SELF STUDY REPORT

FOR

1st CYCLE OF ACCREDITATION

TEEGALA KRISHNA REDDY ENGINEERING COLLEGE

SURVEY NO-56,57,MEDBOWLI,MEERPET,BALAPUR(MANDAL)
500097
www.tkrec.ac.in

SSR SUBMITTED DATE: 06-09-2018

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

September 2018

1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

Teegala Krishna Reddy Engineering College was established in the year 2005 under the reputed Teegala Krishna Reddy Educational Society. The Institute is approved by AICTE, New Delhi and permanently affiliated to JNTUH, Hyderabad. It functions as per the norms of regulatory bodies AICTE and JNTUH. It is located at Meerpet,Hyderabad in a sprawling area of lush green, serene, eco-friendly and dynamic environment with a vision of imparting technical education for young technocrats as well as to achieve entrepreneurship, placements and Higher education.

The Institute currently offers UG programmes in Civil Engineering, Electrical & Electronics Engineering, Electronics and Communication Engineering, Computer Science and Engineering, Information Technology and PG programmes M.Tech in CSE and MBA. EEE and CSE UG programmes are accredited by NBA for three years from 2017-18 to 2019-20.The Institution has got 2(f) and12B status granted by UGC. It has well established and required infrastructure to meet the emerging trends in Engineering disciplines. The Institute is developed with providing all facilities like splendid Library and Information centre, good Laboratories, power supply, continuous Wi-Fi Net connectivity, auditorium, spacious playground, hygienic RO water purifier system, congenial hostels, salubrious canteen etc.Board of Governors, Administrative bodies, Academic committee, various committees, dedicated teaching, non- teaching staff and the students of the institution thrives for the enrichment of academics and non academics.

The Institution has well established Governance, Leadership and Management with which it is able to establish some best practices uniting students and staff.

Vision

Imparting Knowledge and instilling skills to the aspiring students in the field of Engineering, Technology, Science and Management to face the emerging challenges of the society.

Mission

- Encouraging scholarly activities that transfer knowledge in the areas of Engineering, Technology, Science and Management.
- Ensuring students of all levels, well trained to meet the needs of education and their future endeavours.
- Inculcating human values and ethics into the education system for the all-round development of the students.

Quality Policy:

Teegala Krishna Reddy Engineering College is committed to provide quality Technical education to   the students through dedicated and talented faculty, good Infrastructure, Laboratories and Research.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- For the *holistic development* of students TKREC faculty focuses on curricular, co-curricular and extracurricular activities.
- Continuous effective *Mentoring system* is adopted for students over all development.
- The Institute has got AICTE grant in-aid of Rs. 10,00000/-(Ten lakh rupees only) under Industry Institute Partnership Cell (IIPC).
- The Institute has got AICTE grant in- aid of Rs. 3,30,000/-(Three lakh thirty thousand only) under Entrepreneur Development Cell as a distinctive measure to guide the students useful to the society.
- The Institute has *Training and Placement Cell* which has specific aim to place students in competitively good companies/industries for their prosperous future. Soft skills, Telangana Academy for Skill and Knowledge Development centre (TASK), Campus Recruitment Training (CRT), individual counselling and Motivational training sessions are organized continuously to enlighten budding engineers for affluent career and personality development.
- Through *IQAC* the Institute maintains quality in Governance, Leadership and Management with the help of committees involving staff and students.
- The Institute has *National Social Service (NSS)* unit to instil social responsibility in young engineers. The Institute conducts social awareness programs and encourages students to participate actively. Most of the students participated in blood donation camps, Health checkups, Swachh Bharat, Heartfulness meditation etc.
- The Institute has registered *National Cadets Corps (NCC)* which aims at developing character, comradeship, discipline, and a secular outlook, the spirit of adventure, leadership qualities and ideals of selfless service amongst young Indians.

Institutional Weakness

- Due to different background of students admitted from rural background, small towns and cities, it requires greatest efforts to be kept by the college to achieve continuous improvements in academic excellence.
- To achieve financial autonomy support from state government is expected in reimbursing the tution fee in time and fixing appropriate tution fee.

Institutional Opportunity

- Having an opportunity to become Autonomous Institution to customize the requirements of stakeholders.
- New avenues of getting support in terms of research grants and technology from the funding agencies as well as industries.
- Establishing centre of Excellence in key areas like effective research, entrepreneurship development and consultancy.

Institutional Challenge

- More placements in core and corporate companies.
- Networking and strengthen relationship with stakeholders.
- More focus on industry institute interaction.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

Teegala Krishna Reddy Engineering College implements curriculum effectively by framing *academic calendar,* seminars, industrial visits, guest lectures, and workshops. The curriculum structure of Institution includes lesson plans, student *interactive* sessions, projects, collaborative learning process and feedback. Our curriculum includes orientation, induction programs and also maintain mentor mentee ratio by 1:20.The speciality of our curriculum is, it helps the students to encourage projects based learning on real time problems under the guidance of faculty and industry experts to develop practical knowledge in students. Faculty involves in administration and academics as per the university guidelines. Teaching Learning process is enhanced by collecting feedbacks from the stakeholders and taking suitable actions for improvements.

All the programs offered to students are integrated by the Choice Based Credit System (CBCS) and elective courses to meet the needs and interests of students, courses like Gender sensitization, Environmental science, Human values and Professional ethics are included in UG program. Teaching Gender sensitization brings awareness about gender equality. Environmental science helps to develop the knowledge of Environment and sustainability. Human values and Professional ethics teach to lead true life with highest values and morals and also to understand the moral values that might guide the Engineering profession. These disciplines enable students to concentrate on social issues and serve the society.

Curriculum support system is well planned as it contains Enterprise Resource Planning (ERP) to monitor attendance. This information will also be provided to the parents by SMS, e-mail and by giving them login credentials of ERP.

Teaching-learning and Evaluation

Students get enrolled as per state Government guidelines. Institution implements teaching learning practices with interactive techniques, incorporating various strategies for facilitating slow learners by collaborative learning process, clarifying doubts, revising important concepts and practice problems in subjects. Student centric methods, such as experiential learning, participative learning and problem-solving methodologies are used for enhancing learning experiences.

Remedial classes, motivational classes, study material etc. are offered to support the slow learners. Mentor, faculty, alumni, senior students are assigned for their academic growth. Scholarly activities are encouraged for advance learners to satisfy their learning capabilities. Faculty are encouraged to use ICT tools for effective teaching and to utilise e-resources to enrich teaching – learning methods.

The institution is strengthened with qualified and experienced faculty. There are 19 doctorates in the institution. Faculty are recognized with suitable awards. Teaching - learning is achieved by recruiting competent faculty. Recruitment of the faculty is done as per the norms of JNTUH and AICTE. The Institution maintains the student-faculty ratio as per the rules and regulations of JNTUH and AICTE.

Facilities like ramp, wheelchair, lift etc. are provided for the differently abled students. Self learning and Innovative pedagogies of teaching and learning are adopted for better growth of students. The Institute conducts internal assessments transparently, project assessments, internal exams as per university norms and results will be declared. Program outcomes and course outcomes are attained as per internal and external assessment. Mechanism to deal with examination related grievances are transparent, time bound and efficient.

Research, Innovations and Extension

Research and development cell help students to transfer their innovative ideas into their projects and entrepreneurship. Several bodies like ISTE, CSI chapters are registered for conducting professional activities and to try for sponsored grants for research projects. The institute has got AICTE grant in –aid under IIPC grant and EDC grant.

TKREC innovation cell aims to foster an atmosphere of creativity, innovation and exploration in the campus. Dream sessions are organized under IEC to express perspective and fulfil their dreams by developing projects for innovation. Students excelled in start-ups like Quick wash, INV-INN technologies, OM Group of IT solution.

An international conference ICSSCCET-17 was conducted in association with ASDF as a part of MOU. Many faculties had published and presented good quality papers in it. TKREC encourages faculty in authorizing books, publications, newsletters and also to conduct workshops, seminars, conferences etc. for updating of their technical knowledge.

The Institute organizes number of extension programmes like blood donation camp, swachh bharath, health checkups, career guidance and heart fullness meditation etc. Faculty and students are encouraged to visit research-oriented labs and industries to carry out their major projects to improve their practical exposure and skills. Faculty and students actively participate in extension activities.

Infrastructure and Learning Resources

The Institute maintains sufficient budget for providing and maintaining the required infrastructure and learning resources. The Institution has required infrastructure, well equipped laboratories with learning resources like ICT, class rooms as per AICTE and JNTUH norms. The Institute provides substantial infrastructure for sports like cricket, basket ball, throw ball, kabaddi etc. Students are encouraged to participate in college level, university and national competitions.

TKREC library maintains all the books and journals are per AICTE norms. Digital access of resources is provided for teachers and students. Library has a vast collection of 56,872 volumes and 5,847 titles in addition 130 journals, 174 full text IEEE- online journals, N-LIST, INFLIBNET data base, NDL, SWAYAM, NPTEL, SWAYAM PRABHA and 26 General Technical Magazines and 10 newspapers along with rare books and *self learning facilities.*

The Institute has 100 MBPS internet connection.1008 computers are connected in LAN. The institute maintains adequate student computer ratio as per the norms. There are established systems and procedures for maintaining and utilizing physical, academic and support facilities-laboratory, library, sports complex, computers, classrooms etc.

Student Support and Progression

The Institution has got facilities to develop academic and overall personality development skills in students. It has student support system from government of Telangana, in the form of tuition fee reimbursement for eligible students, provides scholarships for socially and economically backward students.

The Institute awards medals and certificates for student achievers in curricular, co-curricular and extra-curricular activities involving students actively in various academic and administrative committees. It encourages capability enhancement and development schemes like career counselling, higher education, guidance for competitive examinations, soft skill development, language lab, and personal counselling/mentoring, yoga and heart fullness meditation for the benefit of students.

The Institute has discipline and grievance redressal committee to address the problems of the students, staff and helps to resolve the issues at the earliest possible. Training and placement cell maintains good relationship with industries and companies to assist in career guidance and placements for students.

Sports and cultural activities committee members are active in organizing events. They encourage students to participate in inter and intra institutional sports competitions and cultural activities.

The institute organizes alumni meet every year, inviting suggestions and inputs from alumni which are used for student's career development. The Institute has an active registered alumni association that helps in industry institute interaction by organizing seminars, workshops and guest lecturers to improve technical skills, entrepreneurship skills and placements to students.

Governance, Leadership and Management

The Institution has effective e-governance, leadership and management with the support of qualified and competent people.

The Institute has well documented strategic plan with Vision, Mission, quality policy, SWOC analysis and action plan. The actionable items are taken up by the concerned people for implementation. Quality education, vision, mission and values are maintained in the institution through involvement of stakeholders.

Various committees minutes of meeting are communicated and implemented effectively.

For the decentralization, institution has inspiring participative management by all the people in various professional development programs like Conferences, FDPs, student development activities and accreditation task.

Service rules and welfare schemes for staff and promotion system is observed. Grievance redressal system is also followed.

Technical knowledge beyond syllabus is imparted to support students. Professional and technical trainings are given to faculty to teach more effectively on emerging trends and technologies. Staff are encouraged to attend such training and financial assistance is also provided .Performance appraisal system is also implemented.

The Institute organizes Techno Fest Seminars, Workshops and Conferences for the overall development of students. Various activities are conducted to inculcate leadership qualities among students and staff.

Institution has IQAC cell to ensure quality in academic, non-academic and administrative functions that strives to achieve Vision, Mission and Quality policy of the institution. Institution conducts internal and external financial audits regularly.

The Quality of the institution is supervised by Internal Quality Assurance Cell (IQAC) which has been formed on 08/05/2015.

Institutional Values and Best Practices

The Institute functions as per the guidelines of the regulatory bodies maintaining transparency.

The Institution encompasses various social responsibilities and universal values such as Integrity, Accountability, Punctuality and Humanity with best practices like Quality and Excellence to achieve its Vision of overall development of the students and staff.

The Institute takes care and provides facilities for students and staff.Gender sensitization in curriculum help students to realize the importance of gender equality. The institute offers course on Human Values and Professional ethics which enable students to have good code of conduct and values are displayed.

The institute adopts eco-friendly policies to have clean environment in the campus. Solid, liquid and e-waste is separated and disposed in line with green building standards. Gobar gas plant is connected to hostel kitchen.

Green practices are adopted to reduce pollution. Rain water harvesting pits are made in the campus to recharge underground water. Engineers Without Border (EWB), a student chapter supplied solar lamps for villagers and developed e-class room for government school.

TKREC innovation cell carried out experiment in Nalgonda district testing presence of fluoride content in different water resources using akva cadisfly, which help the villagers to identify the level of fluoride content in water with in short, span of time. They conducted seminars to bring awareness among villagers for safety drinking water.

