with fervor, which inculcates universal values and emboldens national identity and integrity amongst the students.
- The Institute maintains Academic, Financial and administrative transparencies which gives the impetus to work with greater quality.
- 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, most prominent are (I) E-Management: for effectiveness and Transparency. (II) Green

Initiative, (III) Creation of Awareness among Faculty and Students about their social responsibility.

• The Institute is highly distinctive in Integrated Diversified Techno Values, as we have Students from states like MP,UP,CG,Bihar, J&K and country like Nepal etc. The high levels of different Ethical and Cultural Values, the Students are executing various services to the benefit of the local village.

### 2. PROFILE

### 2.1 BASIC INFORMATION

Name and Address of the College		
Name	TULSIRAMJI GAIKWAD-PATIL COLLEGE OF ENGINEERING AND TECHNOLOGY	
Address	Tulsiramji Gaikwad-Patil College of Engineering and Technology, Khasra No. 8/1, Mohgaon, Wardha Road, Nagpur-441108	
City	Nagpur	
State	Maharashtra	
Pin	441108	
Website	www.tgpcet.com	

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	Prashant S. Kadu	0712-6648252	9763711372	0712-224065 6	principal@tgpcet.c om
IQAC / CIQA coordinator	Geeta Padole Gaikwad	07103-645411	9922966176	0712-645410	naaccoordinator@t gpcet.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	No

# Establishment Details

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Date of establishment of the college	31-07-2007
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U	Jniversity to which the college is affiliated/ or which governs the college (if it is a constituent
C	ollege)

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

Details of UGC recognition			
<b>Under Section</b>	Date	View Document	
2f of UGC	05-06-2018	View Document	
12B of UGC			

_	nition/approval by sta MCI,DCI,PCI,RCI etc			
Statutory Recognition/App roval details Inst Authority nt programme  Regulatory App roval details Inst itution/Departme nt programme  Day,Month and year(dd-mm-yyyy)  Remarks months				
AICTE	View Document	30-04-2019	12	

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

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

Location and A	Location and Area of Campus							
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.				
Main campus area	Tulsiramji Gaikwad-Patil College of Engineering and Technology, Khasra No. 8/1, Mohgaon, Wardha Road, Nagpur-441108	Urban	5	21900				

### 2.2 ACADEMIC INFORMATION

<b>Details of Pro</b>	ogrammes Offe	red by the Col	lege (Give Data	a for Current	Academic year	)
Programme Level	Name of Pr ogramme/C ourse	Duration in Months	Entry Qualificatio n	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BE,Compute r Science And Engineering	48	Intermediate for Regular and Diploma for LE	English	60	60
UG	BE,Informati on Technology	48	Intermediate for RE and Diploma for LE	English	60	60
UG	BE,Electroni cs And Com munication Engineering	48	Intermediate for Regular and Diploma for LE	English	60	18
UG	BE,Electroni cs Engineering	48	Intermediate for Regular	English	60	0
UG	BE,Civil Engineering	48	Intermediate for Regular and Diploma for LE	English	60	45
UG	BE,Mechani cal Engineering	48	Intermediate for Regular and Diploma for LE	English	120	59
UG	BE,Electrical Engineering	48	Intermediate for Regular	English	60	47

			and Diploma for LE			
PG	Mtech,Comp uter Science And Engineering	24	BTech or BE	English	18	18
PG	ME,Informat ion Technology	24	BTech or BE	English	24	5
PG	Mtech,Electr onics And C ommunicatio n Engineering	24	BTech or BE	English	24	24
PG	Mtech,Civil Engineering	24	BTech or BE	English	24	24
PG	Mtech,Electr ical Engineering	24	B Tech or BE	English	24	24
PG	MCA,Master Of Computer Application	36	Graduation	English	60	23
PG	MBA,Master Of Business Administrati on	24	Graduation	English	60	60

Position Details of Faculty & Staff in the College

				Te	aching	Faculty	y					
	Profe	essor			Asso	ciate Pr	ofessor		Assis	tant Pro	ofessor	
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				0				0				0
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit				0				0				0
Sanctioned by the Management/Soci ety or Other Authorized Bodies				7		4		6	J			124
Recruited	4	3	0	7	4	2	0	6	73	51	0	124
Yet to Recruit				0				0			•	0

		Non-Teaching	Staff	
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government		2,		0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				65
Recruited	52	13	0	65
Yet to Recruit				0

		Technical St	aff	
	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				52
Recruited	40	12	0	52
Yet to Recruit				0

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

			]	Perman	ent Teach	ers				
Highest Qualificatio n			Associate Professor			Assistant Professor				
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	4	3	0	3	2	0	0	0	0	12
M.Phil.	0	0	0	0	0	0	1	0	0	1
PG	0	0	0	1	0	0	72	51	0	124

			ŗ	Гетрог	ary Teach	iers				
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor				
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0

				Part Ti	me Teach	ers				
Highest Qualificatio n			Associate Professor			Assistant Professor				
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0

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

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

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
Diploma	Male	416	0	0	0	416
	Female	131	0	0	0	131
	Others	0	0	0	0	0
UG	Male	933	12	0	0	945
	Female	532	0	0	0	532
	Others	0	0	0	0	0
PG	Male	190	1	0	0	191
	Female	198	0	0	0	198
	Others	0	0	0	0	0
Certificate /	Male	0	0	0	0	0
Awareness	Female	0	0	0	0	0
	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	94	84	110	120
	Female	68	61	78	83
	Others	0	0	0	0
ST	Male	17	31	19	25
	Female	14	10	8	9
	Others	0	0	0	0
OBC	Male	104	71	79	108
	Female	57	53	49	67
	Others	0	0	0	0
General	Male	68	47	45	114
	Female	24	18	30	59
	Others	0	0	0	0
Others	Male	41	36	35	44
	Female	29	16	16	22
	Others	0	0	0	0
Total		516	427	469	651

### 3. Extended Profile

### 3.1 Program

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

Response: 446

6	File Description	Document	
	Institutional Data in Prescribed Format	View Document	

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

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

### 3.2 Students

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

2018-19	2017-18	2016-17	2015-16	2014-15
1914	1856	1869	1892	1647

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

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

2018-19	2017-18	2016-17	2015-16	2014-15	
371	371	371	371	371	

File Description	Document
Institutional data in prescribed format	View Document

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

2018-19	2017-18	2016-17	2015-16	2014-15
456	440	370	397	348

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

### 3.3 Teachers

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

2018-19	2017-18	2016-17	2015-16	2014-15
137	161	161	161	151

File Description	Document
Institutional Data in Prescribed Format	View Document

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

2018-19	2017-18	2016-17	2015-16	2014-15	
137	161	161	161	151	

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

### 3.4 Institution

Total number of classrooms and seminar halls

Response: 38

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

2018-19	2017-18	2016-17	2015-16	2014-15
765.98	767.77	786.90	806.90	706.24

**Number of computers** 

Response: 484

### 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:**

Tulsiramji Gaikward-Patil College of Engineering and Technology (TGPCET) is affiliated to Rashtrasant Tukadoji Maharaj Nagpur University (RTMNU), Nagpur and the curriculum and syllabi framed by the University is being followed for all UG and PG programs.

#### Academic Calendar

- Institution calendar is prepared at the commencement of each semester including working days, government and local holidays, and schedule of Internal Assessment and University examinations.
- Department calendar is prepared and aligned with the Institution calendar and it includes activities of departments such as guest lectures, seminars, workshops, symposiums, conferences, activities of various forums and cells, industrial visits/training, value added courses, certificate courses etc.

### **Quality of Classroom teaching**

Quality of the class room teaching depends on content delivery, interaction, discussion, examples, applications and usage of modern ICT tools. The role of the teachers is significant not only with contents but also with inspirational engagement of the students through various instructional methods and pedagogical initiatives.

### Instructional methods and pedagogical initiatives

- Institution practices Outcome Based Education (OBE) while planning and delivering the content. The faculty members will prepare the course plan based on the academic calendar to complete the syllabus as per the frame work.
- Various Innovative Teaching & Learning methodologies are adopted by the faculty members to create the best learning environment for students. Teaching and Learning methodologies include traditional (Chalk and talk) and technology enabled methods.
- Video lecturing is provided by faculty members to explain the real world problem with industrial illustrations, design issues etc.
- Faculty members prepare the e-materials for the benefits of students.
- Faculty demonstrates static & working models, simulations, animations and implemented projects in the department.
- Lectures by experts (industrialists/academicians) are arranged to deliver the content beyond syllabus for knowledge enhancement and value added courses have been organized for bridging the gap between Industry and Academia.
- Tutorials/ E-learning classes are practiced for participative learning with peer group concept.
- Assignments are given to improve the knowledge beyond the syllabus. Group Discussions and

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brain storming are encouraged for participative learning

- Laboratory practices are mandatory to have hands-on experience.
- The students are motivated to do research work and present papers in seminars/conferences/journals.
- The students are encouraged to visit well stocked library with reference books and magazine for the knowledge enhancement.

### Monitoring system for curricular delivery

- HODs and, IQAC coordinator are regularly monitoring the delivery of curriculum. Formal and informal feedbacks have been taken from the students in a regular intervals to monitor course delivery and syllabus completion.
- The teaching faculty is entrusted with the task of mentoring 15-20 students on academic and personal issues. The teachers frequently meet the students and under Teacher-Guardian scheme contact the parents and endeavour to ascertain the problems the students are confronted with
- OBE is adopted for the effective delivery of the curriculum, Question papers for the IAs are

designed to assess the attainments of the COs.

• DQAC regularly monitors the quality in curricular delivery.

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

#### Response: 58

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

2018-19	2017-18	2016-17	2015-16	2014-15
14	12	12	12	8

File Description	Document
Details of the certificate/Diploma programs	View Document
Any additional information	View Document

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

Response: 30.48

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

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2018-19	2017-18	2016-17	2015-16	2014-15
10	10	9	11	7

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

### 1.2 Academic Flexibility

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

**Response:** 79.82

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

Response: 356

File Description	Document
Minutes of relevant Academic Council/BOS meetings.	View Document
Details of the new courses introduced	View Document
Any additional information	View Document

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

Response: 100

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

Response: 14

File Description	Document
Name of the programs in which CBCS is implemented	View Document
Minutes of relevant Academic Council/BOS meetings.	View Document
Any additional information	View Document

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

Response: 91.92

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

2018-19	2017-18	2016-17	2015-16	2014-15
1854	1824	1811	1685	1293

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

### 1.3 Curriculum Enrichment

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

### **Response:**

The Institute takes all measures to enrich the curriculum through activities which are diverse and cater to the cross cutting issues relevant to sustainable environment, gender equality, human values and professional ethics for addressing the economic, social and environmental challenges of globalisation.

The students of TGPCET are moulded as responsible Engineers by creating awareness and addressing the societal and generic needs. Along with a standardized learning plan, the curriculum is enriched by including the courses like Gender Sensitization, Environmental Studies etc., Samples of courses offered to the students for enhancing the knowledge in the above aspects are listed below.

Issues	Regulation	Course Name	Offered to
Environment	andRTMNU	Environmental Engineering	BE-CSE
Sustainability			
	DIRECTION	NO.21	BE-IT
	OF 2014		
	RTMNU		

	DIRECTION NO. 2015	9 OI	Environmental Studies	BE-ECE,	EE,C
			Environment Management	MBA- M	ΙBΑ
	RTMNU		Renewable Energy Systems	BE-ME	
1944 (ST) (C) (C) (S) (S) (S)			Non-Conventional Energy Sources	BE-EE	
	DIRECTION NO	. 35	Watershed Management	BE- CE	
	OF 2016		Environmental Management System	BE- CE	
Human Values	and		Ethical Science	All Progr	am
Professional Ethics			Ethics in Information Technology	BE-IT	
			Industrial Economics and	dBE- ECE	
			Entrepreneurship Development		
				BE-IT	
			Cyber Ferencie and Computer Crimes	BE-ME BE- CSE	
			Cyber Forensic and Computer Crimes		
			Digital Forensic	BE- CSE BE-IT	
				M.Tech-	EC
	\ Y		Cyber Security	BE-IT	
<b>*</b>	4-7,		Cyber Forensic and Computer Crimes	M.Tech-0	CSE

### **Gender Equality**

The institution has formed a "Women Grievance Redressal Cell" with one of the senior woman faculty member as convener and other faculties as members. This committee provides an exclusive platform to women employees and girl students to discuss their grievances. It develops welfare schemes for them and establishes self-esteem and respect for women without any gender bias. It organizes special programs to empower them with their basic rights. Institute gives equal importance to all for all of its activities.

**Environment & Sustainability:** Apart from the curricular courses activities are conducted through NSS and department level committees to Create awareness on environmental issues and its sustainability to society. The Institution has implemented rain water harvesting system. More than 80% of the students and faculty members are using college buses for conveyance.

### **Human Rights**

The College has formed an Anti-Ragging Committee with the Principal as the Chairman. This Committee effectively controls ragging, which is violation of fundamental human values and rights. At the beginning of every year, this Committee forms an Anti-Ragging Squad for the control of ragging. The squad

members are posted at the crowded areas of the college campus to prevent the newly admitted students from being ragged. A Hostel Committee is formed to educate the students by peer group and avoid ragging menace. These activities control the unpleasant incidents arising from ragging and because of this the college campus is declared as a Ragging-Free Campus.

#### **Professional Ethics**

The students are trained to use the professional knowledge to face the public. Students are capable of making judgments, applying their skills, and reaching considered decisions in situations that the general public cannot do because they have not attained the necessary knowledge and skills. The Elegance Cell also trains the students on these soft skills through various courses.

