



SELF STUDY REPORT

FOR

1st CYCLE OF ACCREDITATION

MATURI VENKATA SUBBA RAO ENGINEERING COLLEGE

**MVSR ENGINEERING COLLEGE NADERGUL BALAPUR MANDAL RANGA
REDDY DISTRICT**

501510

www.mvsrec.edu.in

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

March 2019

1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

Maturi Venkata Subba Rao(MVSR) Engineering College, was established in the year 1981 by Matrusri Education Society. The society was founded by a group of visionaries, who included eminent engineers, doctors, advocates and experts in finance and administration.

It is one of the early Institution that steered professional education in private sector in the combined state of Andhra Pradesh.

The college is situated in Nadergul village, 16 Kms from Hyderabad city centre, in a sprawling, well-developed eco-friendly campus, and has spacious built up area of 32,000 Sqm.

The college is established with the vision of imparting technical education of the highest standards, producing technically competent, confident and socially responsible engineers, on par with the best technical institutes in the country.

The college offers UG programmes in Automobile, Civil, CSE, ECE, EEE, IT and Mechanical Engineering, PG programmes in CSE, ECE and Mechanical, besides MBA, with an annual intake of 984 students. Diploma holders join as lateral entry in second year. There are currently 4007 students on rolls. There are 236 well qualified faculty and 168 skilled supporting staff.

Institute is affiliated to Osmania University, approved by AICTE and admissions are made as per the norms of the state government.

The UG programmes of Civil, Computer Science, ECE, EEE & Mechanical Engineering are accredited by the NBA four times and the programme in Information Technology thrice and also approved research centres in CSE, ECE, Mechanical departments.

College is ISO 9001:2015 certified, rated GOLD in AICTE-CII survey and participates in NIRF.

The college has 30 buses for transport of students and staff and is also well connected by State Transport buses.

The campus has a total land area of 18.275 acres including 5 acres of land for outdoor sports and 400 Sqm in RCC framed accommodation for indoor games.

A separate library building of 2,000 sqm is available with spacious areas provided for open-access stack area, journal, reference, e-journal sections. There are over 65,000 Volumes of text books.

The college awards Gold Medals to University rankers and class toppers of each branch and also honours Best Teachers each year from each department.

Vision

To Impart technical education of the highest standards, producing technically competent confident and socially responsible engineers.

Mission

- To Impart adequate fundamental knowledge, technical and soft skills to students.
- To make positive contribution to meet societal needs.
- To contribute to advancement of engineering & technology.
- To bring out creativity in students.
- To create a climate conducive to excellent teaching - learning Process.
- To make learning process exciting, stimulating and joyful.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

1. Vision, Values and Quality being pillars of Institutional development, Management is committed in improving and sustaining the achievements.
2. Six UG programmes are NBA Accredited in June 2018 and accredited previously three times since 2002. The college is ISO 9001: 2008 certified since 2011 and upgraded to ISO 9001: 2015 certification in 2018.
3. Well - Established Infrastructure to meet the needs as per ACITE norms. Good Internet Facility, transport facility are provided by the Institute
4. Well-qualified, experienced faculty committed to the qualitative development of the college. 44 of the 236 faculty possess Doctorate degree, 45 faculty members are pursuing Ph.D. Few faculty members have Patents and Copy right. CSE and ECE Dept. have faculty trained at CISCO and AMP for providing training to Students.
5. The institution follows well established student centric systems for improving CO, PO and PSO attainments. The examination and evaluation is centred around Course Outcomes and provides right ambience.
6. Campus placement is active through Placement Cell in the College with more than 60% of the students placed in prestigious organisations like Cognizant, Infosys, Wipro, Accenture etc., In addition off-campus placement is also effective. Effective skill training programmes are offered to enhance employability and self motivation.
7. Departments are actively involved in executing R & D and consultancy projects from GHMC, DRDO, RCI and other private Institutions. Consultancy worth 2 Crores were executed. College has several MOUs with Industry and reputed institutes for Faculty and student development.
8. College is Institutional member for Life time in IEI, ISTE and IETE professional bodies and also have student local Chapters of IEEE, CSI, ISTE, IETE, IEI, SAE. The college is certified by MHRD, GOI for Institutional Innovation Council.
9. Entrepreneurship Development and Innovation & Incubation Cells are active.
10. Well established feedback system is in place to improve Instructional practices and for continuous improvement.
11. College has achieved Institutional rating in Survey conducted by India Today, Career 360, AICTE CII survey rated Gold and participated in ARIIA for innovation achievements.

Institutional Weakness

1. To achieve financial autonomy, support from state government is expected in reimbursement of tuition fee in time and fixing appropriate tuition fee.
2. Efforts on funded research projects need to increase the quantum of funding.
3. Efforts in placing students in Core companies needs improvement.
4. Percentage of students getting opportunities for internships is to be improved. Consultancy works or Research projects from industry need improvement.
5. R&D laboratories and facilities, particularly involving multidisciplinary technology development is relatively limited.