Institution celebrates the birth anniversaries and observes death anniversaries of great personalities. The institute follows some best practices.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	TEEGALA KRISHNA REDDY ENGINEERING COLLEGE
Address	SURVEY NO-56,57,MEDBOWLI,MEERPET,BALAPUR(MANDAL)
City	HYDERABAD
State	Telangana
Pin	500097
Website	www.tkrec.ac.in

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Associate Professor	V.SURYA NARAYANA	040-9849502074	9849502074	-	naactkrecr9@gmail.com
Principal	JBV SUBRAHMANYAM	040-9393959597	9393959597	-	tkrec@rediffmail.com

Status of the Institution	
Institution Status	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

Date of establishment of the college	20-07-2005

University to which the college is affiliated/ or which governs the college (if it is a constituent college)		
State	**University name**	**Document**
Telangana	Jawaharlal Nehru Technological University	View Document

Details of UGC recognition		
Under Section	**Date**	**View Document**
2f of UGC	09-11-2016	View Document
12B of UGC	09-11-2016	View Document

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)				
Statutory Regulatory Authority	**Recognition/Approval details Institution/Department programme**	**Day,Month and year(dd-mm-yyyy)**	**Validity in months**	**Remarks**
AICTE	View Document	16-04-2018	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 Area of Campus				
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.
Main campus area	SURVEY NO-56,57,MEDBOWLI,MEERPET,BALAPUR(MANDAL)	Semi-urban	10	41082

2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Programme/Course	Duration in Months	Entry Qualification	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BTech,Civil Engineering	48	Intermediate Diploma	English	156	126
UG	BTech,Electrical And Electronics Engineering	48	Intermediate Diploma	English	144	112
UG	BTech,Electronics And Communication Engineering	48	Intermediate Diploma	English	288	212
UG	BTech,Computer Science And Engineering	48	Intermediate Diploma	English	288	212
UG	BTech,Information Technology	48	Intermediate Diploma	English	60	50
PG	Mtech,Computer Science And Engineering	24	B.Tech	English	24	13
PG	MBA,Masters In Business Administration	24	Bachelors Degree	English	60	31

Position Details of Faculty & Staff in the College

	Teaching Faculty											
	Professor				**Associate Professor**				**Assistant Professor**			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				0				0				0
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit				0				0				0
Sanctioned by the Management/Society or Other Authorized Bodies				8				11				238
Recruited	6	2	0	8	7	4	0	11	116	122	0	238
Yet to Recruit				0				0				0

	Non-Teaching Staff			
	Male	**Female**	**Others**	**Total**
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				26
Recruited	17	9	0	26
Yet to Recruit				0

Technical Staff				
	Male	**Female**	**Others**	**Total**
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				15
Recruited	9	6	0	15
Yet to Recruit				0

Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	7	2	0	6	4	0	0	0	0	19
M.Phil.	0	0	0	0	0	0	1	1	0	2
PG	0	0	0	0	0	0	115	121	0	236

Temporary Teachers									
Highest Qualification	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 Time Teachers									
Highest Qualification	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

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

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

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
Diploma	Male	1181	0	0	0	1181
	Female	292	0	0	0	292
	Others	0	0	0	0	0
UG	Male	1608	2	0	0	1610
	Female	1094	4	0	0	1098
	Others	0	0	0	0	0
PG	Male	5	0	0	0	5
	Female	8	0	0	0	8
	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	41	49	43	31
	Female	34	26	23	22
	Others	0	0	0	0
ST	Male	27	32	34	28
	Female	20	18	18	11
	Others	0	0	0	0
OBC	Male	223	246	277	253
	Female	158	182	156	165
	Others	0	0	0	0
General	Male	147	118	188	159
	Female	93	140	176	168
	Others	0	0	0	0
Others	Male	0	0	8	2
	Female	0	0	9	0
	Others	0	0	0	0
Total		743	811	932	839

3. Extended Profile

3.1 Program

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

Response : 2387

File Description	Document
Institutional Data in Prescribed Format	View Document

Number of programs offered year-wise for last five years

2017-18	2016-17	2015-16	2014-15	2013-14
2	2	2	2	2

3.2 Students

Number of students year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
2721	2938	2906	2571	2197

File Description	Document
Institutional Data in Prescribed Format	View Document

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

2017-18	2016-17	2015-16	2014-15	2013-14
567	654	786	812	730

File Description	Document
Institutional data in prescribed format	View Document

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

2017-18	2016-17	2015-16	2014-15	2013-14
852	627	698	589	522

File Description	Document
Institutional Data in Prescribed Format	View Document

3.3 Teachers

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

2017-18	2016-17	2015-16	2014-15	2013-14
257	270	278	238	153

File Description	Document
Institutional Data in Prescribed Format	View Document

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

2017-18	2016-17	2015-16	2014-15	2013-14
257	270	278	238	153

File Description	Document
Institutional data in prescribed format	View Document

3.4 Institution

Total number of classrooms and seminar halls

Response : 67

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

2017-18	2016-17	2015-16	2014-15	2013-14
339	390	431	351	274

Number of computers

Response : 1136

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:

The Institution is affiliated to Jawaharlal Nehru Technology University, Hyderabad and follows the curriculum prescribed by the university. An action plan for timely implementation of curriculum is formulated by the institution to ensure effective delivery. An academic committee consisting of Heads of various departments and headed by the Principal prepares policies after strategizing the best methods to implement the curriculum successfully.

All departments prepare academic calendar as per the schedule given by the university along with other activities like department association hours, make up classes, remedial classes, seminars, tutorial classes, industrial visits, guest lectures, workshops, faculty and students development programmes.

Lesson plan

Faculty are encouraged to prepare lesson plan for their classroom teaching before the semester commences. The preparation of such a plan helps with effective distribution of syllabus, clarity of curriculum and timely completion of the course. Each department prepares its internal academic calendar well before the semester commences. The lesson plan provides an insight on how the course is delivered in a semester. Along with this, the respective faculty prepares course file.

Course File Contents:

1. Vision and Mission of Institution and departments

2. Quality policy

3. PEOs

4. POs,PSOs

5. COs

6. Mapping of COs with POs & PSOs

7. Course Syllabus, Lesson plan

Effective implementation of curriculum is periodically reviewed through departmental meetings in order to be fully prepared for teaching. Continuous evaluation is maintained throughout the year by conducting tests after completion of every unit to ensure thorough understanding. Transparency and impartiality are

maintained in the evaluation process. Committees as a result of their rigorous assessment evaluate each students performance and advice teaching plans based on their ability for effective teaching and learning process to ensure better results. Attention to student needs is given by the faculty.

Students Interaction Sessions

A degree of communication is required in every aspect, which makes learning easier, helps students achieve goals, increases opportunities for expanded learning, strengthens the connection between student and faculty and creates an overall positive experience. To promote this interaction, the following programs are conducted in the campus.

Mentoring

Our institution adopted Mentor-Mentee process to support the students in curricular,co- curricular, extra-curricular and personality development. The Mentor-Mentee ratio is 1:20.

Projects

Project title and guide allotment for the mini-project is in third year and for the major-project in final year. Students can choose a problem-statement of their choice and work towards solving real-life problems, thus giving them hands-on experience.

Enterprise Resource Planning (ERP)

It is a platform to monitor attendance, update student performance, and mentor-mentee counseling information which assists to communicate students performance to parents through SMS, and e-mail.

Students assessment and development

Continuous assessment in a semester is carried out through presentations, seminars, assignments and project reviews which help the students to perform better.

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

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

Response: 6

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

2017-18	2016-17	2015-16	2014-15	2013-14
2	1	1	1	1

File Description	Document
Details of the certificate/Diploma programs	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: 10.87

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

2017-18	2016-17	2015-16	2014-15	2013-14
8	9	3	3	3

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

1.2 Academic Flexibility

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

Response: 18.14

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

Response: 433

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

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

Response: 100

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

Response: 2

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

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

Response: 61.55

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

2017-18	2016-17	2015-16	2014-15	2013-14
1907	1854	1721	1509	1245

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 Institution believes that integrating cross cutting issues with the curriculum would create positive effect on the student in terms of their education and societal commitment. Accordingly courses in Gender sensitization, Environment and Sustainability, Human values and Professional Ethics are offered by the University.

Gender sensitization

This course introduces to develop students sensibility about issues of gender . It provides a critical perspective on the socialization of men and women. It educates students about some key biological aspects of genders. This course exposes the students to debate on the politics and economics of work and also help

students reflect critically on gender violence. Students will be sensitized to basic dimensions of the biological, sociological, psychological and legal aspects of gender. This will be achieved through discussion of materials derived from research, facts, everyday life, literature and film. Students will attain a finer grasp of how gender discrimination works in our society and how to counter it. Men and women professionals will be better equipped to work and live together as equal persons.All students develop a sense of appreciation for women in all walks of life.As per the Government of Telangana, the institute follows reservation policy for girl students.

Environmental science and technology

This course is introduced to understand the importance of ecological balance for sustainable development and the impacts of developmental activities and mitigation measures. It also helps in understanding the environmental policies and regulations. Based on this course, the Engineering graduates will understand/evaluate/develop technologies by ecological principles and environmental regulations which in turn help in sustainable development.Institute organizes various activities like tree plantation, public awareness during festival season with the help of students. E.g. Importance of blood donation and blood donation camps, importance of hygiene and individual responsibilities regarding the same, Immersion of Ganesh idol etc.

Disaster management

This course gives the capacity to integrate knowledge and to analyze, evaluate and manage the different public health aspects of disaster events at local and global levels, even when limited information is available. It also gives the capacity to describe, analyze, and evaluate the environmental, social, cultural, economic, legal, and organizational aspects influencing vulnerabilities and capacities to face disasters. It also helps in the design and performs research on the different aspects of the emergencies and disaster events while demonstrating insight into the potential and limitations of science, its role in society and people responsibility for how it is used.

Human values and Professional Ethics

This course help the students to appreciate the essential complements between 'Values' and 'Skills' to ensure sustained happiness and prosperity which are the core aspirations of all human beings. To facilitate the development of a holistic perspective among students towards life, profession and happiness based on a correct understanding of the human reality and the rest of existence.

File Description	Document
Any Additional Information	[View Document](#)
Link for Additional Information	[View Document](#)

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

Response: 26

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

Response: 26

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

1.3.3 Percentage of students undertaking field projects / internships

Response: 19.26

1.3.3.1 Number of students undertaking field projects or internships

Response: 524

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	[View Document](#)
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management	[View Document](#)
URL for stakeholder feedback report	[View Document](#)

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

B. Feedback collected, analysed and action has been taken

C. Feedback collected and analysed

D. Feedback collected

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

File Description	Document
Any additional information	[View Document](#)
URL for feedback report	[View Document](#)

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

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

Response: 0.16

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

2017-18	2016-17	2015-16	2014-15	2013-14
06	06	07	03	00

File Description	Document
List of students (other states and countries)	[View Document](#)
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)

2.1.2 Average Enrollment percentage (Average of last five years)

Response: 70.25

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

2017-18	2016-17	2015-16	2014-15	2013-14
743	811	932	899	783

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

2017-18	2016-17	2015-16	2014-15	2013-14
1020	1116	1176	1404	1254

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

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

Response: 62.8

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

2017-18	2016-17	2015-16	2014-15	2013-14
448	505	433	411	380

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

2.2 Catering to Student Diversity

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

Response:

Teegala Krishna ReddyEngineering College has a streamlined mechanism of continuous monitoring and evaluation of newly admitted students. The institution considers three grading factors to identify the academic standards of students: Intermediate score, EAMCET / ICET marks.

Based on the analysis, the students who score below 60% are identified as slow learners and above 60%areidentified as advanced learners. This system also contributes to the identification of slow and advanced learners. After admission, an induction program is organized for first-year students. They interact with their seniors to get insight about institution.

Strategies adapted for Facilitating Quick Learners:

Student Academic Enhancement: Teegala Krishna ReddyEngineering College takes into consideration students academic enhancement where faculty acts as a mentor to improve their overall performance by continuous monitoring and guidance. All staff members maintain good relation with students and deal with their problems in a gentle manner.

A teacher is assigned to each batch (20students):

- To provide additional details on the important topics.
- To improve their subject knowledge.
- Slow learners are encouraged to raise doubts on subjects.

- They are advised to visit library to refer textbooks, e-books.

Assessment of learning levels of the students:

Every year the college organizes an Induction Program for the First Year students.

It opens with the Principal's Address and includes –Introductory sessions conducted by dean academics, HODs& faculty members (who are in-charges of various extra-curricular and professional activities taking place within college campus), Talks by the Training and Placement officer.

Slow learners: These students are mentored by interactive sessions other than the regular classroom / laboratory contact hours.

Strategies for slow learners:

Remedial classes are conducted for these students after class hours to clarify doubts, explain the critical topics for an improved performance. Poor performance due to frequent absenteeism is dealt by sending SMS and letters to the parents of such students. Counseling and mentoring sessions conducted in a friendly way help the students to overcome their psychological problems and achieve their goals successfully.

Advanced Learners:

The advanced learners are identified by the concerned faculty based on Student profile maintained their performance in internal assessment tests, end-semester examination. Active participation, involvement, performance in the classroom/academic clubs/seminars, etc.

Remedial Courses:

College also offers remedial courses in which extra time is given to students who learn slowly in class by scheduling separate sessions after college hours. Additional assignments are given to them to strengthen their concepts and understanding in a course.

Faculty mentors and programmed leaders regularly review academic progress and counsel students to improve performance and ensure academic growth. Special measures are taken to support advanced as well as slow learners, such as:

i. Slow Learners

- Adequate Support is provided to slow learners to overcome academic difficulties by Organizing Extra Classes during the semester.
- Organizing Guided Self Study Courses classes (library, internet).
- Providing extra reading material to improve basic understanding of subject.
- Engaging in social activities/class activities/institution activities to develop skills.

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

2.2.2 Student - Full time teacher ratio

Response: 10.59

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

2.2.3 Percentage of differently abled students (Divyangjan) on rolls

Response: 0.04

2.2.3.1 Number of differently abled students on rolls

Response: 01

File Description	Document
List of students(differently abled)	[View Document](#)
Institutional data in prescribed format	[View Document](#)

2.3 Teaching- Learning Process

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

Response:

1. The participatory learning activities adopted by the faculty

(a) Group discussions

(b) Design Projects

(c) Presentations/case studies

(d) Term Papers / Seminar

(e) Home Assignments

(f) Minor Project/ Dissertation

(g) Self-Work (SW)

(h) Industry internship

(i) Field work

(j) Major Project

2. There is an annual Inter-Institutional sports meet. Students' participate in sports Competitions to exhibit talent in variety of games to foster spirit of togetherness and leadership.

3. Students are encouraged to participate in inter-university competitions, technical competitions, sports competitions, corporate competitions.

4. Human Values Students organize activities like blood donation camp, visit to old age homes, orphanages etc. to inculcate values, ethics and social responsibility.

5. Guest lecture, seminars, conferences, industry visits and many such activities are organized to enhance students' learning experience by providing industry interaction.