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

Response: 51

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

Response: 51

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

### 1.3.3 Percentage of students undertaking field projects / internships

Response: 37.62

1.3.3.1 Number of students undertaking field projects or internships

Response: 720

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

### 1.4 Feedback System

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

A.Any 4 of the above

B.Any 3 of the above

C. Any 2 of the above

D. Any 1 of the above

**Response:** A.Any 4 of the above

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

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

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

File Description	Document
URL for feedback report	View Document

### **Criterion 2 - Teaching-learning and Evaluation**

### 2.1 Student Enrollment and Profile

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

**Response:** 4.93

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

2018-19	2017-18	2016-17	2015-16	2014-15
52	64	74	92	159

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

### 2.1.2 Average Enrollment percentage (Average of last five years)

Response: 93.36

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

2018-19	2017-18	2016-17	2015-16	2014-15
806	631	693	845	830

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

2018-19	2017-18	2016-17	2015-16	2014-15
822	810	810	810	822

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

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

Response: 100

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

2018-19	2017-18	2016-17	2015-16	2014-15
371	371	371	371	371

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

### 2.2 Catering to Student Diversity

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

### **Response:**

TGPCET recognizes the need to adapt to the different learning levels of students and therefore has framed many policies to give learning experience to each and every student. The Students who come for admissions have to go through a systematic admission and pre evaluation process. These students come from diverse socio-economic, rural-urban, in state-out state backgrounds and this is reflected in their basic knowledge of English, communication skills and Mathematics.

After the completion of Admission process, the learning levels of the students are assessed by their ranks and performance in 12th /Intermediate. After Induction Programs students are assessed and on basis of their performance, they are categorised into advanced and slow learners. The slow learners are paid special attention to improve their performance during Bridge course. After each Mid Term examination, the slow learners are identified on the basis of their performance in the tests. Remedial classes are arranged for all slow learners in the respective subjects. Remedial classes are conducted by the subject experts beyond the college working hours and records are maintained. Their performance is further monitored through personal counselling.

Students having backlogs (failed in some subjects in the previous semesters) are also identified and necessary support is provided to them by the teachers.

To support the accelerated learners in their academic pursuit, depending upon their program of study, programs like finishing school, special training programs on C programming, campus specific training, online certification courses offered by NPTEL, Spoken tutorial courses , Skill development programs

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ignite the minds of the advanced learners. Better exposure is provided to them through Guest lectures and seminars on emerging areas of Technology. Confidence building and capacity building are the prime focus of the Institute.

#### 2.2.2 Student - Full time teacher ratio

Response: 13.97

File Description	Document
Any additional information	View Document

### 2.2.3 Percentage of differently abled students (Divyangjan) on rolls

Response: 0.05

2.2.3.1 Number of differently abled students on rolls

Response: 1

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

### 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:**

The Institute ensures the learning more student-centric by adopting the following participatory learning activities to ensure the holistic development of students and facilitating life-long learning and knowledge management.

- Conducting tutorial classes.
- Giving assignments.
- Learning some of the subjects by softwares like MULTISIM, LABVIEW etc;
- Flip Classes,
- Team teaching, blended classes,
- MOOCS are introduced which enhance the participative learning.
- Students are encouraged to register in NPTEL courses, which improve the self learning.
- Presentation by students in the seminars
- Discussing Case studies.
- Industry oriented Mini Projects.
- Major Projects on latest technologies and by using advanced software.
- Accessing the additional information and latest developments in the subject area through internet.

Model making and presenting them in project exhibitions.

- Practical training in industry. Industrial / field visits.
- Presenting and Publishing technical papers in conferences/Journals. facilitating internships at Industry/renowned institutions like IIT, IIIT etc; .
- Advising them to become members of technical professional bodies like CSI, IETE, ISTE, ACM etc
- Learning Managment System (LMS)

Exposure to all the above activities creates confidence among students and drives them towards life-long learning and knowledge management.

### Participative learning:

Assignments of Theory as well as practicals are given to find out the current market strategies. Case studies are given to students in group to reflect upon and analyze these experiences to derive new ideas. Role-play methods are used for learners to takes place from re-enactment of past experience Guest lectures by experts from the profession and academic fields are organized by the faculty to provide knowledge beyond the prescribed syllabus. Webinars from experts within/outside India are organized to augment their knowledge and skills Programmes are organized in our Institute. As a part of the curriculum, Language laboratory has been established for students to improve their communication skills. In addition, Soft skills training slots are incorporated in the timetable, wherein the students are guided by the experts, in improving the presentation and communication skills. The students are encouraged to organize and to participate in Inter-collegiate events such as symposium, debates and design contests to bring out the potential of the students.

### Problem solving methodologies:

Design Assignments are given to students to understand the problems. They are required to analyze it and identify the solution. Brainstorming sessions are conducted for the students. Question Answer sessions are conducted for the students. Our campus is enabled with Wi-Fi facility that allows students to access technical resources. In addition to academics, in order to make the students socially responsible citizens, our Institute encourages the students to participate in Rotary Club activities with equal enthusiasm to develop their overall personality. The Institute has a state of the art central library well equipped with books & e-books, technical magazines, journals & e-journals and NPTEL lecture videos which serve as a knowledge resource centre. The teachers are encouraged to use modern teaching pedagogy, in addition to conventional classroom teaching practices. Computer Lab with Internet Connection permits the students to widen their knowledge and skills.

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

Response: 100

2.3.2.1 Number of teachers using ICT

Response: 137

File Description	Document
List of teachers (using ICT for teaching)	View Document
Any additional information	View Document

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

Response: 18.95

2.3.3.1 Number of mentors

Response: 101

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

### 2.3.4 Innovation and creativity in teaching-learning

### **Response:**

The institution adheres to innovative teaching-learning practices to bring academic excellence. The teacher uses various tools for enhancing the innovativeness and creativity in teaching.

Faculty members use Power Point presentation, NPTEL videos and video lectures (using animations) to create and instil innovation creativity in the teaching- learning process. The interactive sessions/ lectures are conducted for the students through smart board teaching. Apart from the conventional teaching approaches, E-learning classes, brain storming sessions etc., are adopted. The working models and charts are used by the faculty members to explain the fundamental and featured topics with advanced technologies in Theory and Laboratory classes. Guest lectures, field trips, visit to the industries, tutorial classes are organized. Peer group is involved for the better participation in the group discussions, assignments, and practical sessions. Students are given with seminar, case study and mini projects through peer groups in order to bring additional focus on the co-curricular activities. Laboratories and seminar halls are provided with internet and Wi-Fi connections to give extensive use of ICT tools for students to strengthen their technical skills. Simulation tools are used in the laboratory classes in order to make the student to participate in the learning practice and to enhance the problem-solving skills. Each department has registered with at least one professional society through which the technical experts are invited for guest lectures, seminars and workshops. Students are encouraged to organize and attend the programs in departments under the students association banner. They are also encouraged to take industrial visits, inplant training, training programs, projects and internship. IPR cell is functioning in the institution and the students become aware of the technique related to development of their innovative ideas into patentable projects.

Include two distinct innovations in TL Process

- 1. Apple MAC Lab:
- 2. FLIPPED CLASS-ROOMS:- Typically, teaching is undertaken in class-room and students practice

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on problems and go through experiential learning phase when they are out of class-room. Flipped class-room practice involves assigning study material, typically in the form of a video or detailed reading material, a few days ahead of the class. Thus, the student comes to the class equipped with the necessary knowledge and gainfully engages in experiential learning by solving problems. Several interventions may be offered by the teacher during this process such as: (i) helping the student recall fundamental knowledge, (ii) providing easiest line of though for complex problems, (iii) show parallel examples to encourage inductive learning, and (iv)provide tips and tricks that the teacher accrued over a period of time. Since this learning is occurring in the presence of the teacher, it is guaranteed to be complete.

3.SELF-ORGANIZED LEARNING ENVIRONMENT: It is known that, rather than spoon feeding (or grain feeding) knowledge to students and expect them to learn/apply concepts, it is better to pose "probing questions and provocative problems" and let them work through then. This method works best when the learning is set in a Computer Lab environment for 1 or 2 hours of sessions

### 2.4 Teacher Profile and Quality

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

Response: 100

File Description	Document
Year wise full time teachers and sanctioned posts for 5 years	View Document
List of the faculty members authenticated by the Head of HEI	View Document

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

**Response:** 7.16

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

2018-19	2017-18	2016-17	2015-16	2014-15
12	16	11	8	8

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

### 2.4.3 Teaching experience per full time teacher in number of years

**Response:** 7.5

2.4.3.1 Total experience of full-time teachers

Response: 1027

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

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

**Response:** 5.19

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

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

File Description	Document
Institutional data in prescribed format	View Document
e-copies of award letters (scanned or soft copy)	View Document

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

Response: 12.22

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

2018-19	2017-18	2016-17	2015-16	2014-15
13	24	23	19	16

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

### 2.5 Evaluation Process and Reforms

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

### **Response:**

One unit test and one model exam in theory subjects and one model examination in case of practical are conducted in each semester. Two Assignments in theory subject and 8 to 9 Assignments are given for Practical subject. The course in-charge carries out internal assessment of subjects based on internal test performance marks / grade received in Examination and assignments. Continuous evaluation procedure is followed for practical subjects. Effective implementation of evaluation reforms of the university are strictly followed. The college has initiated its own evaluation reforms for strict compliance. The process and procedure devised/ suggested by the university are followed. The continuous evaluation system at Institute level is in effect. The evaluation reforms in tutorial and mid-semester are implemented and results are declared within eight days. The students can see their evaluated answer sheets and discuss the same with concerned faculty. Students can prefer appeal for Grievance within 3 days. The students are taken for site visits . On the basis of internal & external Viva-voce continuous evaluation process is done. All the data are collected and stored in digital format for recovery/reference purpose. The students participate in seminar, practical training and thesis project is jointly evaluated by external and internal examiners. The evaluation steps are as follows: The faculty monitor attendance and marks of the students periodically. The Institute appoints examiners for the practical examinations and viva voce examinations as per the University directives The Institute sends its faculty members as examiners to evaluate semester Answer scripts to the affiliating University. The regulations contain the details of the evaluation process. During the Induction program the newly admitted students are updated about the attendance requirements as well as the passing marks requirements and the grading systems for the internal assessments. Whenever the students are in doubt, they are encouraged to approach the faculty to discuss and seek clarification of the doubts.

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

### **Response:**

Institution has a transparent and robust mechanism for the conduct of internal assessment of examinations. The institute is affiliated to RTM Nagpur University and follows the guidelines of the university in conducting the internal assessment of examinations. The academic calendar is provided to the students at the beginning of the semester with the details of assessment examinations of the respective semester.

Each internal examination is conducted after 22 - 25 working days. During each semester the students are well informed about the examination schedules through circulars and information on the notice boards.

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Attendance is maintained during the assessment period by the department examination cell. Absence is informed to the parents concerned and reasons are recorded in the students' database. Valuation of answer scripts is completed within three days after the examination and the consolidated statement of marks and attendance are made available with HoD . The same can be viewed by the students. Parents are informed about their ward's performance through letters at the end of each internal assessment examination. If the performance of a student is poor in all the subjects, parents are called by the teacher guardian to discuss the problem. During counselling period, faculty advisor will discusses with the students to identify the personal or subject problems. Class committee meeting is conducted at regular intervals to know the feedback and grievance from the students about the examination schedule, syllabus coverage and availability of study materials.

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

### **Response:**

The Institute is affiliated to Rashtrasant Tukdoji Maharaj Nagpur University (RTMNU) and end semester final examinations are conducted by RTMNU at identified examination centres. The examination committee is headed by an experienced examination in-charge.

### **Mechanism at University Level:**

The student is entitled to apply to challenge valuation in theory subjects by paying prescribed fee to the university within 7 days of announcement of result. University provides the photocopy of answer books to students regarding any grievances with reference to evaluation. In case there is no improvement, earlier marks are retained.

#### **At Institute Level:**

Institute conducts 2 internal exams in each academic session. Spot evaluation method is used to evaluate papers of students. The answers books, after evaluation are shown to students and 3 days are given to prefer appeal against grievance, If any. The discrepancies are explained by the teachers to the student. The discrepancies are corrected by the concerned faculty. In case the student is not satisfied the case is referred the to Grievances Cell. The Institute has a 6 member Grievances Cell headed by Head of the Department to deal with such cases. The Grievance committee redresses the grievances.

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

#### **Response:**

Institution adheres to the academic calendar for the conduction of continuous internal examination.

The academic calendar of the Institution is prepared by the Principal in consultation with HODs before commencement of every semester. The academic calendar contains:-

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- Holidays
- Schedule for internal exams
- Last working day
- Date of practical University examination
- Institutional level functions viz college day, sports day etc.

Based on the Institution academic calendar, department academic calendar is prepared by the HOD in consultation with faculty members. The department academic calendar contains:-

- Schedule of internal exams
- Seminars/ workshops
- Value added courses
- Conferences
- Revision

The academic calendar is displayed on departmental notice boards. Based on the academic calendar each faculty member prepares teaching plan for theory and lab subjects. Subject loads is allocated to faculty members well in advance so that they could make the plans. The teaching plan includes:

- Study material including question bank for students
- Syllabus and delivery plan
- Teaching pedagogy to be used for each content delivery
- Assignments to be given to Slow learners
- Plan of Continuous Internal Examination

Each continuous internal examination is well planned by the examination cell of each department governed by the examination cell of the institution. **Two internal exams are conducted per semester**. Syllabus for each internal exam is clearly defined at the beginning of the semester and 3rd day from the subject examination.

File Description	Document
Any additional information	View Document

### 2.6 Student Performance and Learning Outcomes

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

#### **Response:**

The learning outcomes are clearly defined using blooms taxonomy for all academic programmes and courses of the Institute. While defining the learning outcomes, following are taken care of:

The Learning outcomes are measurable and stated using active verbs (Bloom's taxonomy). They are expressed as complete declarative sentences that clearly describe the knowledge, skills, and competencies

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that students are expected to acquire as a result of completing their programme of study. The resources (faculty, library, labs, technology etc) and pedagogy to be adopted for effective course delivery and student learning are determined in consonance with the learning outcomes to be achieved. The outcomes are assessed and measured to identify the extent to which goals are accomplished. The outcomes assessment plan also specifies the performance targets/criteria (measurable objectives) that are used by the Institute to determine the extent to which the programme learning outcomes are being achieved.

The assessment of student learning outcomes is done by using direct and indirect measurement tools. Assessment methodology/tools are decided keeping in mind the parameters/learning outcomes to be measured and the desired emphasis during the delivery of a programme as prescribed in the course curriculum

Mechanism of communication

The PO, PSO, PEOs are published at:

Institute website- www.tgpcet.com

Department news letter

#### The PO, PSO, CO, PEO's are disseminated at:

Principal Chamber, Staff rooms, Laboratories, Notice Boards, Class rooms, Seminars Halls, Library and Corridors. Disseminated to all stake holders at appropriate meetings.

In addition to the above, Vision, Mission, PEO's, PSO, POs and COs are conveyed during the first day of each academic semester and also conveyed the same through different Activities. Apart from these Outcomes are disseminated to all the stakeholders of the program through faculty meetings, student awareness workshops, student induction programs etc.

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

#### **Response:**

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

Course Outcome is evaluated based on the performance of students in internal assessments and in university examination of a course. Internal assessment contributes 20% and university assessment contributes 80% to the total attainment of a CO.

#### a) Direct Internal Assessment

#### Direct internal Assessment

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Assignment, tutorials,	ClassØ The assignment, class and open book test and tutorial are
and Open book test	qualitative indices designed to assess students understanding of
	engineering knowledge and to develop problem solving skills.
Mid Term Examination	
	Ø Mid-term and End Examination evaluation is given matrices
End Term Examination	for assessing attainment the COs.
	Ø Each Examination are objective and descriptive in nature.
Laboratory Evaluation	Ø To assess student's practical knowledge with the basic
	theoretical understanding of subjects.
Oral Examination	
	Ø To assess students communication skills and confidence level.
Project Evaluation	Ø Project Evaluation is done thrice for the final year students to
	give them practical exposure.

Sr. No	CO Assessment Tool	<b>Assessment Frequency</b>	Assessor
1	Assignment Class and	OpenEvery Month	Concerned faculty members
	book test, Tutorials		
2	Mid Term Examination	One in a semester	Concerned faculty members
3	End Term Examination	One in a semester	Concerned faculty members
4	Laboratory Evaluation	Every Month	Concerned faculty members
	Oral Examination		
5	Project Evaluation	Every Month	Concerned Guide
6	Programme assessment	Every Year	HoD and Program Assessment
			Committee
7	Alumni survey	Every Year	Alumni Coordinator
8	Employer survey	Every Year	T and P Coordinator
9	Student exit survey	Every Year	HoD and Faculty Coordinator
10	Student portfolio	Every Year	HoD and Faculty Coordinator

#### **PO and PSO Assessment Tools:**

PO/PSO assessment is done by giving 80% weightage to direct assessment and 20% weightage to indirect assessment. Direct assessment is based on CO attainment where 80% weightage is given to attainment through university exam and 20% weightage is given to attainment through internal assessments. Indirect assessment is done through program exit survey, alumni survey and employer survey where alumni survey and employer survey are given a weightage of 25% each and program exit survey is given a weightage of 50%.

#### **Direct Assessment method:**

Display of students' knowledge and skill from their performance noticed during continuous assessment by:

Assignments Class test, Open book test, tutorials

Midterm and End term examinations

Project assessment

Laboratory evaluation and viva-voce.

These methods provide a student sample indicative about the qualitative leaning indices and the attainment levels of PO and POS are estimated.

Sr. No	Direct Asses	smentAssessment	Assessor	Reviewer
	tools	process		
		Frequency		
1	Assignment	ClassEvery Month	Faculty members	HOD
	and Open book	test,		
	Tutorials			
2	Mid	TermOnce in a semeste	rFaculty members	3
	Examination			
3	End	TermOnce in a semeste	rFaculty members	3
	Examination			
4	Laboratory Evalu	uation Every next week	Faculty members	S
	Oral Examination	n		_
5	Project Assessme	ent Every Month	Faculty member	S
			and Coordinator	

Sr. N	No Indirect Assessme	entAssessment	Assessor	Reviewer
	tools	process Frequency		
1	Exit survey	Annually	HoD	HoD and Internal Quality Assurance
2	Alumni Survey	Annually	HoD	cell
3	Employer survey	Annually	HoD	

#### 2.6.3 Average pass percentage of Students

**Response:** 83.67

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

Response: 456

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

Response: 545

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

## 2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

**Response:** 3.97

# Criterion 3 - Research, Innovations and Extension

#### 3.1 Resource Mobilization for Research

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

Response: 1.64

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

2018-19	2017-18	2016-17	2015-16	2014-15
0.18853	0	1	0.35	0.1

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

#### 3.1.2 Percentage of teachers recognised as research guides at present

Response: 4.38

3.1.2.1 Number of teachers recognised as research guides

Response: 6

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

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

Response: 0.08

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

Response: 12

186. 12

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

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Response: 771	
File Description	Document
Supporting document from Funding Agency	View Document

#### 3.2 Innovation Ecosystem

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

#### **Response:**

The college is aware of the Innovation in Industries and other fields of life. The process of Innovation mandates Incubation and acceleration which includes an Entrepreneurship and Start-Up. The college, therefore, has a sought the cooperation of the local body and other industries. The response of the local authority i.e. Municipal Corporation, Nagpur has been very positive and now TGPCET is associated with Mayor Innovation Council (MIC) and Centre for Creativity and Innovation (CCI) to foster spirit of Innovation, Incubation and Entrepreneurship among the students of our Institute as well as students of other Institutions also. The Institute has regularly organized programs related to innovation and Entrepreneurship/start-up in collaboration with MIC and CCI. Moreover, the Institute helps Innovators to incubate their ideas by seeking assistance of local industries. The Institute has formal MoUs for collaborating research and development as well as incubation with renowned organizations and industries .The project entitled "Innovative Water Harvesting Method through Pervious Concrete" was undertaken. This project launched by students of the college was appreciated and recognized by MIC. The college incubated the project. Cresolv Tech Pvt. Ltd. Nagpur adopted the project as a Start-Up for students.

The Institute has conducted many activities in collaboration with MIC. This helps in developing an ecosystem for Innovation, Incubation and entrepreneurship. Similarly various programs have been conducted by the college to enlighten the students in respect of writing a patent, Copyright and internet revolution.

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

Response: 50

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

2018-19	2017-18	2016-17	2015-16	2014-15
14	13	10	6	7

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

#### 3.3 Research Publications and Awards

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

**Response:** Yes

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

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

**Response:** Yes

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

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

Response: 2

3.3.3.1 How many Ph.Ds awarded within last five years

Response: 12

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

Response: 6

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

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

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#### Response: 1.96

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

2018-19	2017-18	2016-17	2015-16	2014-15
73	37	63	52	78

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

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

#### Response: 4.4

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

2018-19	2017-18	2016-17	2015-16	2014-15
187	90	148	146	108

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

#### 3.4 Extension Activities

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

#### **Response:**

The Institute is very concerned about impact of various extension activities on its students, employees, as well as on the regional community and on the environment. The institute believes in giving back what it has gained from the communities amongst which we live, work and play. The institute considers the impact of all extension activities on the local community and hence the various social and technical

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activities, events and programmes reflect our commitment to operate in a techno-social responsible manner. We aim to pursue our goals as one, keeping agreement with planet and society. The institute facilitates the students in various social and technical activities. Institute has conducted various social and technical activities for sensitising and motivating the students to social issues and their holistic development so far. Social activities include Blood Donation Camp, Swachha Bharat Abhiyan, Green Campus, Tree Plantation, Traffic Rule Awareness Rally and Pledge, Road Safety Awareness Program, Voter Awareness Campaign etc through NSS cell.

Students with the help of faculty are regularly interacting with villagers and sensitizing them towards the social issues.

Our students with active participation of villagers have setup and made arrangements for the following:

- Garbage collection and its segregation.
- Making manure from waste.
- Producing Bio-gas using Small Gobar-gas plant.
- Dealing with clean surface drains in villages.
- Stopage of burning harvested waste and left over's in the fields.

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

**Response:** 35

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

2018-19	2017-18	2016-17	2015-16	2014-15
4	16	6	3	6

File Description	Document
Number of awards for extension activities in last 5 years	View Document
e-copy of the award letters	<u>View Document</u>

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

Response: 51

3.4.3.1 Number of extension and outreach Programs conducted in collaboration with Industry, Community

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and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
7	10	13	9	12

File Description	Document
Reports of the event organized	View Document
Number of extension and outreach programs conducted with industry, community etc for the last five years	View Document

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

Response: 87.25

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

2018-19	2017-18	2016-17	2015-16	2014-15
1729	1631	1487	1524	1613

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

**Response:** 353

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

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2018-19	2017-18	2016-17	2015-16	2014-15
125	66	72	46	44

File Description	Document
Number of Collaborative activities for research, faculty etc	View Document
Copies of collaboration	<u>View Document</u>

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

#### Response: 44

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

2018-19	2017-18	2016-17	2015-16	2014-15
13	10	4	10	7

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

# **Criterion 4 - Infrastructure and Learning Resources**

### 4.1 Physical Facilities

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

#### **Response:**

The Institute possesses a wholly self-contained campus comprising of requisite infrastructure, which acts as a facilitator for the effective delivery of our curriculum and thereby fulfilling AICTE norms completely. The Institute provides excellent infrastructure to students with a vibe for availing the best of facilities. The Institute has well planned & well designed area of around 5 acres with a built-up area of 21,900 sq m.

The aesthetically designed campus has ultramodern facilities with academic wings for each department, administrative wings, laboratories, workshops, computer centre, spacious classrooms, well stocked library, conference hall, medical centre, sports ground etc. The institute has total 31 classrooms with modern teaching aids thus providing detailed learning ambiance for students. The Institute maintains high standards of technical education by providing the wide array of high-class equipments in total 77 laboratories of various departments which help students implement practical knowledge thus acting as an interface between students and industry.

The Institute patronizes a spirit of perpetual learning by rendering students facilities like 07 tutorial rooms, 07 seminar halls one for each department. Well equipped incubation centre to nurture new and small ideas by helping them to survive and grow through the difficult and vulnerable early stages of development in engineering and technology. It is our constant attempt to maintain pace with development needed for enriching personal and professional skills of students. The institute has developed well-equipped computer centre, CAD/CAM/CNC/SOM/HV lab and Entrepreneurship Development Cell, Industry-Institute Partnership Cell, R& D Cell.

Amenities and facilities are well maintained which include lawn, ramp, and garden. CCTV surveillance at all strategic locations, generator back up, RO water purifier. Cafeteria is available in the institute. Housekeeping unit takes care of maintain complete cleanliness in the Institute. 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 with each department on each floor as a precaution to avoid major haphazard. Proper checking, periodical inspection, suggestion box, feedback from students, alumni and parents are taken which help in up keeping and maintaining the conducive learning environment within the campus.

	S. No	Description	No.	TotalArea	Average	Carpet
Ш						

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			(sq. m)	area of Each
				Room (sq. m)
	Classrooms	31	2450.24	79.04
2	Tutorial Rooms	7	252.00	36.00
3	Drawing halls	02	264.07	132.03
<u> </u>	Seminar Halls	07	925.35	132.19
5	Library	01	830.00	830.00
5	Laboratories	77	5082.10	67.04
7	Workshops	02	420.00	210.00
8	Additional Workshops	04	840.00	210.00
)	Auditorium	01	750.00	750.00
10	(Open Air) Computer Center	01	159.00	159.00
11	Incubation Center	01	72.00	72.00
12	Cafeteria	01	159.00	159.00
13	Sports Room	01	159.00	159.00
14	Music Room	01	159.00	159.00
15	Conference Hall	02	120.00	60.00
16	Medical Room	01	30.00	30.00

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

#### **Response:**

The Institute is proactively involved in overall development of the students. Due importance is given to groom students in sports and cultural activities. In order to create atmosphere conducive to sports a Sports Committee has been constituted. This committee monitors the sports activities. There are facilities for Indoor and outdoor games .As the college has a big play ground the students play Cricket, Volleyball, Football, Kabaddi, Kho-Kho, Tennis etc. There is spacious hall for Indoor games which is availed of by students for Table-tennis, Chess and Carrom etc. There is also a section in the hall for yoga and meditation. There is room for music and in this room there are musical instruments. The cultural activity is noteworthy. The students are trained in Indian classical dance and western dance. The students of the college evince their talents in cultural activities, competitions at University and State Level.

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

Response: 100

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 38

 File Description
 Document

 Number of classrooms and seminar halls with ICT enabled facilities
 View Document

 any additional information
 View Document

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

**Response:** 11.8

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

2018-19	2017-18	2016-17	2015-16	2014-15
75	80	90	95	110

File Description	Document
Details of budget allocation, excluding salary during the last five years	View Document
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 Institute has well equipped, spacious library of carpet area 830 square meters with rich collection of engineering books including national, international journals, periodicals, and magazines. The library is fully automated with Sack Info 2.5 software. The reading room facility is available for students. The reading room is 164.sq.m with a seating capacity of 250 students. It has about 6451 titles, 21786 volumes, 10523 e books, 100 national journals and 10 magazines along with 17 newspapers. All the books are barcoded and bar-code laser scanners are used in circulation counter for book transaction.

A student approaches the counter for receiving a book; the book is searched by title or author. Students can access physically the stack area. The entry is made in Sack Info 2.5 software through student login and book is registered as issued in student's name. The book is marked for a due date by putting stamp and entry is made manually in the register. Many copies of popular books are brought to make them available to as many students as possible. The books per student ratio are approximately 1:12. Each student can receive 04 books at a time and they have allocated library hours per week. The college Central Library has various institutional memberships of prestigious libraries such as, DELNET membership for e-resources and e-Journals, National Digital Library and browsing centre with 15 internet connected computers in the library. Direct Accesses to online journals are made available for staff and students such as DELNET, National Digital Library to learn the latest research and developed techniques in engineering. Library facility is open to all students and faculty members and is continuously updated with latest books and journals. Bookbank facility is available. The institute always strives to provide latest and best collection of books, journals, online sources to the students.