Following measures are taken to make learning student-centric:

Experimental learning:

The college focuses on imparting that kind of knowledge which enhances critical thinking and gives scope for creative imagination among students so that when they grow up they become responsible citizen of the country. The institute has state of the art laboratories for students to get their theoretical concepts clear through practical / experimental knowledge. Scientific thinking is nurtured among the students by creating an atmosphere where they are made to see and analyze everything in an objective and scientific way.

Participative learning:

In participative learning, students are encouraged to participate in Project Competitions, design contests and various technical events. Arranging field/industrial visits. Conducting sessions like group discussion, seminar, and quiz, poster presentation to make the learning more interactive and collaborative .Inter-collegiate events, Laboratory Experiments. Paper writing, NSS camps are arranged to motivate students, foster creative thinking. In addition, learner–centered teaching methods such as group work, project work, field visit, case study; debates etc. supplement classroom teaching which enhances critical thinking among students.

Process for various Teaching Learning Processes:

Teegala Krishna ReddyEngineering College emphasizes on student-centric approach which includes proven teaching methods and learning experiences. The faculty educates students with problem solving skills through activity based methods to give hands on experience. These methodologies allow students to experiment in laboratory and learn through trial and error basis and make them accountable for the results. The institution includes internships, field trips and industrial visits to acquire skills and knowledge.

Co-curricular Activities: The faculty brings about a change in giving assignments. The faculty asks students to speak about a topic in all their respective subjects as an assignment work. The faculty of Management Studies extend their cooperation in gaining practical knowledge by providing the real time case studies.

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

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

Response: 72.37

2.3.2.1 Number of teachers using ICT

Response: 186

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

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

Response: 11.43

2.3.3.1 Number of mentors

Response: 238

2.3.4 Innovation and creativity in teaching-learning

Response:

Innovation and creativity in teaching-learning:

The institute encourageteachers to use the modern teaching aids, technological equipment along with traditional lecture method. Trends have been set to use the multimedia devices, like Projector and Computers. Quiz, surprise tests, group discussion, class-room seminars, Industrial Visits, audio-visual aids are used to make teaching effective. These innovative techniques help us to make the learning experience of students effective, enjoyable, attentive, interactive and communicative.

The following activities are introduced in the institute to enhance teaching learning process:

Students are encouraged to get involved in industry sponsored projects as a part of their curriculum. Their Project work in different National/International Seminar/Conference/Workshop.

Innovative teaching approaches/methods adopted by the faculty:

The teachers try to make lectures more student-centric by cooperative learning by means of group discussion, role play and technical debate. Institute has developed e- class rooms. In presentation activity, students are asked to prepare presentation on any of the topic related course. This presentation has to be delivered in front of the students.

Impact of innovative practices:

- Learning process becomes increasingly personalized.
- It enables students to develop and realize their personal potential.
- The students are benefitted in placements and corporate culture.

.

File Description	Document
Any additional information	View Document

2.4 Teacher Profile and Quality

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

Response: 100

File Description	Document
Year wise full time teachers and sanctioned posts for 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: 4.17

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

2017-18	2016-17	2015-16	2014-15	2013-14
19	16	09	04	04

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: 20.43

2.4.3.1 Total experience of full-time teachers

Response: 5250

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: 8.78

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

2017-18	2016-17	2015-16	2014-15	2013-14
07	07	07	0	0

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

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

Response: 16.2

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

2017-18	2016-17	2015-16	2014-15	2013-14
59	58	59	35	1

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

2.5 Evaluation Process and Reforms

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

Response:

Assessment and Evaluation process:

This is a two tier system.

1. University defined

2. Institute defined

The college follows guidelines of Jawaharlal Nehru Technological University, Hyderabad for internal evaluation and assessment procedure. For undergraduate programs, the institute conducts two mid-exams of 25 marks each, comprising ten marks for descriptive, ten marks for objective and five marks for assignment. The average marks of both examinations are considered as final mid-marks. End semester examination is for 75marks which is conducted by the university. For the post-graduate program, the institute conducts two mid-exams of 25 marks each as per university norms, and the end semester examination is for 75 marks which is conducted by the university.

After completion of the internal examination, the faculty evaluates the answer scripts and distribute to the students for doubt clarifications or re-correction. The faculty submits the re-corrected scripts to the examination branch and marks are displayed on the notice board. Then the principal conducts a meeting with HODs to discuss the students' performance and necessary action plan for further improvement. For laboratory evaluation for under graduate (R-15& R-16), the institute conducts a lab internal for 25 marks. It is divided into ten marks for the written exam, and 15 marks are allotted for day-to-day performance in the laboratory. External lab-examination is conducted for 50 marks as per R-15 regulation and 75 marks as per R-16 regulation. CCTV cameras are deployed at all class rooms, exam cell and laboratories to monitor the online examinations. Each department has Examination Coordinator for smooth conduction of Internal Tests. The results of each test are strictly declared within a week of the conclusion of the test. The students can see their respective answer sheets and discuss their queries with concerned staff. The term work evaluation is done by respective course teachers in the mid and at the end of semester. The students re -notified about their performance evaluation of students is displayed on notice board through Continuous Assessment Report (CAR).

Continuous Assessment:

The institute believes firmly in continuous evaluation of the students for their sustained performance. Hence a structured evaluation process has been designed and implemented. The tests are prepared and

conducted as per the University examination pattern. To prepare students for practical the institute conducts unit tests, as per the requirement of the concerned syllabi of different classes.

Reforms in the Evaluation process:

Faculty conducts unit-test/surprise-test, assignments, tutorial classes, remedial/extended classes, to evaluate students' performance to get better results.

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

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

Response:

Internal assessment is carried out to ensure the complete understanding of each topic by the students and so they are conducted regularly to keep up with the syllabus prescribed by the university. The evaluation of these examinations is done by faculty members. While preparing the question papers, the teachers in charge gives careful consideration of the syllabus prescribed and the portion covered in classroom. The level of question papers is maintained which is neither too difficult for the students nor too easy. Different patterns and types of questions are used to prepare the students for any examination. The question papers are approved by respective heads of the department. They are then sent to the exam branch through mail by the respective exam branch co-coordinator of the respective department.

Once the examinations are conducted, the answer scripts of students are evaluated by faculty members. The teachers maintain impartiality and fairness. They ensure that they evaluate each student equally and maintain a code of sincerity. Once the papers have been evaluated, they are distributed back to the students by the teachers. The faculty is to discuss the entire length of the question paper and their subsequent correct answers in the following classes. This help the students understand their mistakes and note down the improvements. Thus the students are allowed to assess their own work and any modifications to the marks are reflected. Suggestions are given to the students who need to improve and the ones who performed well are appreciated. The feedback on their performance helps the student to perform better next time. Finalized marks are verified by the teachers and students before displaying on the notice boards of respective departments.

Procedure for internal assessment

The above continuous assessment shall be carried out as per the procedure given below:

Theory Courses

Two tests are conducted each carries 25 marks, in the semester as per the university norms. Ten marks for descriptive, ten marks for objective and five marks for assignments are allotted. The average marks of the

two tests are taken as final marks.

Practical Courses

Every experiment is executed and evaluated based on the experiments prescribed by the university. There is an internal test in the semester. The criterion for internal assessment marks (25 marks) is based on the university guidelines.

Non-academic

Along with academics, Teegala Krishna Reddy Engineering College motivate students for their participation in co-curricular and extra-curricular activities.

Project Work

There are two kinds of projects namely mini-project and major-project. These projects are reviewed by an internal guide, project coordinator and head of the department. The marks for the industry oriented mini-project and major project are awarded by the head of the department,internal guide, and the external examiner.

The major project is for 200 marks, and the mini project is for 50 marks. Along with this, comprehensive viva-voce is conducted for 100 marks and technical seminar/presentation is for 50 marks. Project marks areawarded based on concept creation, project report, attendance, problem-solving ability.

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

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

Response:

The institute has the redressal cell for grievances regarding examination grades. The cell consists of Principal, Head of Departments (HODs), and Examination In-charge. Students can approach the cell for any issues in the evaluation of their answer scripts. The cell conducts a meeting and to hear students concern and takes an appropriate decision which is binding on all.The college conducts two types of examinations, internal and external. External examinations areconducted by the University and the internal examinations are conducted by the college. As part of internal examinations, internal assignment and mid examinations are conducted

The redressal of grievances regarding evaluation in both internal assessment and university examination is through the following process.

At institute level:

The teacher distributes evaluated answer scripts to students, and any clarifications or grievances are addressed by the teacher. The internal marks are then displayed on notice board. If any discrepancy is noticed, the concerned teacher will resolve the discrepancy, and the necessary corrections will be made. If a student is not satisfied with the marks awarded even after resolved by the teacher, they may represent the same to the Principal through the HOD concerned. All such representations are taken positively and are reassessed by another teacher if necessary.

Students are counseled by the faculty counselor, and remedial classes are conducted for students who have failed in the examinations. Students who are absent for internal exams due to genuine reason can apply for the computer-based test(CBT) conducted by the university.

At university level:

Students can express grievances by applying for the following evaluation procedure:

Re-counting:

If the students are not satisfied with the marks awarded, they can apply for re-counting within a week from the declaration of results through the examination branch at the institution. The results of re-counting will be announced as per the university norms.

Re-evaluation:

Students can apply for re-evaluation of their answer scripts within a week from the declaration of results if they are not satisfied with their results. The results of re-evaluation will be announced as per the university norms.

Challenge Evaluation: A student can apply for challenge evaluation within a week after the announcement of the results. This evaluation process is carried out in the presence of student by two subject experts; one represents from the institution and other from the university. If the student wins the challenge university favors students with proper award of marks and the challenging evaluation fee is refunded to the students.

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

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

Response:

The institution ensures effective time management and timeliness. It receives the university given time line and adheres to it. In the beginning of the academic year, academic calendar is published by the University for all programmes.This allows the teachers and the students to space out their teaching and learning and regular assessment of the same.The college conducts assessment to the students in three different components - theory, objective and assignments. The theory component is marked out of ten. The objective component is marked out of 10.The assignment is marked out of five. The college carries out effective planning to stick to academic calendar. The academic calendar breaks down the academic year into two semesters. It provides the information of the courses for the semester, dates of commencement of class work, syllabus completion, examinations, list of holidays, and the total number of working days. The faculty members of the concerned department gather the lists of courses for the coming semester, and the HOD finalizes the allocation of course based on the faculty's choice and area of specialization. Faculty members then prepare the lesson plan before the commencement of semester, indicating the topics to be covered, teaching methodologies being applied, and assignments given to students and the number of lectures.

A course file for each course is prepared by the faculty, which includes department vision, mission, course objectives, outcomes, schedule, references, study material, and questions from previous examinations papers. Students will be provided with the course file in the first week of the semester to provide them awareness about the subject and plan for the semester. The evaluation process for each course is duly reviewed by a senior faculty in the department, approved by the HOD, and then made available to the students. Timetable in-charge of each department prepares theTimetable as per the guidelines given by the university. The time-table is then displayed on the respective department notice boards.

The performance of the student is assessed on a continuous basis by conducting two mid-exams per semester based on the university norms. The average marks of both mid-terms are taken into consideration. The evaluated answer scripts are shown to the students to clarify their doubts about the evaluation process. The academic schedule prescribed is strictly adhered by all departments. The college maintains a high standard through CIE and ensures end semester and practical examinations are conducted jointly by the concerned faculty and an external examiner.

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

All departments in the institute have defined their POs, PSOs, PEOs & COs

along with vision , mission following a due mechanism. This list is displayed in each class room and

laboratories of the respective program. also, the list isavailable in the department profile on the college website.

PROGRAM OUTCOMES (Common to all programs)

1. **Engineering Knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.
2. **Problem Analysis:** Identify, formulate, research literature and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.
3. **Design / Development of Solutions:** Design solutions for complex engineering problems and design system components or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal and environmental considerations.
4. **Conduct investigations of complex problems:** using research-based knowledge and research methods including design of experiments, analysis and interpretation of data and synthesis of information to provide valid conclusions.
5. **Modern Tool Usage:** Create, select and apply appropriate techniques, resources and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
6. **The Engineer and Society:** Apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice.
7. **Environment and Sustainability:** Understand the impact of professional engineering solutions in societal and environmental contexts and demonstrate knowledge of and need for sustainable development.
8. **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice.
9. **Individual and Team Work**
10. **Communication**
11. **Project Management and Finance**
12. **Life-long Learning**

PROGRAM SPECIFIC OUTCOMES (EEE-sample copy)

PSO 1:Students will be able to demonstrate an ability to analyze, design and provide engineering solutions in the areas related to Electrical Drives, Electrical Machines, Power Electronics, Control Systems and Power Systems.

PSO 2: Students of EEE are able to develop and design the electrical and electronic circuits using simulation software's such as P-SPICE, MATLAB and will be able to utilize the techniques and participate to succeed in competitive examinations like GATE, TOFEL, GRE and GMAT etc.

COURSE OUTCOMES (EEE-sample copy of one class)

Course Name: PSOC Course code: C414 Year of Study : 2017-18

Course code	Course out come

C414.CO1	Analyze the Economic Operation of power systems with and without considering the line losses.
C414.CO2	Schedule the Hydrothermal system operation under economic considerations.
C414.CO3	Model various power system components such as Turbine, Generator, Excitation System and Load using the knowledge Control systems and interconnect them.
C414.CO4	Understand the Load Frequency Problem for single area and Two Area cases.
C414.CO5	Develop and validate Load Frequency controllers.
C414.CO6	Understand the concepts of Reactive power Compensation and related Topics.

Each faculty member prepares the academic plan for their respective courses at the very beginning of the semester. POs, PSOs and COs are the part of this academic plan.

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

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

Response:

The process of attainment of COs, POs, and PSOs starts from writing appropriate COs for each course in the undergraduate and postgraduate programs. The course outcomes are written by the respective faculty member using action verbs of learning levels as suggested by revised Bloom's Taxonomy.