Total area of the library	830 Sq.mts		
(inSq.Mts.)	•		
Total seating capacity	250		
Working hours (on working	working days	08:00 am to 6:00 pm	

days, on holidays, before examination days, during examination days, during	weekend	08:00 am to 7:00 pm
vacation)		
Layout of the library	individual reading carrels, lounge area for browsing and relaxed	
	reading, IT zone for accessing-resources	

Average number of walk-ins	650 -700 per day
Average number of books issued/returned	350-400 per day
Ratio of library books to students enrolled	1:12
Average number of books added during last three years	st2900/3=966
Average number of login to opac (OPAC)	Average 30 per day
Average number of login to e-resources	15-20 per day
Average number of e-resource downloaded/printed	s65
Number of information literacy training organized	s Yearly once

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	Yes
In-house/remote access to e-publications	Yes
Library automation	Yes
Total number of computers for public access	20
Total number printers for public access	02
Internet band width/ speed (Mb)	60 Mbps
Institutional Repository	Yes
Content management system for e-learning	Yes

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

#### Response:

Institute has sufficient budgetary provision to procure the books and other reading material as per the requirement of curriculum. Further, this institute is always willing to collect additional reading material to satisfy the needs of faculty members & students.

Central Library has collection of various rare books in both print and e-format. The users can access these from reference section and digital library. Rare books in e-format are downloaded from Rare book society of India (RBSI). This e-collection is available at digital library. The users can access these rare books through intranet on GPG portal of the Institute. Library is enriched with reference books published by renowned publishers. These reference books deal with the different subjects and the library has encyclopedias, dictionaries, handbooks, national electrical code etc.

Also in addition, competitive examination related books are available such as GATE, UPSC, TOEFL and NET-SET. These books cover different examination areas like reasoning, aptitude, objective type questions, computer etc. Library reference reading section also provides to its users project reports, hard bound journals consisting a large number of titles

#### 4.2.3 Does the institution have the following:

- 1.e-journals
- 2.e-ShodhSindhu
- 3. Shodhganga Membership
- 4.e-books
- 5. Databases

#### A. Any 4 of the above

B. Any 3 of the above

C. Any 2 of the above

D. Any 1 of the above

**Response:** A. Any 4 of the above

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

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

Response: 9.99

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

2018-19	2017-18	2016-17	2015-16	2014-15
8.51	9.96	10.64	10.36	10.48

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

#### 4.2.5 Availability of remote access to e-resources of the library

Response: Yes

File Description	Document
Any additional information	View Document

### 4.2.6 Percentage per day usage of library by teachers and students

Response: 32.08

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4.2.6.1 Average number of teachers and students using library per day over last one year	
Response: 658	
File Description Document	
Any additional information	View Document

#### 4.3 IT Infrastructure

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

#### **Response:**

Institute has always eagerly taken an initiative to upgrade itself in providing IT facilities to students and faculty. With 100 computers in the year of establishment, the Institute now possesses 484 computers. The latest configuration of computer available in the Institute is Core i3/i5 with RAM 4 GB, 250GB HDD, HP Intel Core i3/2100 CPU @ 3.10 GHZ processor. The institute has high end Apple MAC OS Deskstop Computer Laboratory. Each department has its own computing facility. Around 300 computers are LAN connected. The Institute has total 27 application software and 06 system software's.

#### • Hardware and Software Facilities

S.No.	Item & Configuration	Quantity
1	Number of systems w configuration	rith 60 systems
		HP Intel R Core i3/2100CPU @
		3.10 GHZ with 4 GB RAM,
		250GB HDD ,18" LCD
2	Computer-student ratio	1:4
3	Dedicated computing facility	60
4	Wi-Fi facility	Yes, entire campus is Wi-Fi enabled
5	Propriety software / Open sour	rceMicrosoft Campus License,
	software:	MATLAB, Oracle ,Xilinx and
		analysis tools, Solaris, IBM
		Rational Rose, Oracle 11G
6	Number of nodes/ computers w	rith300
	internet facility	
7	LAN facility :	10/100 Mbps and 10/100/1000
		Mbps
8	Any other:	Fee transaction, Learning
	-	Management System and ICT
		integrated evaluation through

	customized Campus	Management
	Solution, GPC	I portal
	172.16.200.201	

Application and system software are to keep students updated. Various open source application and system software in the institute are:-

### **List of Licensed softwares**

S. No.	Name of the Software	Licensed / Open Source
Operating Systems		
1	C,C++ Compiler	Licensed
2	Windows 2007	Licensed
3	Windows Server 2008	Licensed
4	JDK	Open Source
5	Linux	Open Source
6	Solaris	Open Source
Application Softwar	re's and Others	
1	MSDN	Licensed
2	IBM Rational Rose	Licensed
3	Oracle 11G	Licensed
4	MATLAB	Licensed
5	MS-OFFICE 2007	Licensed
6	Orcad	Licensed
7	SAP 2000 V-15	Licensed
8	ETABS V-9.7.4	Licensed
9	Tally 9.1	Licensed
10	College Automation Software	Licensed
	(SynchRonik)	
11	Shree Lipi 7.2	Licensed
12	JAVA Net Beans	Licensed
13	JEE Exam Interpreter	Licensed

14	Emulator	Licensed
15	EDIT PLUS	Licensed
16	Creo	Licensed
17	ETNL(Language Lab)	Licensed
18	QUICK Heal	Licensed
19	JAVA Network Simulator	Open Source
20	Apache Tomcat Server	Open Source
21	MYSQL	Open Source
22	Network Simulator	Open Source
23	Adobe Reader	Open Source
24	.Net Framework	Open Source
25	8086 Simulator	Open Source
26	Auto-CAD	Open Source
27	Stadd-PRO	Open Source

Internet service is available in the institute for students and faculty, with a bandwidth of 60 Mbps BSNL connections. The institute has separate computer centre with internet facility. All the IT facilities are minutely looked upon by System Head, System Admin, and Team of technicians.

To synchronize syllabus with industry institute uses open source

- 1. JAVA Network Simulator
- 2. Apache Tomcat Server
- 3.NS2 Simulator
- 4. Adobe Reader
- 5..Net Framework
- 6.8086 Simulator

#### 4.3.2 Student - Computer ratio

**Response:** 3.95

File Description	Document
Any additional information	View Document

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

>=50 MBPS

35-50 MBPS

**20-35 MBPS** 

5-20 MBPS

**Response:** >=50 MBPS

File Description	Document
Any additional information	View Document

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

**Response:** Yes

File Description	Document
Facilities for e-content development such as Media Centre, Recording facility,LCS	View Document
Any additional information	View Document

# 4.4 Maintenance of Campus Infrastructure

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

Response: 45.15

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

2018-19	2017-18	2016-17	2015-16	2014-15
270.15	331.46	353.82	376.07	393.67

File Description	Document
Details about assigned budget and expenditure on physical facilities and academic facilities	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:**

The Institute has all requisite infrastructures like class rooms, faculty rooms, girls' common room, boys common room, laboratories, Seminar Hall, Auditorium and library. Few slots are exclusively reserved in regular time table to ensure effective utilization of the facilities. Concerned faculty members ensure the presence of students & conduction of activities. The Institute has in-house maintenance team for maintenance of all Physical, Academic, and Support facilities such as building, electrical, plumbing, classrooms, laboratories, Sports complex and Library.

General maintenance team handles Electrical, plumbing and building related issues. Regular checkup of Electrical appliances is done by electrical maintenance staff and maintained with immediate actions. Plumbing related issues such as leakages/blockages are managed on time by Plumbing team. Regular infrastructure inspection helps find repairs/paints requirements and the team arranges for the same.

The college has its own Diesel Generator set. It is brought in operation when electricity board discontinues electricity supply. The college has fire extinguishers. The Institute gives utmost importance to cleanliness and hygiene in campus. A team of housekeepers takes care of hygiene and cleanliness to provide a congenial learning environment. Classrooms, Staff rooms, Seminar halls, Laboratories, etc are cleaned and maintained on daily basis. The maintenance officer conducts periodic checks to ensure the efficiency/working condition of the infrastructure.

Periodic maintenance checks by staff keep all facilities operational.

A centralized Computer Center team maintains all software/hardware, CCTV & IT infrastructure

related issues. Lab assistants under the supervision of the System Administrator maintain the efficiency of the college computers and accessories. The non-teaching staff is also trained in maintenance of Laboratory and computer equipments.

Parking facility is well organized. The campus maintenance is monitored through surveillance cameras. Proper inspection is done and verification of stock takes place at the end of every year.

Central library has its dedicated human resource and the departmental libraries are looked after e by the department office assistant and a faculty In-charge of the concerned department. All the departments take care of timely maintenance of the laboratory equipment. Most of the maintenance work is completed during summer break and a close monitoring of maintenance activities is a prime responsibility of Head of the Departments. Periodic reporting on requirements of repairs and maintenance are submitted by the HoDs to the Administrative office.

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#### 1. Maintenance of IT Infrastructure:

Systems Department ensures that the maintenance of the IT Infrastructure is carried out in a planned and systematic manner as per the standard policies developed by the Institute.

The Institute has a full-fledged Systems Department with a qualified Systems Manager for efficient management of IT infrastructure on campus. Systems Department ensures that the IT infrastructure (including hubs, Switches, Wi-Fi Routers etc and peripherals) are always in working condition.

Every laboratory maintains a complete record of the equipment such as Dead-Stock Register, Maintenance Register, utilization and Lab-Readiness Certificate. All the documents are verified by Lab In charge (a faculty member) and are kept in accordance with the standard procedures.

# **Criterion 5 - Student Support and Progression**

### 5.1 Student Support

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

Response: 82.9

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

2018-19	2017-18	2016-17	2015-16	2014-15
1672	1517	1514	1484	1416

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

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

Response: 10.27

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

2018-19	2017-18	2016-17	2015-16	2014-15
194	176	259	182	136

File Description	Document
Any additional information	View Document

#### 5.1.3 Number of capability enhancement and development schemes –

- 1. For competitive examinations
- 2. Career counselling

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

**Response:** A. 7 or more of the above

File Description	Document
Details of capability enhancement and development schemes	View Document
Any additional information	<u>View Document</u>

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

Response: 77.94

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

2018-19	2017-18	2016-17	2015-16	2014-15
1471	1260	1468	1567	1377

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

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

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Response: 40.61

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

2018-19	2017-18	2016-17	2015-16	2014-15
445	730	815	893	818

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

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

**Response:** Yes

•	
File Description	Document
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	View Document
Details of student grievances including sexual harassment and ragging cases	View Document

### **5.2 Student Progression**

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

Response: 62.13

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

2018-19	2017-18	2016-17	2015-16	2014-15
405	374	270	144	96

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

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

**Response:** 3.73

5.2.2.1 Number of outgoing students progressing to higher education

Response: 17

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

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

**Response:** 77

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

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

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

2018-19	2017-18	2016-17	2015-16	2014-15
8	5	2	1	1

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

### 5.3 Student Participation and Activities

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

#### Response: 21

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

2018-19	2017-18	2016-17	2015-16	2014-15
3	2	6	9	1

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

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

#### **Response:**

The institute strongly believes that involvement of students is necessary for the overall progress of the institute. Institute encourages active participation of students through nomination by HODs and Principal. Through the selection process Coordinators from the students have been nominated on Cultural Committee and Sports Committee. These student committees actively work for different activities conducted in the institute. As per provision in The Maharashtra Public Universities Act, 2016 the Students' Council is formed in college. The representative of the students' council of the college participates in the students' council at university level. It is pertinent to mention that the President and Secretary of the Students' Council of the college are the members of College Development Committee constituted as per provision in The Maharashtra Public Universities Act, 2016. Besides students' council which is mainly responsible for organization of various activities in the college the college has constituted following academic and

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administrative committees which have students' representatives:-

**Anti-ragging Committee** – It prohibits any sort of ragging in the college premises.

Women's Grievances Committee – It addresses the grievances of women.

**Sports Committee** – Organizes college level sports tournaments, sends college teams for participation in inter-collegiate, university, state and national level sports tournaments.

**Cultural Committee** – It organizes cultural program in the college and ensures representation of the college in cultural events organized at inter-collegiate, university, state and national level cultural events.

**NSS Committee** – It organizes NSS activities of the college.

**E- Magazine Committee** – It prepares and publishes the E-Magazine containing information of the various activities conducted in the college.

Career Guidance Committee – It is involved in guiding the students as regards their career.

**Student Forum in each Department** – The co-curricular activities is organized under the aegis of this committee.

Canteen Committee – It ensures that delicious and hygienic food is provided to students and employees.

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

Response: 19

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

2018-19	2017-18	2016-17	2015-16	2014-15
22	33	14	15	11

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

### 5.4 Alumni Engagement

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

#### **Response:**

The College has established Alumni Association. The Alumni Association is registered under Societies Registration Act 1860 and bears number MAH 701/14.

Alumni Association meetings with Management and staff are periodically conducted in the college and at other important places including Pune. It functions effectively.

The Alumni who have acquired high positions in several fields of life, who have become industrialist, who have experience and expertise to their credit, who have placed significant role in society are invited to college to deliver lectures and motivate students and provide counselling to students for seeking career opportunities. Institute along with alumni discuss with other stake holders on various matters and academic performance and the alumni feedback is obtained for improvement in quality. On the basis of feedback obtained from alumni, the college modifies and updates all the academic activities and all other programmes related to the current students. The financial assistance is contributed for the welfare of students such as gifts for rank holder students and achievers. Initiatives have been taken recently by Principal to attract Alumni to come forward to conduct campus interviews from corporate sectors, IT companies and other organizations for providing job opportunities and placement of current students.

In terms of money the Alumni Association of the college in the last five years has contributed the sum of Rs. 6.5 lakhs

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

? 5 Lakhs

4 Lakhs - 5 Lakhs

3 Lakhs - 4 Lakhs

1 Lakh - 3 Lakhs

**Response:** ? 5 Lakhs

File Description	Document
Any additional information	View Document
Alumni association audited statements	View Document

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

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### **Response:** 12

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

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

File Description	Document
Number of Alumni Association / Chapters meetings conducted during the last five years	View Document
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 an effective leadership in tune with the vision and mission of the institution

#### **Response:**

Institution has a well structured organization chart with various level of governance to achieve the Vision and Mission of the institution

#### **Institution Vision**

To make exemplary contribution to the progress and future of our country by enhancing the capabilities of our youth, by imparting world class education and training in science, technology and management; empowering them to seek and offer solutions to challenges faced by their brethren locally as well as globally.

#### **Institution Mission**

- To impart world class education and training to our students by offering state-of-art to undergraduate, postgraduate and doctoral programs
- To develop dynamic engineers and managers comparable to the best in the world and capable of taking leadership role in future
- To generate new knowledge by developing cutting-edge research and world class scholarship, to effectively contribute to the future of country and global community.
- To establish and nurture long term symbiotic relationship with industry and institutions of higher learning within and outside our country in generating solutions for current and future issues of concerns
- To develop potential of all our stakeholders to its fullest extent and empower them to actualize it.