A correlation is established between COs and POs, PSOs on the scale of 0 to 3.

0 indicates no correlation

1 indicates a low correlation

2 indicates a medium correlation

3 indicates high correlation

A 6x12 mapping matrix of COs-POs and 6x4 mapping matrix of COs-PSOs is prepared in this regard forall courses in the program.

The following assessment methods are used for the assessment of Program Outcomes and Program Specific Outcomes:

1. Direct Assessment (80%)

- Assignment
- Internal Examination
- Semester end examination

This process includes following three components

1. **Assignment (5%):** The students are assigned to solve several problems related to respective courses; one assignment per unit in the course. The assessment will be done based on their performance.

2. **Internal Examination (20%):** This type of performance assessment is carried out during the examination sessions which will be held twice in a semester. Each and every internal examination is focused in achieving the course outcomes.

3. **Semester End Examination (75%):** Semester End examination comprising entire syllabus of the course is a measure for assessing whether the entire COs are attained or not.

2. Indirect Assessment (20%)

At the end of every academic year annual report is developed where the statistics of students who have participated in professional bodies/ student chapters/ workshops/ seminars/ conferences/ paper presentations/ internships/ industry visit etc. is prepared. This statement is considered to indirectly assess the POs

Survey reports:

Indirect assessment strategies may be easily implemented by embedding them in the end-of-course evaluation form, Alumni Survey, Employer Survey and Exit Student Survey.

Graduate/Exit Survey:

During the program

- The passing out batch of student will give feed back on various facilities provided to them and Teaching Learning parameters adopted during their stay in the college.
- The questions involved in the feed back process are mapped with PO and PSOs with indication of attainment level.

Alumni Survey:

After one year of graduation

Employer Survey:

Employer from industry survey

Finally in Evaluating the Course Outcome we take a weighted average of the 80 % of the Direct Assessment and 20 % of the Indirect Assessment.

The attainment levels in the range of 1 to 3 are decided by following ways:

1. Below 60% = Attainment level 1

2. Between 60% to 69% = Attainment level 2

3. Above 70% = Attainment level 3

Attainment Levels:

Attainment Level	1	2	3
Criteria	Less than 60 %	60 % to 69 %	> = 70 %

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

2.6.3 Average pass percentage of Students

Response: 91.24

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

Response: 750

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

Response: 822

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:

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: 6.7

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)

2017-18	2016-17	2015-16	2014-15	2013-14
5.2	0	0	0	1.5

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

3.1.2 Percentage of teachers recognised as research guides at present

Response: 1.56

3.1.2.1 Number of teachers recognised as research guides

Response: 4

File Description	Document
Any additional information	View Document

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

Response: 0

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

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

Response: 1196

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:

Institutes should have separate R&D cell. The R&D cell comprises of faculty members from various departments of the institute. This committee oversees the smooth and efficient coordination of research and development activities in the institute, thus fostering overall growth. A senior faculty heads this cell in the capacity of Dean (R&D), with the principal presiding over.

The Roles and Responsibilities of R&D committee are

- To prepare annual research activity plan for all the departments.
- To establish liaison with near and far industry and identify the technological challenges being faced by them.
- Take up appropriate problems of the industry for finding solutions through R&D projects assigned to faculty and students.
- Explore technological developmental opportunities in common application areas such as transport, traffic regulation, security, healthcare etc. and assign them to faculty and students
- To initiate and promote MoU with industries and R&D organizations for consultancy, collaborative research, sponsored projects, industry and Institute interactions etc.
- To arrange brainstorming sessions through talks by eminent personalities from industry, R& D organizations and institutions of repute for the better understanding of research methodology and practices currently followed.
- To support faculty for delivering talks at different events and conducting workshops, training programs, seminars, conferences, symposia and faculty development programs.
- To keep everyone informed about announcements by various funding agencies like DST, DAE, DRDO, ISRO, CSIR, AICTE, UGC and University etc.
- To motivate students for presenting papers in National and International conferences and projects in competitions and exhibitions like AVISHKAR at university level.
- Interdepartmental / collaborative work to be encouraged.
- To monitor progress of the research and development activity.

Recommendations of Committee for implementation and their Impact are

- Publications in Research Journals.
- Research Proposals for different funding agencies.
- Participation and organizing conferences, workshops and STTP/FDP.
- Participation in collaborative research work, e.g. VAP /Industrial Training.
- Encouragement for Higher education.
- Internship.
- Signing MOU with industries and research organization.

Initiatives taken to inculcate the spirit of research amongst faculty and students are as Follows

Following research policy was framed.

- Incentives are provided for publications.
- Facilities such as flexibility in timings, use of laboratories etc are extended to faculty as per requirement.
- Implementing a policy for distribution of testing and consultancy charges to motivate faculty for providing consultancy.
- Faculty with an aptitude for research is identified.
- An initiative is taken by Library to help researchers in understanding recent updates of their publications in terms of citation index, h-index, etc.
- In house Project development.

Entrepreneurship Development Cell

This cell is headed by Dr.Kanda Swamy It helps student community to conduct research work and survey for identifying entrepreneurial opportunities

Functions

- To invite eminent personalities from small and large industries and organize seminars and workshops with them.
- To motivate students to become entrepreneurs

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

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

Response: 17

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

2017-18	2016-17	2015-16	2014-15	2013-14
6	2	3	2	4

File Description	Document
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	View Document
Any additional information	View Document

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

Response: Yes

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

Response: 1

3.3.3.1 How many Ph.Ds awarded within last five years

Response: 4

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

Response: 4

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

Response: 0.76

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

2017-18	2016-17	2015-16	2014-15	2013-14
39	75	24	22	21

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

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

Response: 0.37

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

2017-18	2016-17	2015-16	2014-15	2013-14
2	74	2	5	5

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:

- Teegala Krishna Reddy Engineering College has NSS unit with a total strength of 120 members, affiliated to Jawaharlal Nehru technological University (JNTU), Hyderabad. The unit was established in 2009 with an objective to cultivate the attitude of social service in minds of students and to make them responsible citizens.
- Happy Care Foundation is an all student NGO with an aim to help underprivileged. It is to provide accommodation, education, medical facilities, training and assistance with personal development to those who ever in need. In recent years, the organization has grown and now extends its activities to

shelter not only those with physical disability but also children from economically backward.

- Engineers without Boarders of Civil Engineering Department of TKREC are a green initiative by the students of the college to create awareness about the importance of clean and healthy environment. "Clean and Green" is their motto. The club members conduct meetings at various places to explain the advantages of keep surroundings clean.
- Our NSS volunteers in association with Heartfulness Meditation Programme organized yoga programs which help to manage stress through breathing, awareness, meditation and healthy movement. It also helps to build concentration, increase their confidence and positive self-image.
- Besides, the college has a mineral water plant to supply purified water. The college provides dispensary services through experienced and well qualified doctors. Further, the college has poultry, diary, gobar gas, nutritious milk, poly house, and power generator, transport facility, food court, KVB ATM and South Indian Bank.

In TKREC committees like NSS, NCC, Happy Care Foundation, Engineers without Borders meet once in each semester and track students' involvement in various activities. They see to it that all the activities are functioning properly and lead to promotion of students' citizenship roles.

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

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

Response: 10

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

2017-18	2016-17	2015-16	2014-15	2013-14
2	2	2	3	1

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

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

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

Response: 52

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

2017-18	2016-17	2015-16	2014-15	2013-14
16	9	11	8	8

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

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

Response: 60.48

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

2017-18	2016-17	2015-16	2014-15	2013-14
1635	1802	1764	1543	1324

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

3.5 Collaboration

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

Response: 24

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

2017-18	2016-17	2015-16	2014-15	2013-14
10	2	1	10	1

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

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

Response: 10

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)

2017-18	2016-17	2015-16	2014-15	2013-14
5	2	1	1	1

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

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

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

Response:

Teegala Krishna Reddy Engineering College has well equipped and required infrastructure which is spread over a vast area of 10 acres of land, with a built in area of 41,082 Sq.mts serene, lush green land which provides an eco-friendly environment, laboratories are well established to conduct experiments and simulations.

The facilities available are mentioned below

Classrooms:

- Teegala Krishna Reddy Engineering College has well-equipped, spacious class rooms with good ventilation to conduct classes.
- Classrooms are maintained as per norms for proper visibility of blackboard and audibility.
- Classrooms are furnished with fans, lights, WI-FI connectivity and also some class rooms with LCD projectors.

Tutorial class rooms:

- The Institution has tutorial class rooms to conduct study hours, remedial classes to address the doubts and queries of students.
- Tutorial classrooms are equipped with blackboards, benches, fans and tube lights.
- Tutorial classes help the students in understanding the concepts better way with the aid of self learning facilities.

Laboratories:

- The Institution has domain centric laboratories as per the regulations of AICTE and JNTUH.
- The Institution has laboratories, with well-equipped instruments, devices, and equipment to conduct experiments. Additional equipment is available to provide students opportunities to work on their projects.

Seminar Halls:

- The college has seminar halls to conduct seminars, conferences, guest lectures and workshops by students and faculty.
- Every seminar hall has different seating capacity and these are equipped with LCD Projectors,
- Seminar halls have whiteboards, stage and public addressing system with internet facility.

Computing equipment:

The Institution has a total of 1,136 computers. The configuration include DELL Intel core 2 duos, i3- 4th generation, 4GB DDR-III, RAM 2 GB DDR-II RAM, 80GB,160 GB HDD, and DELL LCD Monitors.

Library:

- The Institution has a central library, which is well developed and furnished with 240 seating capacity. Students are able to access to National Digital Library (NDL), SWAYAM, NLIST and NPTEL lecture videos through the digital library.

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

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

Response:

The Institute focuses on the overall personality development of the students and encourages them to participate in different sports and cultural activities.

SPORTS AND GAMES:

The Institution provides facilities for sports and games. The Institute comprises 2.27 acres of sprawling green cricket ground with flood lights. Students are trained in sports under the guidance of qualified and specialized coaches. The Institute has a spacious and well equipped indoor-sports room, where students can play games like table tennis, chess, and carom board. The Institution has two volley ball courts extended over 3600 sq.fts are provided separately for boys and girls and are well maintained with permanent nets. A concreted & well-equipped Basket Ball court with 4700 sq.ft is available on the campus. Regular training is provided to all the students with special focus on talented students in different sports. These students are selected through selection trials. They are trained and encouraged to participate in various levels of competition including intra-college events, inter-university events, national events and international events. Intra-college events are also organized by the college to encourage students to participate. All the Participants are awarded with participation certificates. Winner and runners-up teams are duly rewarded with shields and certificates.

ACHIEVEMENTS IN SPORTS:

- 15 of our students represented the university in various sports events.
- Students secured First place in Inter-Engineering Colleges Cricket Tournament conducted at Bandari Srinivas 9th cricket Tournament during Academic year 2016-17.
- Winners at JNTUH Central Zone Men Cricket Tournament during 2017-18.Winners in RED BULL CRICKET TOURNAMENT conducted by Red Bull at TKRES Grounds. TKRES won the trophy.
- Winners in Cricket at Inter college zonal tournaments during 2016-17 at JNTUH.

- Winners in Throw ball at NAIPUNYA'16 in Bharath Institute of Engineering & Technology.

The Institute has physical fitness center (gymnasium) extended over an area of 1800 sq.ft with equipment like dumbbells and heavy weight lifting with 23 work stations available at campus during 6am to 8am and 5pm to 8pm every-day to encourage the workouts for better health consciousness.The Institution conducts yoga and meditation classes for the teaching, non- teaching staff and students.

CULTURAL ACTIVITIES:

The college believes in all-round development of students. It constantly encourages them to take part in extra and co-curricular activities to spark their interests and cultivate leadership qualities as well as team spirit. Every year the college conducts cultural programs like dance (solo and group), ramp walk, singing etc. to boost up their skills. Cultural activities are conducted in the auditorium, and in the lawns of the institution.

Students are encouraged to organize various cultural activities in the college. Festivals like Independence Day, Republic Day, Women's Day, College fest, Ganesh Festival, DurgaPooja, Teacher's Day, Engineer's Day, Dussehra, Bathukamma etc., are celebrated by students and staff actively.

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

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

Response: 47.76

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 32

File Description	Document
Number of classrooms and seminar halls with ICT enabled facilities	[View Document](#)
any additional information	[View Document](#)
Link for additional information which is optional	[View Document](#)

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

Response: 5.46

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

2017-18	2016-17	2015-16	2014-15	2013-14
17.22	26.65	29.51	11.41	14.50

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 TKREC Library & Information Centre has established in the year 2005. The Institute has central library and six departmental libraries. The Library has a vast collection of 56,872 Volumes and 5,847 titles, in addition 130 National Journals, 174 full text IEEE-online Journals, N-LIST INFLIBNET database, NDL, SWAYAM, NPTEL, SWAYAM PRABHA and 26 General Technical Magazines and 10 News papers are available. The Library has total Plinth Area 2010 (Sq yards) and 240 seating capacity.

Name of the ILMS software - NEWGEN LIB

Nature of automation (fully or partially) –Partially

Version – 2.5

Year of Automation-2010

The library assists faculty and students for various other activities such as:

- Reference Service
- Reprographic Service (Xerox and Printing)
- Quick Mail Service
- Book Bank Service
- Digital Library Services
- Current Contents Service/journals.
- Current Awareness Services/newspaper
- NPTEL – Learning Resources Service Centre
- OPAC (Online Public Access to Cataloguing for Book Search) Service
- Previous Question Papers Access

- E-Book Services
- DELNET, NDL
- SWAYAM (online course)
- Reports of best projects carried out by students
- Book Reservations
- Competitive Exams cell
- Self learning Resources
- Inter Library Loan
- Selective Dissemination information (SDI)

To make the functioning of library easy and effective, college has automated the operations using NEWGEN LIB software. The central library was automated by the NEWGEN LIB 2.1.1version software in 2010.The software consists of various modules on acquisition, cataloging, circulation, serials control, and Online Public Access to Cataloguing (OPAC), Web OPAC. The NEWGEN LIB software was upgraded to 2.5 version software in 2016. This new version enables the librarian to issue, renewal of books; maintain the database of books, journals and periodicals to maintain the data of students and faculty.