#### Governance, Leadership and Management

The Management actively takes part in the monitoring the institution. The Governing Council conducts the meeting twice in a year in which they review the activities and recommends the new initiatives. Management allocates the funds for the development, activities such as faculty requirement, academic work, research, infrastructure, training, placement etc.

#### Perspective plan for development

Institution has perspective plan in tune with Vision and Mission of the Institution for the effective governance and leadership. Suggestions of the stakeholders and impeccable work of the decision making bodies result in a phenomenal growth and achievement of the perspective plan as detailed below.

- Continuous Quality Improvement through well planned monitoring
- Practicing Outcome based Education
- Industry Supported Lab

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- Finishing School
- Neat and Clean Green Campus
- Industry Explorer
- AICTE-PMKVY skill development centre
- TCSiON Approved Centre online competitive examination centre
- Business English Certificate (BEC) Cambridge English Training Centre
- Sewage Treatment plant
- Rain water harvesting system
- Integrated RO system
- Solar systems to meet total power requirements

#### **Distinctive Characteristics of Vision and Mission**

The Vision and Mission of our college focus on OBE. Aligned to that, our college moulds the younger generation more competitive as the college admits many students from rural background. Besides above, our students are moulded to be socially aware and to become more responsible for contributing towards societal transformation and Nation Building along with social responsibility.

### **Decision making bodies**

The governance is reflected by effective leadership of the following decision making bodies in tune with the Vision and Mission of the institution

- Governing Council
- IQAC
- Department Academic Advisory Committee
- Program Assessment Committee
- Timetable Committee
- Research and development cell
- Admission cell
- Training and Placement Cell
- Sports Committee
- Hostel Committee
- Transport Committee
- Anti-ragging committee
- Grievance Redressal Committee
- Women's empowerment cell
- Mentor and class advisor committee
- Scholarship committee
- Library committee
- Maintenance committee

#### 6.1.2 The institution practices decentralization and participative management

#### **Response:**

TGPCET functions with perfect decentralized administration that has complete transparency in the decision making process. The motives of decentralized administration are:-

- a) To enhance democracy in decision making,
- b) To promote the effective and efficient use of resources in education,
- c) To make public education more responsive to local needs,

For the smooth functioning various committees are constituted. Major committees are listed below.

Sr. No.	Functional Committee	Responsibility
1	Internal Academic Audit Committee	To deal with academic ma
2	Disciplinary Committee	To conduct enquiries with students and faculty who a
3	Anti Ragging Committee	To ensure the campus rag
4	Hostel Committee	To run the hostel smoothly
5	Training and Placement	Since the placement is more cell ardently provides train
6	Industry Institute Interaction Committee	This committee provides of industrialists and experts f
7	Women Empowerment Cell	To address the grievences
8	Planning, Approvals, Accreditations & Certifications Committee	To coordinate the work of
9	Transport Committee	To monitor the conveyance
10	NSS Committee	To train the students and o

		programmes and create so
11	Management Information System Committee	To coordinate the work of and give update information
12	Relationship Management Cell Committee	To maintain cordial relationship with people are
13	Sports Committee	To develop the sports ac participate in inter collegia
14	Entrepreneurship Development Cell	To promote entrepreneurs seminars & workshops
15	Alumni Committee	To organize Alumni meet the development of the col
16	Examination Committee	To ensure the smooth C examinations.

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The management promotes a culture of participative management by involving the all employees. The management encourages employees

- To take part in college –local community relationship
- To involve the Principal, Vice Principal along with other members of the different Committees to take part in decision making process.
- To interact with experts in education, industry and in social service..
- To encourage the employees and the students to involve themselves in developmental activities.
- To review Examination results, strategic plan in detail and take corrective measures.
- To coordinate with other stakeholders of the institute and work together for the development of the college and the students.

# 6.2 Strategy Development and Deployment

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

#### **Response:**

TGPCET has a Vision and in consequence the college has prepared perspective plan in keeping with the Vision of the college. The majority of the students who seek admission to the college hail from rural area. Unfortunately they are not at par with the students who belong to metropolitan cities. Naturally the Perspective plan of the college must be focused on such students who come from economically backward rural area.

In view of this the Perspective plan of the college includes

- Holistic development of students
- Inspiration and motivation of students
- Dissemination of knowledge replete with quality
- Employability of students
- Placement of Students

The college is aware that pursuit of knowledge is an ever widening process. Every day new knowledge is generated. The perspective plan of the college contains cautious and watchful endeavors to receive newly

generated knowledge. In the field of technology there is unpredictable rotation of branches the students opt for. The college, therefore, shall anticipate the rotation of options of the students and take appropriate steps to fulfill the demands of the students.

The college plans to introduce new branches of technical education. The college plans to deploy academic employees as per the need of hour. In all efforts of dissemination of knowledge quality is to be regarded as a watchword. The academic employees need to be enlightened about the new trends in technical education and for this conferences; seminars and workshops shall be organized.

The college plans to make ardent and earnest endeavors to increase the communication skill of the students to enable them to vie with others with their heads held high. The major problem the students are confronted with is the problem of unemployment. The college plans to increase Industry -Institute relationship. Fortunately there is labyrinth of industries in the area the college is located in. The college plans to motivate the students to have hands on experience of functioning of the industries. The college is aware that everybody after passing the final examination cannot be employed. In view of this college plans to motivate the students to become entrepreneurs. The college knows that for this the students need to be guided by successful entrepreneurs. In perspective plan of the college there is provision for organization of "Entrepreneurship Awareness Programs".

Acquisition of degree is not the aim of education. The college, therefore, plans to teach the students beyond syllabus. The college plans to enlighten the students about the great culture of this ancient country and the valves the country has nourished so far. The college plans to inculcate valves, ethics and morality in the students and make them self-reliant, sagacious and tolerant citizens of the country.

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

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

#### **Response:**

The flow of administrative decisions is explained in the organization chart attached.

#### 1. Governing Body

Management of the institute is the supreme body for policy making. Governing Body, the Advisory Body of institute meet periodically to discuss various issues and aspects related to the development of the college. Governing body responsibilities include considering and approving the institutional strategic plans of framing academic aims and objectives. It also formulates financial, physical and HR strategies.

#### 2. Administrative Setup

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Executive Director is the key person of the college and reports to the Secretary for all academic, administrative and financial matters of the college. Principal is the member secretary of governing body and reports to Executive Director. The Principal is having reasonable autonomy to take academic and administrative decisions in consultation with the Directors and Vice Principal pertaining to procurement of lab equipment, library requirements etc. Similarly fund are sought by the Principal to organize seminars, workshops etc. Vice Principal assists Principal for the smooth academics and administration.

### 3. Head of the Department:

Decisions pertaining to academic matters are decentralized to a large extent. Allotment of subject, work load, monitoring of syllabus coverage, planning and organizing seminars Guest lectures, Workshops, Industrial tours, Staff orientation programs, Remedial sessions, Personality development programs, Project works etc are also organized as per the instructions of the HOD.

4. **IQAC** Is a supporting functional body for the development and application of quality benchmarks/parameters of the various academic and administrative activities of the institution. It also concentrates on academic audit, taking curriculum feedback from all stakeholders, analyzing and taking necessary actions to implement the suggestions.

Following are the supporting units in administrative office.

- Admission and scholarship: All matters pertaining to admission of students to the college at all levels in line with the norms of the University, State and Central Government are dealt by office assistant of admission.
- Examination: Office assistant of examination attends all matters pertaining to the conduct of University examinations both theory and practical.
- **Registrar:** Registrar is responsible to facilitate recruitment of potential faculty and staff who have the relevant skills, qualifications and experience to make a positive, innovative contribution towards the development of the institution and maintenance of employee records.
- Accounts: Director of Finance is responsible for keeping all the files updated regarding financial transactions of the college. Office assistant of Accounts is responsible for all financial transactions under the instructions of the Director of Finance

#### Service rules and procedures

The Institution has Human Resource policy and Academic policy for the college. These policies have been framed in keeping with the rules and norms laid down by Statutory Authorities including AICTE, UGC, Government of Maharashtra, Affiliating University and Directorate of Technical Education.

#### **Grievance redressal mechanism**

In order to ensure transparency in imparting technical education and with objective of preventing unfair practices and to provide a mechanism to students for redressal of their grievances, **Grievance Redressal Committee** is formed under Clause 1 of Section 23 of the All India Council for Technical Education, Act, 1987.

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### **6.2.3** Implementation of e-governance in areas of operation

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

**Response:** A. All 5 of the above

File Description	Document
Screen shots of user interfaces	View Document
Details of implementation of e-governance in areas of operation Planning and Development Administration etc.	View Document

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

#### **Response:**

The Principal conducts the meeting of following committees. The convenor of the respective committee calls the meeting and maintains minutes of meeting (MoM). Every committee is assigned with specific tasks

.The roles, responsibilities and functions of the conveners and members of respective committees are framed by Principal.

The Various Committees are,

- 1. Internal Quality Assurance Cell (IQAC)
- 2. Research & Development Committee
- 3. Admission Committee
- 4. Examination Committee
- 5. Library Committee
- 6. Staff Performance Appraisal Review Committee
- 7. Student Welfare Committee

- 8. Sports & Cultural /NSS/Extra Curricular Activities Committee
- 9. Anti-Ragging Committee
- 10. Internal Complaint Committee (ICC)
- 11. Grievance Redressal Committee
- 12. Publicity/Advertisement/ Institute Website updates committee
- 13. Discipline Committee
- 14. Institute Maintenance Committee
- 15. Hostel Committee
- 16. Training & Placement Cell
- 17. Entrepreneurship Cell
- 18. Alumni Association Cell
- 19. Industry-Institution Partnership Cell(IIPC)
- 20. Women Empowerment Committee

#### Significant distinctive initiatives taken:-

- 1. Internal Quality Assurance Cell (IQAC) was established in the college on 27th Oct. 2014. Since the establishment IQAC has played major roll in reforming Academic activities of the college the distinctive initiatives taken by IQAC are: It has developed a system for conscious, consistent and catalytic improvement in performance of the college and channelized the efforts and measures of the college towards academic excellence. IQAC has organized workshops, seminars etc.to enhance the quality of teaching learning process. It has assured all stakeholders namely students, teachers, other employees and society in general the accountability of the college for its quality and probity.
- 2. **Alumni Association Cell:** Alumni Association is registered under Society Registration Act, 1860 with number MAH/701/14. The former students of the college are located through the length and breadth of the country. But they have sense of belonging as far as the college is concerned .They, therefore, participate in Alumni meets held at Nagpur, Pune or at any other place. They have provided the college with pecuniary help of Rs.6.5 lakh during the last five years.
- 3. Examination Committee: has introduced several reforms in Internal Examinations of the college
- The question paper set by the course coordinator is moderated by the Moderation Committee of the Department
- The Moderation Committee ensures that Bloom's Taxonomy is followed in question paper and Course Outcomes are mentioned in the question paper.
- The Answer Books are valued at the Spot Valuation Centre of the college.
- Valued Answer Books are displayed to the students and the grievance of the student, if any is resolved.
- Course attainment of student is calculated.
- The Report of the performance of the student is sent to parents of the students.

Self Study Report of TULSIRAMJI GAIKWAD-P	ATIL COLLEGE OF ENGINEERING AND TECHNOLOGY
3.3 Faculty Empowerment Strategies	
6.3.1 The institution has effective welfare measure	ures for teaching and non-teaching staff
Response:	
the tremor caused by adaptive environment. The	who influence organisational effectiveness by stabilizing the management of TGPCET has implemented various trees for employees. Monetary welfare schemes are:-
1. Group insurance of staff members	
2. Maternity Leave	
3. Staff Loan	
4. Staff Ward concession	
5. Leave for higher education	
6. Medical Policy	
7. Bus facility	
8. Financial Assistance for Conference in India an	d Abroad
9. Subsidized food in the canteen.	
Apart from Monetary schemes various non-monet professional development. The schemes are listed	ary welfare schemes are provided to employees for their below:-
<ul> <li>Technical workshops are conducted to kee</li> <li>Faculty development programs /STTP are</li> <li>Faculty members are encouraged to attend</li> </ul>	conducted in the institute. seminars and conferences.
<ul> <li>Experts from the industry and academia are</li> </ul>	e invited for interaction with the staff.

• The institute motivates the faculty and staff for arranging / attending industrial training programs/

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visits.

- Faculty members are encouraged/ assisted to undertake professional body membership for active involvement.
- Adjunct faculty members are present in each department to provide professional exposure to other faculty members
- Training programs are arranged for updating the knowledge of the non-teaching staff.
- Faculty members are encouraged and benefited from qualification improvement programs such as PhD by providing adequate time to undertake course work and research work.

### 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: 99.06

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

2018-19	2017-18	2016-17	2015-16	2014-15
134	159	160	161	150

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

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

Response: 30.2

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

2018-19	2017-18	2016-17	2015-16	2014-15
31	33	31	28	28

File Description	Document
Details of professional development / administrative training programs organized by the Institution for teaching and non teaching staff	View Document
Any additional information	View Document

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

Response: 96.29

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

2018-19	2017-18	2016-17	2015-16	2014-15
137	161	161	161	123

File Description	Document
Details of teachers attending professional development programs during the last five years	View Document
Any additional information	View Document

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

#### **Response:**

The college has adopted the system of Self Appraisal for the Academic Employees of the college. At the end of every Academic year the teachers are required to fill in Self Appraisal Forms. These Self Appraisal forms are enrooted to Principal through head of the Department. In Self Appraisal form there is reflection of the merits and the demerits of the teacher concerned. These Self Appraisal forms enlighten the teachers concerned about what they have done and what they have not been able to do. This exercise enables the teachers to make necessary changes in their teaching methodology which in consequence improves their performance. The process is designed to foster individual development and identify opportunities for additional support wherever required.

Total 16 performance parameters are considered for assessment.