The staff helps the students to find the necessary titles. The books are indexed, categorized according to programs and subjects and arranged alphabetically. The software contains details about the author's name, title and publishing house.

The library follows the book bank scheme. With this, the students are able to borrow books for the entire length of a semester so as to help them study with reasonable cost. All books are bar coded and a reference ID is given.

Content Management System for e-Learning:

The Library & Information Centre has a content Management system to facilitate e-learning CD/DVDs, NPTEL lessons, e-Books and other self-learning resources can be loaded on the dedicated server in the Digital library accessed through LAN.

Participation in Resource sharing Networks / Consortia:

Indian National Digital Library in Engineering Science and Technology,

Consortium – **INDEST**

Developing library Network – **DELNET**

National Program on Technical Enhanced Learning – **NPTEL**

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

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

Response:

The TKREC library is constantly stocked with rare and special literature for the benefit of the students. The faculty go to conferences, attend workshops and fairs where they pick up material that they believe are useful. This allows the college to create a collection of rare books, manuscripts and special reports.

S.No	Acc.No.	Title	Author	Publisher
1.	47670	Objective Arithmetic.	GKP	GKP
2.	44468	Programming in C.	Dey, Ghosh	Oxford
3.	44092	A First Course in Differential Equations with Modeling Applications.	G. Zill	Cengage
4.	44428	ELCs Lab Manual.	Board of Editors	Orient Black
5.	47664	50 Practice Sets (Quantitative Appititude).	Arihant	Arihant
6.	47703	General Studies.	Rohit Vadhwover	New Vishal
7.	14408	Toefl iBT (2006-2007).	J. Shor pc	Golgotia
8.	47665	Verbal Reasoning.	K. Kundan	BSC
9.	12926	GATE (ECE).	R.K.Kanodia	Nodia&Con
10.	42922	Complete Competition Reasoning.	Tarun Goyal	KG
11.	12833	GATE (ECE).	Karna	CBS
12.	47709	Telangana State Genco/Transco and Discoms A.E. Electrical Engg.		Sharadha Pu
13.	44408	Effective Technical Communication.	M. Ashrat Rizvi	MGH
14.	47710	Telangana State Genco/Transco and Discoms A.E. Electrical Engg (Telecom).		
15.	42938	GATE (Composter Science & IT).	Trishna's	Pearson
16.	47704	Sub-Inspector Examination.	A.B. Raajaa	R.K.

17.	42929	General Knowledge.	Dr.B.inay Karna	Lucent's
18.	44052	Workshop Manual.	k. Venugopal	Anuradha
19.	47694	GATE (Electronic Eng).		Made Easy
20.	47676	GATE (Electronic Engg).		GKP
21.	42931	A Hand book of Civil Engg, IES, GATE, PSUS &other Competitive Exams.		Made Easy
22.	44082	Text Book of Engineering Chemistry.	B. Ramadevi	Cengage
23.	sw-121	Data Base Management systems.	Raghuramakrishna	MGH
24.	47715	Communication skills for Campus Placements.	Uma Mahashwari	wiley
25.	47691	General Studies & Engineering Aptitude.		Made Easy
26.	47702	IELTS International English Language Testing system.	Dr. Lin Loughead	NewAge
27.	42936	GATE (Electrical Engineering)..	Thrishan's	Pearson
28.	47696	UGC-NET 2018 (Computer Science & Applications).		Made Easy
29.	47672	GATE-2018 (ECE).		GKP
30.	47699	General Studies (for Civil Services Preliminary Exam).	Arun Sharma	MGH
31.	42921	Complete Competition Mathematics.	Tarun Goyal	KGP
32.	47682	TSPSC Assistant, Executive Engineering (Electrical Engg).		GKP
33.	47687	Objective Electronics & Communication Engg.	G.K. Mithal	G.K.P
34.	45922	Campus Recruitment (Complete Reference).		Praxis
35.	47675	GATE-2018 (ECE).		GKP
36.	47714	QA Simplified for CAT.	Ashujain	Wiley
37.	47711	RBI Officers (Grade 'B' Phase1) Solved Papers & Practice Tests.		
38.	47708	Quantitative Aptitude.	R.S. Agarwal	S.Chand
39.	47706	Non-Verbal Reasoning.	R.S. Agarwal	S.Chand

| 40. | 47671 | GATE computer Science & IT. | | GKP | |
| 41. | 45923 | Campus Recruitment. | | Praxis | |

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

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: 12.81

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

2017-18	2016-17	2015-16	2014-15	2013-14
9.87	14.53	8.06	17.82	13.77

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

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

Response: Yes

File Description	Document
Any additional information	View Document

4.2.6 Percentage per day usage of library by teachers and students

Response: 20.25

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

Response: 603

File Description	Document
Any additional information	View Document

4.3 IT Infrastructure

4.3.1 Institution frequently updates its IT facilities including Wi-Fi

Response:

The Institute aims at providing the futuristic facilities to its students so that they can utilize these resources to reach greater heights. To enable this, the institution frequently updates its IT facilities to provide best facilities to students.

Some classrooms have been equipped with LCD projectors and most of them are supported by audio visual systems. The entire campus is monitored by CCTV facility. The CCTV installed at strategic places help monitor the campus activities.

The college is facilitated with 1136 computers that are accessible to the students as well as the teachers for academic and co- curricular purposes. Printers are arranged in the office, library, and exam branch. Campus is Wi-Fi enabled. The Computer-student ratio is

- UG-1:6
- PG-1:4

Wi-Fi is available at all labs and staff rooms. The borrowing of books in the library is digitized. Each book has its own unique barcode and every student's borrowing card. These two are input in the system while borrowing a book which allows for easy tracking of books in the library.

The institute has well disciplined examination branch. Marks attained by each student after every examination is updated in exam branch. This allows the students to review the marks being forwarded to the university and report any mistakes that might have been found.

Information about upcoming events is available on the website. This information includes the time and date along with details about the event. Following the completion of the event, pictures and minutes of the event are also uploaded for easy access. This allows the parents to be aware of the programs being conducted in college as well.

For easier communication, circulars including important notices to students and parents are also posted online. The academic calendar as well as the course information is also updated in the beginning of every academic year.

The institute has always been reviewing the current needs and accordingly the internet bandwidth is upgraded from time to time.

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

4.3.2 Student - Computer ratio

Response: 2.4

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](#)
Link to photographs	[View Document](#)

4.4 Maintenance of Campus Infrastructure

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

Response: 18.26

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)

2017-18	2016-17	2015-16	2014-15	2013-14
39.75	48.53	76.78	79.88	72.73

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:

LABORATORY

Teegala Krishna Reddy Engineering College insists on all departments to provide annual budget to maintain the existing facilities in laboratories. The annual budget is periodically approved by the board of governors, channeled through the Principal. Funds are allotted to ensure optimum utilization and the maintenance of lab equipment. The laboratories in the college are furnished according to the statutory rules. Necessary equipment and material is procured.

Maintenance

Before the commencement of the academic year, a meeting is conducted and a report on the requirement of new equipment, replacement of the old equipment and modernization of machines/software is prepared along with requirement of consumables, non-consumables as per the university guidelines to conduct experiments. Regular inspection of machines is organised.

LIBRARY

The Institute has constituted a library advisory committee to help in the development activities of the library. The committee follows up with the librarian and regularly monitors the library to ensure and maintain all text books, reference books, articles, competitive examination books, magazines, journals, e-magazines, e-books and e-journals.

Maintenance

- Regular swabbing of the library floors, regular cleaning of the racks, upkeeping the quality of the books with needed binding are in place.
- The chairs and tables are cleaned and mopping of the Library is done every day.
- Library maintenance is computerized and automated with regular/constant up-keeping.

SPORTS ROOM

Teegala Krishna Reddy Engineering College maintains sports facilities through regular monitoring of the equipment for indoor games and outdoor sports. The institution has a well-maintained infrastructure for sports like cricket, basketball, volleyball, throw ball and badminton.

A sports committee is created to handle the matters and concerns related to sports. This committee consists of students as well as concerned faculty.

Utilization

- Students are permitted to play sports and to practice for any competition.

- Students are permitted to utilize and take sports material with prior notice to the Physical director.

COMPUTERS

The computer systems and other sensitive equipment (servers, Projectors, Printers, Scanners, Xerox machines, Bio-metric machines) are provided with UPS systems to avoid any damage during power outages.

CLASSROOMS

The study environment of students plays a pivotal role in their performance. It becomes extremely necessary to provide them with a surrounding that is peaceful, comfortable and spacious.

Maintenance

- The benches and windows are cleaned and mopping of the class rooms is done every day.

- In case of any damage to the projector, internet, the class mentor brings it to the notice of the Administration. The necessary follow up is done by the Administration and steps are taken to fix whatever is broken.

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

Criterion 5 - Student Support and Progression

5.1 Student Support

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

Response: 67.92

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

2017-18	2016-17	2015-16	2014-15	2013-14
1883	2005	1965	1705	1499

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

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

Response: 19.99

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

2017-18	2016-17	2015-16	2014-15	2013-14
544	587	581	514	439

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

5.1.3 Number of capability enhancement and development schemes –

1. **For competitive examinations**
2. **Career counselling**
3. **Soft skill development**
4. **Remedial coaching**
5. **Language lab**
6. **Bridge courses**
7. **Yoga and meditation**
8. **Personal Counselling**

A. 7 or more of the above

B. Any 6 of the above

C. Any 5 of the above

D. Any 4 of the above

Response: A. 7 or more of the above

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

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

Response: 77.48

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

2017-18	2016-17	2015-16	2014-15	2013-14
2125	2326	2267	1943	1682

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

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

Response: 17

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

2017-18	2016-17	2015-16	2014-15	2013-14
523	441	358	420	486

File Description	Document
Details of the students benifitted by VET	[View Document]
Any additional information	[View Document]

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

Response: Yes

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

5.2 Student Progression

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

Response: 18.32

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

2017-18	2016-17	2015-16	2014-15	2013-14
153	146	131	115	63

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

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

Response: 21.6

5.2.2.1 Number of outgoing students progressing to higher education

Response: 184

File Description	Document
Upload supporting data for student/alumni	View Document
Details of student progression to higher education	View Document
Any additional information	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: 37.04

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

2017-18	2016-17	2015-16	2014-15	2013-14
35	15	14	5	9

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

2017-18	2016-17	2015-16	2014-15	2013-14
64	50	30	28	25

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
Any additional information	View Document

5.3 Student Participation and Activities

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

Response: 141

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

2017-18	2016-17	2015-16	2014-15	2013-14
33	27	34	28	19

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

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

Response:

The institute believes in giving opportunity to the students in supporting the authorities and the faculty in running the affairs of the institute. For this, the institute provides them with opportunities to participate in the various academic and administrative committees.

S.No.	Name of Commitee	Committee Convener(Faculty)	Student Name	Stu
1	Discipline and Grievance Committee	Dr.V.Surya Narayana	G.Venkatesh	Cor

				Gri the to t
2	Women Welfare Committee	Dr.Smrithi Rai	B.Vinesha Reddy	Be mea wor
3	Anti-Ragging Committee	N.Phani Kumar	N.Anurag Reddy	Info the on ens
4	Sports and Cultural activities committee	P.Madhavi	V.Ravali	Enc part cult
5	NSS committee	K.KumaraSwamy	J.Prudvi Raj	Enh acti
6	Library Advisory Committee	V.Vijay Kumar	T.Sowmya	Ens faci
7	Staff and Student Welfare Committee	M.Sarala	E.Sai Lakshmi	Ens wel
8	Training and Placement Committee	A.Roja Ramani	G.Naveen Reddy	Stud Cou driv exa and
9	Academic/Advisory Committee	Dr.JBV Subramanyam	Lakshmi	Cor univ Aca
10	R & D Committee	Dr.N.Sathish Kumar	G.Sindhu	Mal rese opti
11	Staff and Student Feedback Committee	Ch.Nishanthi	P.Prasanna	Mal imp plar
12	Alumni Committee	J.Sravan Kumar	Y.Uday Kumar	Sha exp ben
13	Hostel Committee	P.Johnson	Lakshmi	Imp and to t
14	EDC	M.Hari Krishna	A.Naresh	Enc to b thei
15	IQAC	Dr.JBV Subrahmanyam	K.Sai Tejasri,Sowmya	Und inst imp mea

16	IIIC	A.Arun Kumar Reddy	K.R.Tejaswini	Act inst dev coll
17.	Minority/OBC Cell	Shabbier Ahmad Sydu	Shaik Rabbani	To ava
18	SC/ST Committee	Dr.K.Merlin Kumari	Veeranna	To ava

The college has constituted various committees and student representatives are appointed in the committees to carry out various academic and administrative activities.

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

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

Response: 30.4

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

2017-18	2016-17	2015-16	2014-15	2013-14
34	32	31	29	26

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

5.4 Alumni Engagement

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

Response:

The college has a registered alumni association; the registration number is 854 of 2018 dated 29.5.2018. The institute has a well-defined alumni association administered by duly nominated alumni committee. The alumni association regularly meets at least once in a year. The suggestions offered by the alumni during its meetings carry more importance and weightage in college and student developmental activities.

Name of Alumni Association member	Designation in committee
Y. Uday Kumar	President
K. Dileep	Vice President
K. Chandana	General Secretary
B. Aparna	Joint Secretary
S, HariPriya	Treasurer
D. Ranga Reddy	Executive Member
A.Koti Reddy	Executive Member

The alumni support to the college by sharing their professional experience with current batch student and motivating them through various activities like delivering guest lectures and seminars on carrier program and current scenario of industrial culture, providing internships and recruiting fresh graduates etc.

The feedback of alumni is implemented by the Principal and alumni association members to identify and fill the gaps in student's career development. Various programmes on interview skills, personality development, study abroad and career counseling are organized based on the suggestions given by alumni. Infrastructure facilities are being regularly upgraded or expanded to meet the requirements and aspirations of students based on suggestions given by alumni in alumni meet.

The current students are inspired by interaction with alumni through alumni association. Alumni of the college make current students up-to-date with various job opportunities and corporate requirements.

The alumni of the college who have qualified competitive examination interact with students appearing for competitive examination through on–campus lectures or by online. College tries to maintain a life-long good relation between the institute and its alumni to support the current students for their overall development.

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

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

4 Lakhs - 5 Lakhs

3 Lakhs - 4 Lakhs

1 Lakh - 3 Lakhs

Response: <1 Lakh

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

Response: 5

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

2017-18	2016-17	2015-16	2014-15	2013-14
1	1	1	1	1

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

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

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

Response:

VISION
Imparting Knowledge and instilling skills to the aspiring students in the field of Engineering, Technology, Science and Management to face the emerging challenges of the society.

MISSION

- Encouraging scholarly activities that transfer knowledge in the areas of Engineering, Technology, Science and Management.
- Ensuring students of all levels, well trained to meet the needs of education and their future endeavors.
- Inculcating human values and ethics into the education system for the all-round development of the students.

QUALITY POLICY

Teegala Krishna Reddy Engineering College is committed to provide quality technical education to students through dedicated and talented faculty, good infrastructure, laboratories and research.

The Institution follows curricular, co-curricular and extracurricular activities. The main focus is on the recent trends in technology with project based learning, creativity and technology transfer through Industry-Institute interactions. Principal provides requisite leadership to generate, preserve and share knowledge for developing a vibrant society, by imparting quality education. All stakeholders are involved in formation of the vision, mission and quality policy. The program outcomes, program specific outcomes and the course outcomes are formulated keeping the vision, mission and quality policy statements in mind. The faculty are active members in the decision making council of the college.

Reflection of Mission and Vision in the leadership of institute:

1. **The policy statements and action plans:** The Principal makes action plans in consultation with faculty members to review of outcomes from the implementation of action plans through meetings with functional committees and makes necessary changes in action plans if required. 2. **Formulation of action plans:** The action plans are formulated in line with quality policy under the leadership of the Principal and the same are incorporated into strategic plans for effective implementation.

3. **Interaction with stakeholders:** The Principal ensures that all stakeholders are involved in different activities.

4. **Proper support for policy and planning:** The requirements of the society for policy making and planning are collected by the Principal through interaction with various stakeholders.

The college has a 13 member Governing Body comprising of eminent personalities as members from industry, academics, university nominees etc., Two faculty members, in the capacity of faculty representatives, are members of the Governing Body and they are actively involved in the decision-making process to sustain and enhance quality of education imparted by the institution.

Vision, Mission, short term and long term goals, quality policies are kept wide open to all stakeholders for their suggestions, necessary training is provided to its faculty and supporting staff for their development and motivates the team building and team work to create healthy work culture. The Leadership also involve in proper functioning of Internal Quality Assurance Cell (IQAC). The participatory role of the management encourages and sustains the involvement of the institute staff, which is necessary for the efficient and effective running of the institute.

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

6.1.2 The institution practices decentralization and participative management

Response:

Decentralization

Institute has a mechanism for delegating authority and providing operational autonomy to all the various functionaries to work towards decentralized governance system. Through effective decentralization, the institution practices successful delegation and enhances the productivity of the college. Through participative management, the committees handle and ensure their activities in a complete and constructive way.

Governing Body, the highest body of policy making, meets periodically to discuss various issues and aspects related to the development of the institution. It includes considering and approving the institution strategic plan which sets the academic aims and objectives of the institution and identifies the financial, physical and staffing strategies. Governing body considers the recommendations of various Committees and it chalks out a roadmap to achieve the goals of the institute.

Participative Management

The institute promotes a culture of participative management by involving staff and students in various activities. All decisions of the institution are governed by management of facts, information and objectives. Both students and faculty allowed expressing themselves of any suggestions to improve the excellence in any aspect of the Institute.

Strategic Level

The GB is involved in defining the policies/procedures, framing guidelines and rules/regulations pertaining

to admission, placement, discipline, grievance, counseling, training & development, and library services etc., and effectively implementing the same to ensure smooth and systematic functioning of the institute. For the various programs to be conducted by the institute, committee members involving staff and students- meet, discuss, share their opinions and plan for the activities and get them approved by GB.

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

6.2 Strategy Development and Deployment

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

Response:

Yes, the institution has a formally stated quality policy which is being implemented through a well structured body called Internal Quality Assurance Cell. Internal Quality Assurance Cell (IQAC) was established at TKREC on Date 08-05-2015.The IQAC should be a part of the institution's system and work towards realizing the goals of quality enhancement and sustenance. The development of the college is a constant ongoing process. This is made possible with the help of perspective/strategic plans that chalk out the necessary actions to be taken to grow and develop. In line with its vision statement the Institute has developed a perspective plan for its development. The perspective plan has been designed by the institute for the future taking into consideration the suggestions from the stakeholders. The institution focuses on performance assessment and improvements. It addresses the issues from the stakeholders perspective and takes steps to fulfill their requirements. The Institute has following Perspective/Strategic plans:

- Accreditation by National bodies
- Introducing recognized research centre
- Autonomy of the institute
- Establishing centre of excellence and Foreign collaborations for higher studies and student placement.
- Better industry institute relationship through MOUs to enhance the activities of Entrepreneurship Development Cell.
- Establishing and developing incubation centre to guide and support the prospective entrepreneurs.
- Implementation and effective use of ICT enabled learning management system (LMS).

It is based on the instructions from Head of institution after meeting all concerned heads of various departments and committees at institution level along with individual proposal at faculty level being considered for an agenda point for discussion at annual governing body meeting. A perspective plan is chalked out biannually in GB. The same will be reviewed periodically throughout academic year for measuring efficiency. The aspects to be included in the plan will be drawn from the following committee recommendations with priority.

S.No	Name of the Committee

1	Staff and student welfare committee
2	Staff Selection committee
3	Discipline and grievance Redressal committee
4	Finance committee
5	Women well fare committee
6	Sports and cultural activities committee
7	N.S.S committee
8	Anti Ragging committee
9	Training and placement committee
10	Academic committee/ Advisory committee
11	Research and development committee (R&D)
12	Staff and Student feedback committee
13	Alumni Committee
14	Library advisory committee
15	Internal Quality Assurance Cell (IQAC)
16	Examination Monitoring committee
17	Hostel committee
18	SC/ST Committee
19	Minority/OBC Committee
20	Entrepreneur development cell (EDC)
21	Board of governors (BOG)
22	Industry-Institute Interaction Committee (IIIC)

File Description	Document
Any additional information	[View Document](#)
Strategic Plan and deployment documents on the website	[View Document](#)
Link for Additional Information	[View Document](#)

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

Response:

The institute is having decision making processes. The institute is having a well structured Governing Body and Academic/Advisory Committee. Decisions made by GB and Academic/Advisory Committee are disseminated by Principal to all the teaching and non-teaching staff members. Principal works with the four main sections i.e. office administration, academics, training & placement, extracurricular activities and the auxiliary bodies. The auxiliary bodies work for alumni, anti-ragging, library, purchase and grievance. The Extra-curricular activities sports, magazines, NSS are looked after through students and staff. The office is administered through administrative officer for accounts and establishment sections.

Governing Body, the highest body of policy making, meets periodically to discuss various issues and aspects related to the development of theinstitution.

Various Bodies of the Institute

S.No	Name of the Committee
1	Staff and student welfare committee
2	Staff Selection committee
3	Discipline and grievance Redressal committee
4	Finance committee
5	Women well fare committee
6	Sports and cultural activities committee
7	N.S.S committee
8	Anti Ragging committee
9	Training and placement committee
10	Academic committee/ Advisory committee

11	Research and development committee (R&D)
12	Staff and Student feedback committee
13	Alumni Committee
14	Library advisory committee
15	Internal Quality Assurance Cell (IQAC)
16	Examination Monitoring committee
17	Hostel committee
18	SC/ST Committee
19	Minority/OBC Committee
20	Entrepreneur development cell (EDC)
21	Board of governors (BOG)
22	Industry-Institute Interaction Committee (IIIC)

Service rules contents

1. Service records

2. Method of recruitment

3. Promotion policies

4. Leave rules

5. Medical facilities

6. Conduct and discipline

7. Annual confidential report

8. Appeals and reviews.

Recruitment Policies:

The institute follows AICTE/JNTUH norms for staff recruitment. The HoDs review requirements as per Teaching Load and as per AICTE/JNTUH requirements and submit the consolidated staff requirement to Principal through Dean Academics and conduct the recruitment as per the norms. University appointed staff selection committee along with the HOD, Principal, Management representative and Subject experts decide the eligibility of the candidate by his/her performance in the interview according to the parameters they are looking for.

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

6.2.3 Implementation of e-governance in areas of operation

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

A. All 5 of the above

B. Any 4 of the above

C. Any 3 of the above

D. Any 2 of the above

Response: B. Any 4 of the above

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

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

Response:

Various committees, cells and bodies are constituted as per the norms or requirement to oversee academic and administrative operations of the institution. The list of committees is provided here under.

S.No	Name of the Committee

1	Staff and student welfare committee
2	Staff Selection committee
3	Discipline and grievance Redressal committee
4	Finance committee
5	Women well fare committee
6	Sports and cultural activities committee
7	N.S.S committee
8	Anti Ragging committee
9	Training and placement committee
10	Academic committee/ Advisory committee
11	Research and development committee (R&D)
12	Staff and Student feedback committee
13	Alumni Committee
14	Library advisory committee
15	Internal Quality Assurance Cell (IQAC)
16	Examination Monitoring committee
17	Hostel committee
18	SC/ST Committee
19	Minority/OBC Committee
20	Entrepreneur development cell (EDC)
21	Board of governors (BOG)
22	Industry-Institute Interaction Committee (IIIC)

Members of these bodies meet as per determined frequency of meetings. Higher authorities may call for meeting of any body at any time based on the need. All meetings are supported by a note taker and minutes of the meeting are recorded. Every meeting will be ended by listing out actionable items and recommendations, requests for approvals and conclusions. All actionable tasks are reviewed in the next meetings for progress. Approvals are followed up and converted into actionable items.

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

6.3 Faculty Empowerment Strategies

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

Response:

An institution can be good with its staff. The institution understands this and appreciates the efforts of its staff. It recognises their hard work and acknowledges their needs and requirements. As a result the institution has a welfare policy for its teaching and non-teaching staff. Performance of each member of the faculty as well as the non-teaching staff is evaluated by the institution through performance appraisal system. Increments & promotions are given as per qualifications and service in the institution. Performance appraisal includes individual and team accomplishments in terms of self rating for all parameters like attendance, results, paper presentations, publications, conferences, workshops, seminars attended, certifications and awards received. Further day to day performance monitoring is observed by HOD's and Principal .GB takes the following measures to retain the senior eminent faculty: Provides stress free work environment where in they are given a free hand in subject selection. They are encouraged to participate in some management decisions. Encouragement to present papers in National and International seminars, publications etc. Dedicated cabin, computer, internet are provided to Professors.

 Following welfare schemes are available for teaching and non-teaching staff:

1.Free uniforms for class IV employees

2.Accident insurance policy for drivers.

3.Faculty members are promoted for self development programs and higher education.

4.Various leaves available to teaching and non-teaching staff are vacation leave, casual leave, Special casual leave,Compansated   casual leave, maternity leave for ladies staff .

5.Ambulance and doctor is available in campus.

6.The Institute is having IKON Multi specialty Hospital and Staff gets discount at the hospital.

7.Transport facility for teaching and non-teaching staff.

8.Canteen is available.

9.Some of the staff is having PF facility.

10 Bank and ATM Facility.

11.Farm fresh eggs and dairy products are available in the campus.

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

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

Response: 10.81

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

2017-18	2016-17	2015-16	2014-15	2013-14
58	38	25	6	9

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: 13

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

2017-18	2016-17	2015-16	2014-15	2013-14
16	14	13	12	10

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: 57.15

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

2017-18	2016-17	2015-16	2014-15	2013-14
120	143	156	132	114

File Description	Document
IQAC report summary	[View Document](#)
Details of teachers attending professional development programs during the last five years	[View Document](#)
Any additional information	[View Document](#)

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

Response:

Yes, Institution has Performance Appraisal System for teaching and non-teaching staff. Performance appraisal is done annually at the end of each Semester. The management always plays an active role in the performance appraisal of the staff. The management keeps a keen vigil on the working behavior of the members of the teaching as well as the non-teaching faculty. Faculty Performance Appraisal consists of following two important parts:

1. Self Appraisal form being filled up by faculty members

2. Assessment of these self appraisal forms by a review committee IQAC prepares the format of Self Appraisal form being filled up by the faculty members which consists of following parameters:

1. Students Feedback on teaching performance of concerned faculty members.

2. Examination results of the subject(s) taught by the concerned faculty member for the Semester.

3. Research Publications by concerned faculty member during Semester.

4. Details of Faculty development programs attended by the faculty members during Semester

5. Details of any other specific achievement.

Assessment 1. Management constitutes a review committee for the assessment of Self Appraisal Forms. Following are the members of the committee 2. Principal 3. Dean Academics 4. Head of the respective Department.

Annual increment will be decided based upon the assessment of Self Appraisal Forms.

Appraisal Process:

1. All faculty members will submit the duly filled self appraisal forms to their HoDs .

2. HoDs will collect all the self appraisals and write their remarks based on the information captured from various committees and the information provided in the self appraisal forms.

3. HoD will conduct individual meeting with faculty and discuss the performance. 4.HoD may revise the remarks based on the discussion.

4. Faculty performance appraisal forms along with self appraisals will be submitted to principal for further processing.

5. Principal will discuss with the faculty with lower performance to assess the correctness and also to mentor the faculty.