# 6.4 Financial Management and Resource Mobilization

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

#### **Response:**

Yes. The Institution conducts internal audit half yearly and external audit at the end of every financial year. Financial planning is exercised well in advance for the organization and efficient budgeting is done by involving the various Academic departments and Administrative sections of the Institution. Financial planning and review is done by Governing Body where Secretary and Treasurer are members. Internal audits are carried by internal audit committee (IAC) and external financial audits are regularly done by chartered accountants.

The institutional mechanisms for internal and external audit are given below:

The internal audit of accounts is carried out by Treasurer. The Internal auditor checks fee receipts and payment vouchers and necessary supporting documents. Final report is submitted to the Governing Body during GBM for validation. The External audit is conducted at the end of financial year. The audit is carried out by chartered accountant (CA).

During the internal audit the Treasurer raise objections, if any, related to finance and stock related records, giving an opportunity to the accounts to address and rectify the same. Queries in the audit will be reported to the account section and compliance is effected within a months' time. He also give necessary guidance for improvement in account maintenance. These measures ensure no further discrepancies in the records that can be objected by the external auditors. Every Financial transaction is recorded through software.

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

Response: 52.65

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

2018-19	2017-18	2016-17	2015-16	2014-15
19.48	3.66	3.35	13.81	12.35

File Description	Document
Details of Funds / Grants received from non-government bodies during the last five years	View Document
Any additional information	View Document

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

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#### **Response:**

The institution has a well-defined mechanism to mobilize the funds, the main corpus of which comes from student's fees with additional support from the management, if needed. Head of the Departments/ section heads shall prepare the approximate annual budget and the same is submitted to the Principal well before the commencement of an academic year. Principal prepares the consolidated Institutional budget and presents the same before the Governing Body for approval. Approved budget is handed over to the respective department and section heads for implementation. Accounts makes necessary arrangement to mobilize the fund as per the budget requirement. The Treasurer keeps track of the budget through internal audit. In any unforeseen circumstances, non-budgeted amount is allotted depending on the merit of the case. After implementation by the departments/sections, Invoice and purchase order is reviewed by the Treasurer at the end of the year.

Fund mobilization through following sources:

Fee collected from the students Term loan from Bank Consultancy fees

Mobilization of funds received through various sources are done for following

- 1. Salary of teaching and supporting staff
- 2. Purchase of equipment, machinery, software and furniture
- 3.Library books, e-subscriptions of journal and books
- 4. Electricity charges, telephone, internet bills, postage and other miscellaneous
- 5.Annual maintenance contract, consumables, repair and maintenance, sanitation-house keeping gardening and security charges
- 6.Repayment of bank loan
- 7. Advertisement, printing & stationery
- 8.Infrastructural development facilities and Building construction works
- 9. Research and project activities
- 10. Seminars, Conferences and Faculty Development Programmes and other extra/co-curricular activities

#### **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

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#### **Response:**

The dynamic environment has necessitated the institution to establish and institutionalize a quality assurance system with a view to plan, implement and monitor the strategies/activities to drive the institution towards continuous improvement in academic and administrative matters. The Composition of IQAC is as per the recent guideline of NAAC with 21 members. The process of quality improvement and monitoring is

DQAC (Departmental Quality Assurance Committee)

### (meets minimum monthly once)

Receiving data from various sources and Identifying areas for improvement. Suggesting recommendations/strategies to the QPF.

#### **Quality Policy Forum (QPF)**

#### (meets one week before IQAC meeting)

Receiving recommendations/suggestions from DQAC. Deliberating and approving the recommendations/suggestions and forwarding the same to the IQAC for implementation and monitoring.

Also, analysing the feedback responses from the students and other stakeholders and recommending corrective actions required, if any, to the IQAC.

#### **Internal Quality Assurance Cell**

(meets once in every quarter)

Planning and implementing the recommendations/suggestions forwarded by the QPF. Auditing the same to assess its impact in the academic and administrative matters . Developing quality benchmarks. Promoting workshops/seminars on quality related themes.

IQAC is contributing to the institute in the following quality assurance strategies and process issues:

- Identify the processes needed
- Plan for Certificate and Value added courses
- Industry academic collaborations based on the gaps identified
- Arranging Industry persons for guest lectures.
- Organizing International Conference in every year.
- Ensuring the ICT integration in Teaching Learning Process
- Ensuring Practice of Outcome Based Education.
- Organization of IPR workshop and encourage faculties to publish paper in Scopus indexed/ UGC journals
- Monitoring activity of Finishing School.
- Industry based projects
- Ensure availability of requisite information and resources

- Measure, monitor and analyze
- Ensure, achieve planned results and improvement.
- Suggest modifications to academic planning & Curriculum
- Pre and Post audit execution
- Entering subject wise attendance through software.
- Posting messages to the parents of the students for shortage of attendance/marks.
- Displaying monthly attendance.
- Organization of workshops, seminars on quality related themes.
- Submission of proposals to various Govt and Non Govt agencies for research grant, conference grants, induction programs etc.
- All type of accreditations, NIRF Ranking, ISO certifications, AQAR submission.

#### The most Significant Initiative is

**'Elegance'** – **The Finishing School** is an in-house department which works for the overall development of the students. It opens the gates of the globe for the students by making them efficient enough to face the real world.

Elegance brings out the quality of being graceful and stylish in student's personality. It helps students in developing their communication skills that is useful in all aspects of life, from their professional sphere to their social gathering. The ability to communicate information accurately, clearly and as intended is a vital life skill. At the 'ELEGANCE'- THE FINISHING SCHOOL the college groom the students so that they can excel in every sphere of life with an excellent communication skills and an elegant personality.

The deatils of the finishing school is attached as additional information

File Description	Document
Any additional information	View Document

# 6.5.2 The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms

#### **Response:**

At the beginning of every semester the allocated course faculty review the syllabus and prepares a course plan for that subject based on the course outcome and schedules a 45 to 55 hours plan to deliver it. He/she also makes a day wise schedule plan, methodology being used, pedagogies and what is expected out of that lesson.

Course files or planning documents of every course are used to bring objectivity and strategize the course of teaching and learning for every topic. The teachers go through the syllabus and ensure that all the registered students full fill the pre-requisites of the course. They check if the students have a fair knowledge of the basics, so that they are able to understand the teaching. The Program Structure, Course Syllabus, Course Session Plan, Time-table, Master Academic Planning Worksheet are made available to the students before the commencement of the semester. Daily monitoring of conduct of the classes is done

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by the in each department. Regular meetings of course faculty are held with Head of the institution to review the course delivery and student learning progress.

The IQAC has developed a continuous review process on teaching-learning to sustain effective teaching and learning for targeted outcome. IQAC believes in appropriate planning for success. Following are few parameters on which review is conducted.

#### **Curriculum Level**

Review of Academic Process Calendar - Once in Semester

Review on Curriculum Planning - Once in Semester

Review on Teaching – Learning (Planning) - Once in Semester

Review on Teaching – Learning (Execution) - Once in Semester

Review on Teaching – Learning (Attainment) - Once in semester

Review on Syllabus Completion Monitoring - Twice in semester

Review on Teaching Feed Back from students - Twice in semester

Review on Conduct of Remedial Classes - Once in semester

Review on Quality of Projects/Product Development- Once in Year

#### **Co-Curricular Level**

Review on Industrial Visits - Once in Year

Review on Internships - Once in year

Review on Guest Lectures/Work Shops/

Certification/Value Added course for students - Once in semester

Review on students Technical Paper

Publication in Journals/Technical Events - Once in year

Review on Quality of News Letter Publication - Once in year

Review on Conduct of Activities by

Professional Bodies - Twice in year

#### **Extra-Curricular Level**

Review on Student participation in Art/Literary/

Once in Year **Cultural Activities** 

Review of Student participation in Sports & Games Once in year

Review of Student participation in NSS activities Once in year

#### **Organisation level**

Review on attainment of Cos, POs and PSOs Once in year

Review on ICT / Laboratory facilities Once in year

Review on Best practices/Innovation/

product Development Once in year

Review on Faculty Development Programs

conducted / attended Twice in year

Review on Budget planning & utilization Once in year

Review on finance audit Once in year

The Academic Audit format is attached as additional information

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

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

Response: 25.6

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

2018-19	2017-18	2016-17	2015-16	2014-15
29	25	23	23	28

File Description	Document
Number of quality initiatives by IQAC per year for promoting quality culture	View Document
Any additional information	View Document

#### **6.5.4** Quality assurance initiatives of the institution include:

- 1. Regular meeting of Internal Quality Assurance Cell (IQAC); timely submission of Annual Quality Assurance Report (AQAR) to NAAC; Feedback collected, analysed and used for improvements
- 2. Academic Administrative Audit (AAA) and initiation of follow up action
- 3. Participation in NIRF
- **4.ISO Certification**
- 5.NBA or any other quality audit
- A. Any 4 of the above
- B. Any 3 of the above
- C. Any 2 of the above
- D. Any 1 of the above

**Response:** A. Any 4 of the above

File Description	Document
Details of Quality assurance initiatives of the institution	View Document
Any additional information	View Document

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

#### **Response:**

Recommendations by NAAC Peer team during 1st Cycle Visit	Initiatives implemented	
To prepare perspective growth and vision plan to maintain growth	Perspective strategic Plan along with	deplo
	are continuously monitored.	
To seek autonomous status from the university	Will apply after reassessment of NAA	.C
To improve the quality and quantity of research output	R& D committee continuously mo	nitors
	research.	
To establish relevant research facilities and laboratories	Advanced Computing Lab (Apple established	Mac

To enhance feedback from stake holders and integrate with IQAC	IQAC and Quality Policy Forum (QPI
	feedback, analysing, proposing correc
	monitoring
To fully integrate and implement ERP system	ERP system is implemented in all area of
To introduce more vocational ,skills and value added courses	Implemented and students benefitted
To strengthen the industrial interaction and consulting activities	50 Active Industrial MOUs for live
	training etc.
To strengthen placement opportunities for graduates	Proactive T&P cell is taking all measures

Criteria	Initiatives implemented	
1	Industrial certification courses.	
	Soft Skill Courses through Elegence	
	Compulsory Internship.	
	Value Added courses for Campus Placement, Soft skill, Life skill apart from to	echni
2	Effective mentoring system for all round development of students.	
	<ul> <li>In house ERP module for academic planning, monitoring</li> </ul>	
	• LMS and Lecture Capturing system to integrate ICT in Teaching Learning pro	ocess.
	• Students are encouraged for Industrial Projects.	
	Industry supported Labs	
	• Reformation in Internal Assessment process.	
	• Students result is enhanced. Students are in University Top Ten merit ranks	
	Outcome Based Education is Practiced by Faculty and Students	
3	ISTE and AICTE sponsored FDP conducted.	
	<ul> <li>Industry Academia linkages through 50 MOUs.</li> </ul>	
	• RTMNU recognized NSS Cell. Extension activities in association with Govt.	organ
	• IPR Cell for to promote Industry academia innovations practices.	Ü
	• Industry persons talk and entrepreneurship development programs organized.	
4	ICT enabled Class room and Seminar Halls	
	Enhancement in Library facilities and Digital Library	
	Enhancement in Internet Bandwidth	
	<ul> <li>Maintenance Committee to ensure well maintained campus and its units.</li> </ul>	
5	<ul> <li>Career Guidance, Guidance for Competitive examination and Soft Skill training</li> </ul>	ng by
	trainer and external experts.	
	<ul> <li>Enhancement in Placement and Higher studies</li> </ul>	
	<ul> <li>AICTE sponsored PRERANA for GATE coaching</li> </ul>	
	<ul> <li>Professional Societies Chapters of ISTE, IEI, ICI, CSI</li> </ul>	
	Improvement in Alumni Engagement	
6	<ul> <li>Perspective plan for 2017-22 in place to monitor the implementation and future</li> </ul>	re asp
	<ul> <li>Enhancement in faculty and staff welfare measures.</li> </ul>	
	<ul> <li>External peer review is through involving experts from Industry/ Reputed Inst</li> </ul>	itute/
	committees, Invited talk series, curriculum part delivery and audits	
	Participative Management	
7	• Implementation of Solar System to meet 65% of power requirements	
	<ul> <li>Improved in Green Initiatives and Waste Management system.</li> </ul>	

# **Criterion 7 - Institutional Values and Best Practices**

### 7.1 Institutional Values and Social Responsibilities

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

#### Response: 22

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

2018-19	2017-18	2016-17	2015-16	2014-15
5	5	4	5	3

File Description	Document
Report of the event	<u>View Document</u>
List of gender equity promotion programs organized by the institution	View Document

#### 7.1.2

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

#### **Response:**

Gender sensitivity refers to the of behaviour of other sex by raising awareness of gender equality concerns. This is achieved by conducting various sensitization campaigns, training program, workshop etc. Active Anti Ragging Cell, Grievance Cell and Internal Complaint Cell too are very much concerned about gender sensitivity.

#### 1. Safety and Security

#### (a) Class room and laboratories

Institution has more than 40% female faculty members, lady attendants and sweepers. Each department has a complaint box for the grievances to be redressed. Suggestions and grievances are considered so that management can take the necessary actions on time. To ensure the safety in the laboratories, students are instructed to wear apron while doing experiments. Fire Extinguishers are placed on each floor accessibble from each laboratory.

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#### (b) Hostel safety and security

Ladies hostel is with vigilant security guards round the clock to maintain the safety and security of girl students. Institution has a hostel committee to deal with the safety and security of inmates. The safety norms are displayed on notice boards. The warden calls the parents for permitting their wards to go outside for attending programs and for going to native place. Permission letter is duly verified by the faculty advisor and HOD.

#### (c) Transport safety and security

The institution has fleet of more than 17 buses which ply on various routes for day scholars. Transport is provided to the students those who are involved in various curricular, co-curricular and extra-curricular activities beyond the college hours. For industrial visits, excursions and study tours, both genders of faculty members accompany the students. Institution provides transportation and female faculty members when girl students participate in the events outside the campus. Parents' permission is sought by the department if a girl student participates in the activities outside the campus.

#### (d) Cyber safety

The College premises, laboratories and corridors are under CCTV surveillance to ensure effective safety of the students. Internet is available to the students and staff on basis of 24x7 and systems are protected with firewall and antivirus software. Hostel students can avail WiFi facility around the campus after getting permission from authorities.