6. Principal will take appropriate approvals for the increment/promotions as a part of budget approvals from the governing body.

The performance of the non-teaching staff is currently appraised every year by the immediate supervisor followed by the necessary training and counselling.

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

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

The institute has a mechanism for internal and external audit. We have our own internal audit mechanism where internal audit is an ongoing continuous process in addition to the external auditors to verify and certify the entire Income and Expenditure and the Capital Expenditure of the Institute each year. Qualified Internal Auditors from external resources have been permanently appointed and a team of staff under them do a thorough check and verification of all vouchers of the transactions that are carried out in each financial year. Likewise an external audit is also carried out on an elaborate way on quarterly basis. The institutional accounts are audited regularly by both Internal and statutory audits. So far there have been no major findings / objections. Minor errors of omissions and commissions when pointed out by the audit team are immediately corrected / rectified and precautionary steps are taken to avoid recurrence of such errors in future. The institute regularly follows Internal & external financial audit system.

The College has a governing body consisting of university AICTE nominee, management representatives and other industry and Academic members. Every financial year budget proposals including income & expenditure details are being submitted by the college to the governing body for their consideration and approval. The proposals are made on different heads such as laboratory equipment, library expenses, salary payments, building infrastructure and other maintenance expenses.

Internal:

In the college there is an internal Financial Committee constituted which would examine the budget proposals, receipts, bills and vouchers and supporting documents for the current year. The financial committee after the scrutiny, they may advice concerned departments for any possible improvement.

External:

The College has submitted the budget proposals and income and expenditure statements to the Audit Committee for the necessary audit. The Accounts were audited by External Auditor under the Income tax Act.

Procedure Preparation of Budget:

- Institute makes budget periodically, all department's HOD make their budget plan by following the

guidelines provided by the principal.

* HODs create budget plan on the basis of the requirements for departmental labs, need of equipments, and required funds for various activities like guest lecture, workshops, seminars, industrial visit and for reference books.
* Principal collects the data and have a discussion with the Director in the presence of HODs, and then it is forwarded to the GB for approval.
* At the time of overall organizational budget the GB concentrates on Salaries & allowance, and administrative expenses like stationeries, software, building maintenance, electricity, water, telephones, mails, college transport, and gasoline.
* Budget is planned under the careful supervision, and considerations of need of all the departments. Priorities are made on basis of the needs to fulfill various committees' financial requirements to upgrade the development of the department.

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

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

Response: 0

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

2017-18	2016-17	2015-16	2014-15	2013-14
0	0	0	0	0

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

Response:

The Institution always monitors the effective and efficient use of available financial resources for the infrastructural development and teaching learning process. Each and every rupee spent for the development is properly auditable by the charted accountant. Statutory audit as a specific concern enables a reporting system to the management express the reasonableness on the utilization of the financial resources. As a part of Outcome Based Education system, this institution has given utmost importance for the generation and utilization of funds to meet the objectives of the institution. The institutional strategy to generate funds is primarily based on Quality enhancement strategy. This strategy is essential in teaching learning and scientific-work environment. By providing quality enhancement, a better fee structure can be claimed by the college that can be sanctioned by the government. This also leads to improved funding. Hence, quality enhancement of the institution is nurtured to generate funds from different sources. Optimal utilization of funds is ensured through the following:

1. Adequate funds are allocated for effective teaching-learning practices that include conduct of FDPs, orientation programs, workshops, inter-disciplinary activities, training programs that ensure quality education.

2. The budget will be utilized to meet day-to-day operational and administrative expenses and maintenance of the fixed assets. This equipment is further utilized in the established advanced laboratories of the institute.

3. Enhancement of library facilities leads to novel learning practices and accordingly requisite funds are utilized for this every year.

4. Adequate funds are utilized for development and maintenance of very good infrastructure for the institute.

5. Some funds are allocated for social service activities as a part of social responsibility.

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

6.5 Internal Quality Assurance System

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

Response:

The Institute has established the Internal Quality Assurance Cell on 08-05-2015.The IQAC of the College is involved in framing the quality policies for Teaching-Learning, Research, finance, Curriculum implementation, Student activities & progression, infrastructure & learning resources ,innovation, institution values and best practices and all the extracurricular and co-curricular activities. Quality parameters developed for various academic / administrative activities of the institute. Assessing the quality parameters and providing required suggestions for the improvement. Arranging training on pedagogy every semester for all newly admitted faculty. Conducting seminars / workshops, FDPs on emerging technologies for faculty. Conducting Guest Lectures from Industry/Experts. IQAC contribute/Monitor/Evaluate the Teaching & Learning processes: Feedback from the stakeholders (students, staff, alumni, industry experts, research organizations and parents). Monitoring of course files, lecture Schedules, course plans by random sampling Verification, question papers identifying the new processes and recommending the same for improving the quality.

Functions:

- Development and application of quality benchmarks/parameters for various academic and administrative activities of the institution
- Facilitating the creation of a learner-centric environment conducive to quality education and faculty maturation to adopt the required knowledge and technology for participatory teaching and learning

process

- Arrangement for feedback response from students, parents and other stakeholders on quality-related institutional processes
- Dissemination of information on various quality parameters of higher education
- Organization of inter and intra institutional workshops, seminars on quality related themes and promotion of quality circles
- Documentation of the various programmes/activities leading to quality improvement.
- Acting as a nodal agency of the Institution for coordinating quality-related activities, including adoption and dissemination of best practices.
- Development and maintenance of institutional database through MIS for the purpose of maintaining /enhancing the institutional quality.
- Development of Quality Culture in the institution.
- Preparation of the Annual Quality Assurance Report (AQAR) as per guidelines and parameters of NAAC, to be submitted to NAAC

Benefits of IQAC:

Ensure heightened level of clarity and focus in institutional functioning towards quality enhancement

- Ensure internalization of the quality culture
- Ensure enhancement and integration among the various activities of the institution and institutionalize good practices
- Provide a sound basis for decision-making to improve institutional functioning
- Act as a dynamic system for quality changes in the Institute
- Build an organized methodology of documentation and internal communication
- The IQAC constituted different sub committees in which most of the staff members are involved in formulating and executing the decisions of IQAC.
- The decisions of IQAC are widely communicated to staff members through circulars / notices/website/mails

The following suggestions of the external members of IQAC have been implemented.

- Conduct of Industry related training Programs.
- Identification of specific areas to develop the "Centre of Excellence"
- Conduct of faculty enablement programs in collaboration with premier academic Institution.
- The IQAC communicate and engage staff from different constituents of the Institution.

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

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

Response:

The following innovative processes are adopted by the institution in Teaching and Learning:

1. Promoting the usage of ICT.

2. Implementing OBE.

3. Mapping course outcomes / instructional objectives and program educational objectives

4. Arranging training on pedagogy and assessing its impact on teaching-learning.

5. Arranging training on latest technologies.

6. Conducting FDP programs on emerging technologies.

7. Class in charges for a section is nominated.

Besides regular classroom learning and innovative teaching methods, Field trips, Industrial visits and Internships are also organized

1. Guest lectures on advanced topics by the Eminent Academicians and industry experts.

2. Conducting seminars by students

3. Practice of emerging technologies through technical seminars,Mini projects and main projects

4. Faculty development through subject based workshops, orientation programs, seminars and conference programs, technology based workshops etc. The programs are designed by outcomes based approach. IQAC Contribute/Monitor/Evaluate the Teaching & Learning processes: The IQAC organizes regular academic audits to ensure effective implementation of teaching learning process and maintenance of course files. Verification of question papers, Arrangement of special classes for slow learners during evening hours. Identifying the new processes/delivery method and recommending the same for improving the quality.

The institution regularly collects student feedback and evaluates the teaching – learning process of faculty and advices on their shortcomings for improvement.

· 	Head of the department evaluates the performance of the faculty.

· 	Performance of the students is continuously evaluated by the mentors.

· 	Students counseling is available which advices each student.

· 	Detailed course handout is to be prepared unit wise as per the prescribed syllabus and subject-wise lecture notes are required to be prepared by each faculty members.Lab manuals are prepared by the faculty.

By implementing all the above measures student development is ensured by IQAC.

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

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

Response: 18.4

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

2017-18	2016-17	2015-16	2014-15	2013-14
22	21	17	16	16

File Description	Document
Number of quality initiatives by IQAC per year for promoting quality culture	[View Document](#)
Any additional information	[View Document](#)
IQAC link	[View Document](#)

6.5.4 Quality assurance initiatives of the institution include:

1. Regular meeting of Internal Quality Assurance Cell (IQAC); timely submission of Annual 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: B. Any 3 of the above

File Description	Document
e-copies of the accreditations and certifications	[View Document](#)
Details of Quality assurance initiatives of the institution	[View Document](#)
Any additional information	[View Document](#)
Annual reports of institution	[View Document](#)

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

Response:

Academic measures

1. **Evaluation reforms:** followed as per university norms for final exams

2. **Teaching learning approach:** Student centric approach with focus on self-learning implemented instead of traditional teaching learning approach.

3. Teaching learning methodology: In addition to chalk & talk ICT is also used for better learning

4. Research Activity: By motivating staff & students towards research.

5. Laboratory enhancement: Labs equipped with sophisticated equipment and instruments.

6. E-resources: The institution has a digital Library with Internet and Wi-Fi facilities along with eBooks and e-journals, NLIST and NDL subscription for enhancing the learning process.

Administrative Measures

- Internal Quality Assurance Cell has been set up to monitor the continuous progress of the

As a result of IQAC recommendations, improves the quality in Teegala Krishna Reddy Engineering College, the following parameters are Incremental improvements:

- Subject allotment process is carried out, based on the performance of the faculty in demonstration of their respective domains.
- Students actively involve in theory and practical sessions motivated by active learning methods.
- Students are motivated to watch the NPTEL videos to understand their academic subjects.
- Availability of resources for academics is increased due to sharing of e-books with the students from e-resource like National Digital Library (NDL), DELNET, PDF drive and Bookboon.
- Faculty registered in SWAYAM where academic information is available in the form of e-books, video lectures and online courses.

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

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: 31

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

2017-18	2016-17	2015-16	2014-15	2013-14
8	6	6	6	5

File Description	Document
Report of the event	[View Document](#)
List of gender equity promotion programs organized by the institution	[View Document](#)
Any additional information	[View Document](#)

7.1.2

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

Response:

Institution shows gender sensitivity in providing facilities such as

> 1.**Safety and Social Security**

- Gender Sensitization is the domain of Humanities and Social Sciences. Gender Sensitization course has been introduced in our institution under guidance of JNTUH.
- Teegala Krishna Reddy Engineering College (TKREC) is always taking utmost precautions regarding safety and security especially for girl students and faculty. In connection with that different committee such as Anti-ragging committee, Discipline and Grievance committee, Women Welfare committee, staff –Student welfare Committee and Internal compliance committee as per the order issued by JNTUH have been constituted and function of that committees are monitored through our College Internal Quality Assurance Cell (IQAC).
- The institution provides the CCTV surveillance in the campus main places such as entrance,

parking places, canteen, library mainly to avoid ragging and any mischievous happenings in the Campus and the same is centralized with CCTV to watch day to day happenings and take necessary action.

- All students and employees of our TKREC are allowed with ID card by our security at the main gate itself. The outside visitors will be allowed with passes.
- The two wheelers and four wheelers parking area are provided very near to the entry of our college and making pollution free inside the campus.
- Our students participated in the road safety awareness programme.
- Local police station is helping the institution as and when any problems are raised.For contact: Mobile:9490617366, 9490617111
- Our Institution has safety provision to handle emergency including fire and other calamities.
- Rubber mats are provided wherever the electrical conduits crossed between the worktables in all laboratories.
- First aid box, fire alarm and fire extinguisher are provided in the main places of the college buildings.

b. Counselling

- Department faculty are taking responsibility for individual care of students in all manners such as academic performance, discipline in and out of campus and any other personal problems come up.
- Under Mentoring, 20 students are allocated to each faculty to look after the activity of students periodically.
- TKREC also formed different committees for the welfare of students and staff including women staff and girl students.

c. Common Room

- Common Room is provided for students to lead a healthy and stress-free life in our college campus.
- The institute has separate common room both for girls and boys. Students utilize the common room to take rest when they are ill.

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

7.1.3 Alternate Energy initiatives such as:

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

Response: 50.02

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

Response: 12073

7.1.3.2 Total annual power requirement (in KWH)

Response: 24135.9

File Description	Document
Details of power requirement of the Institution met by renewable energy sources	<u>View Document</u>
Any additional information	<u>View Document</u>
Link for Additional Information	<u>View Document</u>

7.1.4 Percentage of annual lighting power requirements met through LED bulbs

Response: 50.05

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

Response: 37995

7.1.4.2 Annual lighting power requirement (in KWH)

Response: 75920

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

7.1.5 Waste Management steps including:
- **Solid waste management**
- **Liquid waste management**
- **E-waste management**

Response:

   Our Institute takes all measures to maintain our campus with reduced plastic usage and to remove the waste which are harmful to environment.

Solid Waste Management

- Dust bins are arranged in all department staff rooms, labs, library, and every floor steps.
- Cleaning or emptying the dustbins is being done on a regular basis.
- The dead leaves and garbage are collected by our housekeeping personnel and hand over to Municipal vehicle daily.
- All plastic wastes are collected and it is given to Municipal Corporation.

Liquid Waste Management

- Liquid waste from the points of generation like the canteen, and toilet is segregated and disinfected and let out as effluent into a common drainage facility.
- This liquid waste effluent could trigger various infections and can cause disease outbreaks among the people, if they end up in the some local water bodies like lakes, rivers etc.,So sensing this danger, we plan to have Effluent Treatment Plants (ETPs), for treating the waste water that can eventually be reused.

E-Waste Management

- The College has emphasis on paperless office to save carbon emission in printers. The cartridges of laser printers are refilled outside the college campus. UPS, Batteries are recharged / repaired / exchanged by the suppliers.
- Our institution follows buy back system to dispose the E-waste like monitors, CPU etc., Some equipment is reused after service and slight modifications.
- The non-working computer spare parts and other non-working equipments are collected in the IT workshop for showing demo to our students.

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

7.1.6 Rain water harvesting structures and utilization in the campus

Response:

Rain Water Harvesting

- TKREC has constructed 6 no's of rain harvesting pits in different areas to collect and store the water for long time and long term resource.
- Water draining from the roofs, and surrounding areas of the college, is made to collect them and redirect to a deep pit, hence the ground water level sustains to serve even during peak summer.
- Our College is using the bore well waters for supplying water to all the purposes which is placed near to the rain water storage pits since for making availability of water in the bore well round the year without getting dry even in the summer season.
- In addition our college provides purified water for drinking through our own RO purifier plant which is situated on the roof top. Our plant is having 1000 litres capacity. The waste water from the plant is also made to discharge in the rain water storage pits.
- With the help of storing water it is made to supply water for drinking and plantation of the College, which will improve vegetation and save our environment.
- There is enough open space and mud places are also available in our college campus to harvest the rainwater.

The reason for rain harvesting is to help ourselves and help the society by reducing the burden of dependency on Government.

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

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:

Green Practices

"Going **green**" means to pursue knowledge and practices that can lead to more environmental friendly and ecologically responsible decisions and lifestyles, which can help protect the environment and sustain its natural resources for current and future generations.

Students and staff using

1. **Bicycles**

- Bicycles are used by few to improve their health conscious and they are economical and pollution free.

1. **Public Transport**

- Our College provides bus facility to students and staff.
- Many of our students availing public transport provided by the government based on their convenience. The common bus stand has been contributed by our institutions and it is located beside our college campus.
- In addition to this, there are about 250 sharing Autos which shuttle all the times

1. **Pedestrian friendly roads**

- Many students and staff are using pedestrian friendly roads in and around the campus.

- Our security guards are standing in the entrance for providing separate path to vehicles and pedestrians to avoid traffic in the peak hours in the campus entrance.
- Side walk facility is also provided in the college campus.

1. **Plastic free campus**

- The Institute has initiated to make campus plastic free and to use eco friendly items to stamp out environmental damage and risks.
- Students and staff are instructed not to use plastic covers in the campus
- Burning of plastic wastes is strictly prohibited.

1. **Paperless office**

- The Institute has reduced paper to a maximum extent by maintaining e-records which can save money, boost productivity, save space, make documentation and information sharing easier, keep personal information more secure, and help the environment.
- The most important official information is communicated through department e-mail to Head of the Department.
- Common notification to the faculty is communicated electronically

1. **Green landscaping with trees and plants**

- The institute maintains very lovely vegetation by maintaining the trees in and around the campus for shade and health.
- Maintains medicinal plant garden to save environment.
- Events like Haritha Haram were organized by the College to plant trees in many occasions.

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

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

Response: 0.37

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

2017-18	2016-17	2015-16	2014-15	2013-14
1.5	0.75	3.13	0.5	1.0

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

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

1. **Physical facilities**
2. **Provision for lift**
3. **Ramp / Rails**
4. **Braille Software/facilities**
5. **Rest Rooms**
6. **Scribes for examination**
7. **Special skill development for differently abled students**
8. **Any other similar facility (Specify)**

A. 7 and more of the above

B. At least 6 of the above

C. At least 4 of the above

D. At least 2 of the above

Response: B. At least 6 of the above

File Description	Document
Resources available in the institution for Divyangjan	View Document
Any additional information	View Document
link to photos and videos of facilities for Divyangjan	View Document

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

Response: 51

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

2017-18	2016-17	2015-16	2014-15	2013-14
15	13	9	6	8

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: 51

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

2017-18	2016-17	2015-16	2014-15	2013-14
15	13	9	6	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

Response: Yes

File Description	Document
Any additional information	[View 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

File Description	Document
Any additional information	[View Document](#)
Provide link to Courses on Human Values and professional ethics on Institutional website	[View Document](#)

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

Response: Yes

File Description	Document
Any additional information	[View Document](#)
Provide URL of supporting documents to prove institution functions as per professional code	[View Document](#)

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

Response: 45

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

2017-18	2016-17	2015-16	2014-15	2013-14
8	12	10	7	8

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:

All nations have their religious and colourful festivals. However, Indian festivals are known to attract the world due to their harmony, variety, colour and excitement. Being multi lingual and multi racial country Indians celebrates a number of festivals all through the year.

The *Institution* has been organizing activities relating to *national festivals*, *birth/death anniversaries* of the great personalities to bring *National* integration, to bring the feeling of commonness and oneness amongst the *people* of country even after being from different races, cultures, religions or regions in order to build a strong and developed nation. It promotes the unity in diversity and feeling of oneness amongst *people* to a *great* level.

- Our College celebrates Independence Day, Republic day, Engineer's day, Teachers day every year without making any negligence along with students and staffs.
- National youth day is celebrated on the birth day of great spiritual leader Swami Vivekananda.
- National science day is celebrated to mark the discovery of the great Indian physicist Sir.C.V.Raman. On that day most of our students involved voluntarily and presented their project models.
- Death and Birth anniversaries of great personalities are important to pay the mark of respect to the peoples who paved the way to society, education, policies and technology through their inventions, sacrifices and dedication etc. Our institution disbursed homage on the death day of the Missile Man and Former President of India Dr.APJ Abdul Kalam.

File Description	Document
Any additional information	View Document

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

Response:

Institution maintains transparency and accountability with good governance keeping in view the vision, mission and goals at all levels. The Institute involves stakeholders and beneficiaries for transparency in evaluation process

1. TKREC is fully transparent in Admission Process and fees structure by following JNTUH, Telangana Government, AICTE, TFRC rules and regulations.
2. Admission brochure is published in our college website every year before starting the admission process along with course details, fees structure, placement details, availability of faculty, scholarship details, hostel and other facilities in order to make transparency to all parents and students. Institute deals directly with students, as TKREC does not entertain any agents/ consultants.
3. Institute appoints various committees for the smooth running of the institution to implement its quality policy and plans. Statutory bodies of the institutions are formed with the senior members of faculty who are involved in taking constructive decisions to strengthen and Streamline the process such as policy making, finance, student welfare, etc
4. TKREC Staff salaries are credited in the bank account every month.
5. All the Department HOD are scheduled to prepare Annual budget for academic activities and purchasing consumable lab components, repair,maintenance and finalized by finance committee of our institution.

In all the above practices, our Institute aim for improvement in the system, Regular inputs from staff in various functions such as Admission, Academics, Examination, Procurement, HR, Industry Interaction, Finance, Administration, Maintenance, etc.

Academic committee in charge in coordination with head of departments to impart learning and cultivation of values through education and inculcate human values and professional ethics in students, faculty and society.

7.2 Best Practices

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

Response:

Best Practice 1

Title:

Sport as a, "**United Teamwork**" (for the development of National and International peace)

Objectives

- To impart importance to sports and games.
- To Motivate and impart students for participative and competitive sport.
- To promote the sports and games in the country level.
- To improve the skills with united **teamwork**.

Context

- Our Institute have the outdoor sports facility and indoor games facility
- Our Institute have well trained Physical directors and the students will be practiced in a very good manner to take part in the various competitions.
- Our Institute is established with huge green lawn Cricket ground along with floodlight facility.
- Our Institute is enriched with Cricket Net Practice and Bowling Machine facility to enhance the practice of our cricket team.

Practice

- Training the students under professional trainers in cricket and encourage the students for daily net practices.
- Sports period is allotted in the time table.
- Our Institute conducts college level cricket tournaments and Annual sports meet every year.
- Our students have **won** in **78** tournaments in the various levels **out of 82** tournaments participated.

Evidence of success

- **Akshith reddy** played under-19 world cup, IPL cricket as opener batsman.
- **K.Sumanth, B.Sandeep and Vamshi vardhan Reddy**, played Ranji Trophy as wicket keeper, and represented **under-19, 23, 25**.
- **Pranithraj** selected for vizzu trophy.
- **Diana David** women cricketer represented as player in **Women's world cup**.
- **Sindhuja Reddy** women cricketer played under -19 for India.

Problems encountered and resources required

- Government initiation is required in funding talented rural background students.

Best Practice-2

Title: Uniting Staff and Students through events

Objectives

- To bring in attitudinal changes among the Staff and Students.
- To work voluntarily as a team for the welfare of the Institution.
- To establish unity in diversity.
- To have integrated culture among staff and students.
- To educate prioritization and time management skills.

Context

Our institute organizes multitude of cultural activities round the year. Students are encouraged to attend variety of cultural events. If the cultural event is "**live**" one then that event will create curiosity to participate with the people. In order to increase the participating culture among our staff and students our management organizes live concert like **SHIZNEY** every year.

Practice

- Our Institute celebrates Sankranthi, Bathukamma in a grand manner every year.
- Dandia and traditional day and Christmas are also celebrated.
- Our Institute conducts social awareness programs to bring social responsibilities among the staff and students.
- Our students and staffs are getting motivation to facilitate **Community growth** through this **breed of Cultures** executed in our Institution **customarily**.

Evidences

- "**The Hindu Education plus Challenge- 2014**" conducted in TKRES
- Our students **adopted** one **village Nalgonda** for **testing salt content** in drinking water.

Problems

- At the time of cultural activity, all the committee members especially discipline committee members should be conscious in all the places

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

7.3 Institutional Distinctiveness

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

Response:

Through the accurate planning and managerial capacity, our institution focuses at delivering best to the students to meet the vision of our college. The establishment of the Entrepreneurship Development Centre (EDC) in the Campus is one of the most important steps for the student development. With a distinctive vision of providing path to young minds to pursue and develop their skills and transmit their dreams along with an intelligence of their technique.

The objective of the EDC is set to promote entrepreneurship skills among students and to make them self-reliant in their career.

EDC Activities are:

- Arranging in plant training or internship in their core subject.
- Bridge the gap between academia and industry, our institute has launched Aptitude and Reasoning sessions on 18th Sep 2017 through MOOCS platform combined with TASK created by Govt. of Telangana.

https://twitter.com/taskts/status/909723246374690816

- Paving way to prove technology thrust of our students for launching their own ideas/enterprise/innovative ideas which will be helpful to become a future entrepreneur.
- Motivating the students to participate in National and International level seminars and conferences related to entrepreneurship development.
- Our Civil Department student Saikiran Gaddam participated and presented in innovative Idea Contest at Institute of Engineers (IEI) Bhavan Bangalore and he received Certificate of Appreciation.
- Seven students from our college participated and presented a paper in the International conference held at Singapore.
- Conducting seminars and workshops to understand state-of-the-art technology.
- International Conference ICSSCET 2016 was conducted in TKREC on 16/02/2017 and 17/02/2017. **Dr. KriengkraiBhuvanij, Charge of d'affairs**, Ministry of ICT Kingdom of **Thailand** and **viethnam** was the Resource Person.
- The technical fest **REIN4Z 2K18** was conducted by Department of Civil Engineering on 27-02-2018 and 28-02-2018 to pave a great platform for the students and enhance their skills at the highest level.
- The Institute has got AICTE grant in-aid of **Rs. 10,00,000**/-(Ten lakhs) under **Industry Institute Partnership Cell (IIPC).**
- Under **Entrepreneur Development Cell (EDC)** our Institute has got AICTE grant in- aid of **Rs. 3, 30,000**/-(Three lakhs thirty thousand only).

The following are the events organized/attended by the students:

- Entrepreneurship development programs-Dream Session

  - Final Year students conducted **Dream session** for the **first year students** on 24/08/2016.In that session Final Year students explained about Engineers Without Borders (EWB) activity, importance of student club, Projects, Innovation Cell and Entrepreneurship cell activities.
  - TKREC Entrepreneurship Development Cell (EDC) strives for excellence in students. Students from EDC organized Entrepreneurship Development Program, Students have excelled in Start -Ups

namely Quick wash, Y Ride, SUDHAR and a company named OM Group of IT Solutions.

- A Special Lecture was given by Lecturer **Jong-ho-Kim** from IMEI (International Mind Education Institution), **South Korea** on 1st March 2017 through International Youth Fellowship (IYF) .
- Technology oriented Seminars/Workshops.

  https://www.youtube.com/watch?v=A01cgZlM7Mg

- Industrial visits/ Field trips .

The EDC is handled with high priority and is given significance by all for the effective and efficient growth of TKREC students future.

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

5. CONCLUSION

Additional Information :

- The Institute has qualified and experienced faculty who *mould* young aspirants to be a part of *nation building*.
- All the departments of TKREC conduct Seminars, Workshops, FDP & Techno fest to elevate technical knowledge, skills and self learning.
- Faculty members published number of research articles in national and international journals in various fields and presented research papers in national and international conferences.
- The Institution has Memorandum of Understanding (MoU) with ASDF. Conducted an International conference ICSSCCET 2017 and many of our faculty presented research articles in the conference.
- TKREC Entrepreneurship Development Cell (EDC) strives for excellence in students. Engineers without Border (EWB), a student chapter motivates students to become global leaders and also to look into the welfare of the society. Students from EWB worked on drinking water safety in Nalgonda dist. tested fluoride content using Akvo Cadis fly in different water resources. G.Saikiran from CE dept. presented his research article in International Conference ICACE 2017 held at Singapore and in ICSSCCET 2017 held at TKREC, Hyderabad.
- Mr. Akshith Reddy a dynamic and energetic cricketer from IT dept. played five matches in World Cup under19 in Indian cricket team. He played IPL (Indian Premier League) for Deccan Charges; he also played in Ranji Trophy.
- Ms Diana David an enthusiastic all- round women cricketer from department of MBA represented as a player in Indian Women Cricket team in Women World Cup.

Concluding Remarks :

The Institution has well established Governance, Leadership and Management in line with its Vision, Mission and Quality policy, with which it is able to establish some best practices uniting students and staff, serving the society to the level best.