#### 2. Counselling

Mentors are allocated to the students to counsel their academic and personal problems to create fearless environment. The students are Counselled during mentor hour and after college hours. To instil confidence among girl students. Many opportunities are given to interact with successful women entrepreneurs and leaders. Interpersonal skill development and stress management programs are conducted with doctors and specialists. A doctor is exclusively appointed to address the stress and health issues in the campus.

**3.** Common Rooms and medical care:- Common rooms are available for both boys and girls. Magazines and newspapers are made available in the common room. The first aid boxes are kept for emergency. A doctor is available during the college hours to attend the student's health problems.

#### 7.1.3 Alternate Energy initiatives such as:

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

Response: 68.47

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

Response: 167258

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#### 7.1.3.2 Total annual power requirement (in KWH)

Response: 244281

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

#### 7.1.4 Percentage of annual lighting power requirements met through LED bulbs

Response: 65

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

Response: 22750

7.1.4.2 Annual lighting power requirement (in KWH)

Response: 35000

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

#### 7.1.5 Waste Management steps including:

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

#### **Response:**

#### **Solid waste management**

Solid waste management is the process of collecting, treating and disposing of solid waste material. Improper disposal of solid waste can create unsanitary conditions which in turn leads to pollution of the environment and outbreaks of vector-borne diseases. The college has made adequate arrangement for solid waste management. To make the environment conducive for survival and retaining the natural setting, the following procedure is followed in the campus:

For disposal of Biological waste Dustbins are placed at distinct spots. There is proper collection of fallen leaves of the trees and plants and these leaves are converted into manure for fertilization. Food and vegetable waste from mess and canteen is collected and that is used to feed the animals outside the

campus .Mechanism for effective disposal of liquid waste.

#### **Liquid Waste Management:**

Due to the increase of water usage, the volume of sewage increases and safe disposal of sewage has become a cause of concern. The appropriate reuse of treated sewage is the obvious and eminent solution. Our Institution has sewage treatment plant (STP) to recycle the waste water.

To ensure effective utilization of waste water, the lawns, saplings and trees in the campus are watered after recycling. Well constructed drainage system in the form of closed collection tanks prevails in our campus. The tanks are regularly cleaned to avoid stagnation of water. Effluent Treatment Plant is in place for effective treatment of liquid waste.

#### **E-Waste Management:**

Disposal of e-waste is an emerging global environmental and public health issue. The life of the electronic items is prolonged by doing proper maintenance. E-waste from the computer hardware, electronic equipments etc., are weeded out by the institute periodically . The worn out batteries are disposed through the scrap vendor. E-waste material is collected and auctioned to the concerned recycling agents. Few of the harmless items are used in the laboratories for demonstration purpose. The out dated computer mother boards, RAM, hard disks and processors are used for the purpose of hardware assembly training. Few electronic items are reused in the students' project.

#### 7.1.6 Rain water harvesting structures and utilization in the campus

#### **Response:**

Rain water harvesting is a strategy for the collection of rainwater and storing it in the right way for future use. The water can be collected from various surfaces and platforms and stored for later use. In most cases, the water is usually collected from rooftops and other hard surfaces. Rainwater harvesting is considered as a very reliable way to conserve water. The rain water is usually stored for later use. The roof of buildings is the best way to harvest rainwater. There are numerous advantages in doing so. Some of the advantages are as follows:

#### 1. Easy to Maintain

First and foremost, the collection of rain water offers a better and efficient utilisation of energy resource. It is important because the water put in pots for drinking is usually not renewable.

#### 2. Reducing Water Bills

Rain water that has been stored from harvesting can be used for several non-drinking purposes. It immediately reduces the charges to be incurred on electricity.

#### 3. Suitable for Irrigation

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Harvesting allows the collection of large amount of water. Most rooftops provide the necessary platform for collecting water. Rainwater is usually free from harmful chemicals, which makes it ideal for irrigation purpose.

#### 4. Increase in water level in the earth

Another important advantage is that it increases water level in the earth. It is important especially in areas with low water levels.

#### Rain water harvesting structures and utilization in the campus:

Water scarcity is serious problem throughout the world for both urban and rural community. Urbanization, industrial development, increase in agricultural field and production has resulted in overexploitation of groundwater and surface water resources and resultant deterioration in water quality. The conventional water sources namely well, river and reservoirs, etc. are inadequate to fulfil water demand due to unbalanced rainfall. Keeping this global problem of water scarcity in view,

#### Water supply source of Institute:

The Institute has a big bore-well inside the campus to cater the total water requirements of the college.

#### **Rooftop water harvesting:**

The proper arrangements have been made to collect water falling from the rooftop and this water is exclusively used for other purposes such as gardening, cleaning etc.

#### 7.1.7 Green Practices

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

#### **Response:**

Our Institution has the following green practices for environment sustainability;

### **Green Landscaping with Trees and Plants**

Keeping the campus green and clean is mandatory for the institution to keep the ambiance of the institution. The vibe is conducive to teaching and learning process. The endeavours are made in respect of Global Warming, Soil preservation, reducing air pollution, getting more oxygen and good rain.

The college has developed a magnificent infrastructure with the "Clean & Green Campus" as its motto. It

provides a natural eco friendly ambiance to the students to enjoy learning experience at the lush green atmosphere. The small seeds that we planted a few years ago have grown into a large number of trees. The campus is turned into an eco friendly and green campus. It includes various eco friendly trees. The Ventilation in classrooms is adequate due to natural light and air.

#### **Public Transport**

The college is situated on National High Way 07 and the buses owned by Government regularly and frequently ply on the road. There is bus stop near the college. Similarly the buses owned by Municipal Corporation too ply on the road and students and employees avail these buses for conveyance.

#### **College bus Transport**

The college operates 17 buses for the benefit of staff and students. The students and the employees living in the city of Nagpur and nearby villages including Butibori, Dongargaon, Parsodi, Bothali etc. avail these buses for conveyance.

#### **Parking**

Parking facilities are made separately for two and four wheelers in the college campus. Similarly separate parking places are allotted for employees and students in the campus.

#### Plastic-free campus

All efforts are made to keep the campus plastic free. Instructions are displayed at the prominent locations to create awareness of ill effects of plastics.

#### Paperless office

Communication inside the campus is made paperless by recently developed means of communication like e-Mail, WhatsApp, Google Drive etc. The college has separate Blade server to store the documents. Usage of ICT enabled class rooms and smart classrooms provide effective teaching environment.

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

#### **Response:** 1.78

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

2018-19	2017-18	2016-17	2015-16	2014-15
13.10	13.41	13.61	13.97	14.06

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

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

- 1. Physical facilities
- 2. Provision for lift
- 3. Ramp / Rails
- 4. Braille Software/facilities
- **5. Rest Rooms**
- **6.** Scribes for examination
- 7. Special skill development for differently abled students
- **8.** Any other similar facility (Specify)
- A. 7 and more of the above
- B. At least 6 of the above
- C. At least 4 of the above
- D. At least 2 of the above

**Response:** A. 7 and more of the above

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

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

Response: 20

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

2018-19	2017-18	2016-17	2015-16	2014-15
4	6	3	3	4

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

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

Response: 16

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

2018-19	2017-18	2016-17	2015-16	2014-15
1	2	1	4	8

File Description	Document	
Report of the event	View Document	
Any additional information	View Document	

#### 7.1.12

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

Response: Yes

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

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

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Response: Yes	
File Description	Document
Provide URL of website that displays core values	View Document

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

Response: Yes

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

### 7.1.15 The institution offers a course on Human Values and professional ethics

**Response:** Yes

**Document File Description** Any additional information View Document Provide link to Courses on Human Values and View Document professional ethics on Institutional website

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

**Response:** Yes

File Description	Document	
Any additional information	View Document	

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

Response: 25

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

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2018-19	2017-18	2016-17	2015-16	2014-15
5	5	6	5	4

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

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

#### **Response:**

The Institution has students from different parts of India and abroad. Majority of the students who seek admission to the college hail from remote rural areas. They are not fully aware of the great culture of the country. They even do not know about the role the nation had played in the history of the world. The authorities of the Institution know that the students of this generation need to be enlightened about the history and culture of this country. They also need to be told about the freedom struggle and contribution given by great stalwarts in the freedom struggle. It is observed that they do not have any knowledge of the Constitution of the country. They are not aware of duties and rights of a common man in India. In view of this functions like Independence Day, Republic Day, Constitution Day, Human Rights Day, Engineers Day, Girls day, NSS foundation Day, National Youth Day etc. Are celebrated in the college .Similarly the students have to be told about the role they shall be required to play as Engineers after completion of their academic pursuits. The college therefore conducts programs to enlighten them about the role they shall be required to play in future. Birth and Death Anniversaries of the great leaders are observed to make the students aware of their contribution in shaping the country. Eminent speakers are invited to speak on such occasions. These speakers throw light on the lives and work of these stalwarts. The students get motivated and inspired to espouse the cause of National Development.

After the Independence the country had to toil hard to vie with other developed countries. Due to earnestness and foresight of the persons who were at the helm of the affairs of the country the country began to make rapid progress. Since Independence the country made huge efforts so today India is considered as one of the powerful countries. India is not dependent on any other country for the needs of the people of the country. The students of this generation have to be told how India has made rapid progress and today it is almost on the acme of glory and success. For this several functions are organized in the college.

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

#### auxiliary functions

#### **Response:**

#### **Financial and Administrative Transparency**

The Institute adheres to the guidelines laid down by statutory authorities. Initially the budget of the college is made . The budget includes the probable receipts and probable expenditure. The budget contains the probable receipts in the form of fees , scholarship etc. and the probable expenditure to be incurred on salary of the staff , infrastructure , purchasing of new equipments, calibrations, maintenance, service, new constructions and implementation of new ideas every year . The college fee is collected as per the guidelines of State Govt Fee Regulatory Authority. There is flawless work flow of finance department . In this flow proper hierarchy is maintained . The financial power is given to HoDs and Principal. There is complete transparency in financial transactions. Every financial year, the audited Receipt and Payment statement sign by Chartered Accountant is published on the website of the institution.

#### **Academic Transparency**

The Institution believes in the transparency in the academic administration through decentralized delegation of administration power at every stage. Principal, being the head of the Institution, delegates the power to the HODs to administrate the academic work of the department. IQAC members of the department take the responsibility to discharge the academic and administration work entrusted to them. Each laboratory has faculty in-charge assisted by a lab assistant, who takes care of purchase, maintenance and service of the equipments. Internal Exams are conducted by the department examination cell coordinator who schedules exams and analyzes the result. University exams are conducted by the central examination cell.

The college has defined the process for carrying out academic audit in order to review the academic process and enhance the quality in the academic activities through the Internal Quality Assurance Cell (IQAC). Internal Academic Audit is conducted through the IQAC cell. Continuous monitoring of the academic activities is carried out through IQAC and action plan is recommended for further improvement.

#### Main Objectives of the Academic Audit:

- To ensure that there is proper contain delivery
- To ensure that assessment of COs, POs, PSOs and PEOs, SWOC analysis is properly done.
- To evaluate the quality of teaching learning process
- To evaluate whetherthe quality in academic work is enhanced

#### 7.2 Best Practices

7.2.1 Describe at least two institutional best practices (as per NAAC Format)

**Response:** 

**Best Practice I** 

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

#### 2. Goal:

To use E-management tools for effective:

- i. Teaching and Learning
- ii. Monitoring and Maintaining
- iii. Transparency
- **3.** The Context: The use of information technology in management in any organization can augment the productivity and quality. The use of information technology in the domain of education can accord help to the students. The help is extended to the students by ready availability of subject resources, Time Tables, Performance, Attendance schedule related to all examinations and other programmes/activities. Moreover it offers transparency which is most important aspect of the management. Similarly e-management systems are extremely helpful in providing aids to the Members the teaching staff and it accords a great help to create a culture of

transparency which is very significant and consequent for healthy and un-biased working atmosphere.

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

#### i. Website:

- a) Availability of complete information beginning from departments, courses and teachers including Main phone contacts.
- b) Complete details about the course structure, Syllabi, subject details, time table, the rules and regulations and the examination procedure.
- ii. Internet for effective dissemination of information and strong space (N: Drive) accessible to everybody, everywhere in the college campus.
- iii. Study material is available on college website for 24X7 referal
- iv. Web kiosk: Different persons and professional activities/ aspects related to the college can be entered and retrieved making the system transparent.

These activities are related to

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

- b) **Teaching:** student attendance, information about the students who bunk the classes, classroom booking.
- c) Examination: the Entry of marks, grade entry, result, invigilation duty.
- **d)** Counseling and mentoring: To view grades of the students and performance of the students by parents and teachers.
- e) Provide feedback: e.g. IQAC.
- **5. Evidence of success:** the practice followed by College has led to the creation of healthy and transparent work culture.
  - The transparency and dissemination of knowledge/information in easy manner through IT enabled system starting from the classroom experience to examination has accorded great help to the students and the parents concerned. The policy to view examination copies, mechanism to redress issues/ problems along with engagement has provided unbiased and effective mechanism.
  - For employees the information about salaries, benefits kind of leave, income tax deduction, etc are available online. This type of transparency along with healthy policy for promotion and help in career advancement makes college an alluring place to work. College has good rate of faculty and staff retention. The confidence of faculty reposed in system has laid to long term thinking and planning.
- **6. Problems encountered and resources required:** The change from paper work to paperless work is not easy. Since many years the employees have engaged themselves in traditional letter writing, report writing, etc. The mindset of the employees has been mandating them to resort to paper to express their opinions, views and remarks on paper only. Change from paper work to paperless works needs change in mindset. Moreover it is the matter of training. The senior employees traditionally involved in the paper work initially are reluctant to receive training to change to correspondence. College has senior as well as young and enthusiastic members of teaching and non teaching staff. Though it took time to change the mindset of the senior employees, with the passage of time, after learning the simplicity and effectiveness of new method gradually they shifted themselves to new methods. Now all employees in the college are able to implement several aspects of engagement successfully.

#### **Best Practice II**

- 1. Title of the Practice: TGPCET Green Initiative
- **2. Goal:** Environmental issues bring about thoughtful questions on the role of Institute in society. Irrespective of whether they are contributing to a better environment or worsening it, Institutions have to acknowledge environmental or green issues through impact research and measurement. Based on the approach college has significant Green Initiatives to
  - Promote sustainability by creating awareness
  - Share knowledge & expertise-Expert talks about environmental problems and possible solutions
  - Deploy eco-friendly technologies for greening and cleaning our campuses
- **3. The Context:** Water Management, Waste management, Energy (conservation and generation) and Landscaping and Trees.

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#### 4. The Practice: Energy conservation

- The Internal stakeholders take all measures to save the power.
- More than 50% lighting requirements are met through LED sources and Solar System

#### Use of renewable Energy

- Interactive solar power generating system of 120 KW is provided on the roof top of the buildings. With the installation of this system 70 to75% of the total electricity requirement is met .It also has additional advantages like:
  - no escalation in power cost for 15 years
  - upto20% rebate in property tax under Green Building Norms,
  - Un-interrupted energy use during day time round the year.
  - Hot water is provided in Bathrooms of boys and girls hostels

#### Water harvesting

• Rain water harvesting structures are in place which collects the roof top rain water and discharges it to ground.

#### Efforts for carbon neutrality

•Installing solar panels helps in reducing carbon emissions. The installation of 167258 KWH solar power systems has saved the amount of carbon dioxide released into the air. Thus the emission of carbon dioxide is well controlled with these efforts in the institute to achieve carbon neutrality.

#### **Plantation**

• Every year students along with the garden staff plant trees. Plantation Drives are organized by NSS. Due to this program over the years the campus has become lush and green. Also, a herbal garden consisting of plants with medicinal values is proposed to be cultivated in the college campus.

#### E-waste management

• E-waste generated is first reused in the campus itself.

#### 1. Evidence of success:

**Water Management:** Due to the increase of water usage, the volume of sewage increases and safe disposal of sewage has become a cause of concern. The appropriate reuse of treated sewage is the obvious and eminent solution. Our Institution has sewage treatment plant (STP) to recycle the waste water.

To ensure effective utilization of waste water, the lawns, saplings and trees in the campus are watered after recycling. Well constructed drainage system in the form of closed collection tanks prevails in our campus. The tanks are regularly cleaned to avoid stagnation of water. Effluent Treatment Plant is in place for effective treatment of liquid waste.

**Waste management:** Solid waste management is the process of collecting, treating and disposing of solid waste material. Improper disposal of solid waste can create unsanitary conditions in turn leads to pollution of the environment and outbreaks of vector-borne diseases. The college has made adequate arrangement for solid waste management. To make the environment conducive for survival and retaining the natural setting, the following procedure is followed in the campus:

For disposal of Biological waste Dustbins are placed at distinct spots. There is proper collection of fallen leaves of the trees and plants and these leaves are converted into manure for fertilization. Food and vegetable waste from mess and canteen is collected and that is used to feed the animals outside the campus . A common Effluent Treatment Plant is functioning to treat solid and liquid waste and to produce energy/gas for cooking.

**Solar Systems**: The College has installed solar panels on the top of the building. This system produces total Energy 167258 KWH. It has substantially reduced the electricity consumption. This system provides round the clock energy supply. This system has considerably lessened dependence on supply of electricity.

**Landscaping and Trees:** Keeping the campus green and clean is mandatory for the institution to keep the ambiance of the institution .The vibe is conducive to teaching and learning process .The endeavours are made in respect of Global Warming, Soil preservation, reducing air pollution, getting more oxygen and good rain .

The college has developed a magnificent infrastructure with the "Clean & Green Campus" as its motto. It provides a natural eco friendly ambiance to the students to enjoy learning experience at the lush green atmosphere. The small seeds that we planted a few years ago have grown into a large number of trees. The campus is turned into an eco friendly and green campus. It includes various eco friendly trees. The Ventilation in classrooms is adequate due to natural light and air.

**6. Problems encountered and resources required:** The initial problem was related to certain formalities related to Maharashtra Electricity Board. It took much time to get the necessary permission. The installation process also consumed lot of time. However the ardent and earnest efforts of the college solved all these problems and solar plant was installed. The solar plant is functioning properly. The Green Initiative seeks to better the ambience which is conducive to teaching learning process. The trees and the plants need to be zealously needed to be guarded. A team of gardeners have to look after the trees and plants. The students and the employees need to move in the campus without trampling the grass. Adequate water supply is needed to maintain lush green lawn in the campus. needs to be ensured that flowers are not plucked by the students.

#### **Best Practice III**

- 1. Title of the Practice: Creation of Awareness among Faculty and Students about their social responsibility.
- **2. Goal:** To develop ethical and moral values in faculty and students. To create harmony and peace in the faculties and students and non-technical staff. To develop emotional quotient and spiritual quotient along with intelligent quotient. To imbibe education among the Faculties and students for the development of the society and community. To create sense of belonging and social awareness in the employees and the students.

- **3. The Context:** To develop society, the institute has decided to create engineers having social, ethical and moral values. The need of the society today is to develop budding engineers having research mindset, ethical values and entrepreneurship skill. The young generation is very volatile and it is the necessary to bring awareness in them regarding their social responsibilities.
- **4. The Practice:** Institute conducts the program under the aegis of National Service Scheme. The efforts are made to enable the students understand their social responsibilities. Institute understands the importance of learning the life skills & organizes co-curricular, cultural programs, tours, and visits, conferences to develop interpersonal skill, decision making and values clarification. Free distribution of motivational books to school students. Institute arranges spiritual lectures on different idolized thoughts.
- **5. Evidence of success:** By organizing blood donation camp, tree plantation, save girl rally etc., community activity is promoted in the neighborhood of the institution. NSS activities also give the social and ethical awareness among students. Stress management lectures are helpful to students and staff for relieving stress and maintain peace
- **6. Problems encountered and resources required:** Going to the villages and convince them that the institute is working for their betterment is a herculean task. More budget provision needs to be made for carrying out social work.

#### 7.3 Institutional Distinctiveness

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

#### **Response:**

#### **Distinctiveness - Diversity of Students**

Promoting diversity in the Institutions is a big challenge. We have highlighted diversity practiced and illustrate the ways to incorporate an understanding of diversity in the classroom and beyond.

The Institution has admitted students from various states in India like MP,CG,Bihar, UP, J&K and Countries like Nepal. Much discussion about diversity focuses on the forms of marginalization: Race, Gender and physical orientation.

#### 1. Diversity in the classroom

Having a diverse group of students simply means recognizing that all the people are unique in their own way. Their differences consist of their reading level, athletic ability, cultural background, personality, religious beliefs, and the list goes on. There has always been diversity in the classroom, but it is important to embrace it and make positive use of it. Teachers value the diversity and model this attitude to their students. Teachers recognize and respect the fact that students are different and these differences are generally good things. For example, when attempting to solve a problem, teacher assembles a diverse team with many skills and many different ways of approaching the problem than a team that has all their strength concentrated in one area. Teachers playing number of roles in the classroom; yet, valuing diversity

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is one of the most important ones. Here is a list of environments created where each student feels valued and respected.

- Take the time to learn students' background, interest and learning style.
- Create an environment that is conducive to each individual student to learn about each other and gain an appreciation for the diversity they bring to the classroom.
- Teach students that everyone has strength and weakness.
- When working in teams, students are encouraged to take advantage of their strengths of the team members to produce the best possible results.
- Invite guest speaker from different places may share certain qualities with students.
- Implement a "zero tolerance" for anything that is disrespectful, hurtful, or intolerant of diversity

#### 2. Learning Culture, Location and Ambiance

The atmosphere in the classroom reflects the importance of the work undertaken by both students and faculty members. RTMNU and AICTE are recommending English as the medium instruction. This avoids the language problem. A classroom with a strong culture for learning is characterized by high cognitive energy. There are high expectations from all students and the classroom is a place where the teacher and students value learning and hard work. For the weak students, the institute arranges remedial classes to improve the performance. Mentors are allocated to the students to give counseling in their academic, personal problems and create fearless environment. Elegence – Finishing school is active for the professional and personality development of the students

#### 3. Ethical Values and Integrity

College celebrate national days like Republic day, Independence Day, International Women's Day, Engineers day, Teachers Day, etc to inculcate the importance of moral values and significances. During every program, the national anthem is being played to feel the integrity and patriotism. RTMNU University has provided a course called Professional Ethics and Human Values to learn ethical practices and human values among students. The institution encourages diversified students to participate and lead the activities and programmes such as conference, symposium, workshop, cultural festival, sports and college days, etc inside and outside the campus. During annual functions and alumni day, students are encouraged to showcase their native and regional talents.

#### 4. Diversity by Community

Reservation is a form of affirmative action to uplift the status of socially and economically backward communities in India. The college is working under statutory bodies such as RTMNU, DTE Maharashtra and AICTE and follows the rules and regulations (community based) in reservations of admission process.

#### .....AN INSTITUTE WITH A DIFFERENCE......

- Where we believe that education should stimulate the minds of the young and inflame their intellect.
- Where global citizens of tomorrow are groomed by dedicated and trained faculty.
- Where the focus is on teaching not just to make a living but how to make a life.

- Where there is symbiosis of technological development and human values.
- Consistent institutional growth with respect to student intake, faculty, infrastructural, facilities, etc. Students performance at university examination.
- Campus placement for eligible students.
- Increase in number of students planning for higher studies.
- Organization of successful national and international level events.
- Conduct of university curriculum with full effectiveness and performance monitoring.
- Mock test to boost confidence and performance in campus placement.
- Emphasis on extra-curricular and co-curricular activities for overall growth of personality.
- Participative highly qualified management from academic background are accessible 24x7 for the development of the Institute and to resolve the issues

# 5. CONCLUSION

#### **Additional Information:**

We at TGPCET, strive to bring out and nurture the talents and skills of youths with Quality Technical Education, motivate them to be self-disciplined and develop their competence to face the challenges of globalization. The endeavours are made

- To provide value-based education.
- To produce Industry-ready Professionals through training in Soft-Skills and Personality development. Undertaking networking with Industry, Academic and Research Institutions
- To provide adequate and furnished infrastructure for academic and research activities.
- To organize national level Seminars/Conferences.
- To promote Creativity and Innovation among students.
- To conduct Career -Vision program to facilitate right career choice by students.
- To encourage Entrepreneurship among students.
- To motivate the students to participate in Co-curricular and Extra-curricular activities.
- To train teachers in modern instructional methodologies to improve their teaching skills.
- To motivate the faculty to publish papers in National/International Conferences and Journals.
- To provide Hostel and Residential accommodation to students and staff.
- To develop and promote Green Environment.
- To provide quality environment and services to all Stakeholders.
- To teach and follow Ethical, Environmentally responsible Engineering practice.
- To attend to issues of national relevance.
- To respond to the changes in both technology and applications.
- To provide systems, resources, and opportunities for continuous improvement.

# **Concluding Remarks:**

Institute has well framed vision and mission, considering the needs of the society. Best academics, infrastructure, laboratories, industry-interaction, self-learning and co-curricular and extra-curricular activities are some of the special features which cater to the comprehensive development of the students.

The governance comprises of Governing Council, Governing Body, Departmental Advisory Board, Internal Quality Assurance Cell, Academic Monitoring Committee and various institute level committees. These all play significant role in the evolutionary reforms towards positioning the Institute in the preferred list of all stake holders.

The Institute believes in promoting a culture of delegation of powers through strategic policies. The Principal of Institute is assisted by Vice- Principals, HODs, Administrative Head, Sections in-charge and coordinators of various committees in decision making process at the Institute.

Institute executes strategic planning from time to time for producing quality engineers and overall growth of the institute has well established organizational structure to execute smooth functioning of administrative and academic processes. TGPCET has deployed e-governance in all the areas of academic processes to ensure better academic planning and monitoring.

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Institute regularly conducts training to staff and faculty members for implementation of quality procedures. External audit by various agencies like AICTE, RTMNU and internal audit is undertaken periodically to improve institutional activities.

The Institute believes that Excellence is a continuous process. The descriptive summaries and the accompanying data under each criterion are a proof of the sincere efforts of the Institution in this direction. It is a firm belief as well as the perception of the Management of this Institution that the growth in infrastructure, academics, research, co-curricular and extracurricular activities, activities on social and national issues for creating awareness as well as mitigating the problems, contributions in terms of activities of relevance to local community around the Institution - have all been in keeping with the expectations of NAAC - a wing of the UGC, highly relevant to the present-day educational scenario in the country.

# **6.ANNEXURE**

#### 1.Metrics Level Deviations

Metric ID Sub Questions and Answers before and after DVV Verification

- 2.4.4 Percentage of full time teachers who received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the last five years
  - 2.4.4.1. Number of full time teachers receiving awards from state /national /international level from Government recognised bodies year-wise during the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
8	6	10	9	8

Answer After DVV Verification:

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

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

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
9.53	6.83	1.85	0.35	1.1

Answer After DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
0.18853	0	1	0.35	0.1

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

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
178	76	72	53	48

Answer After DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
125	66	72	46	44

Remark: HEI input edited as per clarification.

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

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
19	10	4	10	7

Answer After DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
13	10	4	10	7

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

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
8	5	2	1	1

Answer After DVV Verification:

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

5.2.3.2. Number of students who have appeared for the exams year-wise during the last five years Answer before DVV Verification:

2018-19   2017-18   2016-17   2015-16   2014-1
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Number of awards/medals for outstanding performance in sports/cultural activities at national / international level (award for a team event should be counted as one) during the last five years.

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

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
7	2	6	9	1

Answer After DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
3	2	6	9	1

- 7.1.9 Differently abled (Divyangjan) Friendliness Resources available in the institution:
  - 1. Physical facilities
  - 2. Provision for lift
  - 3. Ramp / Rails
  - 4. Braille Software/facilities
  - 5. Rest Rooms
  - 6. Scribes for examination
  - 7. Special skill development for differently abled students
  - 8. Any other similar facility (Specify)

Answer before DVV Verification : A. 7 and more of the above Answer After DVV Verification: A. 7 and more of the above

#### 2.Extended Profile Deviations

ID	Extended Questions		
1.1	Number of courses offered by the institution across all programs during the last five years		
	Answer before DVV Verification: 453		
	Answer after DVV Verification : 446		