Institutional Opportunity

1. Joint/Collaborative Research and Consultancy Activities: There is scope to increase the current level of research and consultancy activities involving Research Laboratories within the city, such as DRDL, DLRL, RCI, BDL, Midhani, etc., and institutions such as IIIT Hyderabad, IIT Hyderabad.
2. Quality Engineering Graduates: As there is a demand for quality engineers, the college can increase the intake into some of the engineering disciplines. Advanced engineering skills in various engineering disciplines may be provided by strengthening engineering workshops to address state-of-the-art skills.
3. PG programs: To start PG programmes and obtain Research Centre recognition for remaining four programs, so that Ph.D students can be enrolled furthering research ambience.
4. As there is need, awareness and support available for innovations, the college can establish a centre for industry centric research, innovations and incubations.

Institutional Challenge

1. There is need to establish and further the strategic alliance with prestigious national institutions, R&D Laboratories and universities to improve the quality of academics, research.
2. Fewer numbers of bright students are opting for postgraduate and research programs.
3. Those with excellent academic credentials are not choosing teaching profession.
4. An integrated approach is required to connect innovation and startup activity with industry and market needs through a structured course and a responsible partnership of all stakeholders.
5. The issues of adequacy of tuition fee, and timely reimbursement, both by State Govt, if addressed, the institution can accelerate its development and modernization.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

MVSREC though affiliated to Osmania University, contributes to changes in curriculum in order to introduce topics of current interest. Academic calendars are designed within the University almanac to include other co-curricular activities.

- The institution offers UG and PG programs in foundational engineering courses to produce graduates, competent to participate in the technological development of the nation.

- Each department makes an academic calendar based on the University almanac. Instruction, internal evaluation and cocurricular activities are well planned. Faculty prepare lesson plans for theory and laboratory courses. Course material and laboratory manuals are provided to students. Course Outcomes are written for each subject and attainments are also evaluated. Feedback from students on curriculum delivery is also carried out as per schedule.
- Choice Based Credit System is introduced from the academic year 2016-17, and most of the courses are accordingly modified. The number of elective courses are increased giving greater choice of subjects to students.
- Each department plays a significant role in the evolving of schemes of instruction, and course content relevant to current technologies taking the consent of Stake Holders, Alumni, Employers etc.,.
- All students are given career-oriented training by the Campus Placement and Training Cell. Students are encouraged to undergo certificate programs such as CISCO networking & special facilities are created for students to take up on-line courses like QEEE and MOOCs.
- A number of students undertake internships in industries each year.

Teaching-learning and Evaluation

Admission of students is based on the norms of the State Government, and as per the reservation policy in vogue. The college attracts meritorious students and enrolment was nearly 100% in each category during the last five-year period.

- There are 236 full time faculty members, of whom 44 possess Doctoral degrees. The average teaching experience of faculty is over 12.06 years. The institution follows STR of 1:15 for UG programs and 1:12 for PG programs.
- All classrooms are provided with amenities such as LCD and WIFI. Seminar halls are air-conditioned and additionally have PA system.
- Efforts are made by faculty to provide a creative environment through various student-centred approaches, like taking up innovative minor or major projects, seminars, assignments, and access to e-learning resources.
- The teaching-Learning process is through Outcome-based education. Each program has a well-designed set of Program Educational Objectives, Course Outcomes and Program Specific Outcomes are well defined.
- The Course Outcomes are written as per Bloom's taxonomy. The attainment and Program Outcomes mapping processes are robustly designed and implemented.
- Internal evaluation process is well defined and has been modified at component level in tune with CBCS system. The institution has a timebound student-friendly mechanism of redressal of examination related grievances.
- The college has a well-developed student feedback system that helps to ensure timely intervention in instructional processes and attainments of COs, Pos, PSOs etc.
- Average Pass percentage of final year students in the college is about 93.04% and over 50% of them pass with distinction.

Research, Innovations and Extension

- MVSREC has constituted a Research, Development and Consultancy Cell headed by a Professor for coordinating and encouraging Research, Development and Consultancy activities.

- The total amount received from Govt, Private sector and through schemes from AICTE is over 1 crore.
- The departments of CSE, ECE and Mechanical Engg. are recognized by Osmania University as Research Centre and 14 faculty members are recognized as Ph.D supervisors.
- 232 papers were published in UGC notified journals and 161 Conference papers were presented by faculty during the last five years.
- To train engineers/trainees of BHEL, Midhani and ISRO, the faculty organised several training programmes after design and development of course content.
- The institution has an active Incubation and Innovation centre. Many workshops on IPR and industry-related activities are organised each year for the benefit of students.
- Students are encouraged to work on innovative products including laboratory equipment, participate in various hackathons, design and build all-terrain vehicles for competitions. The college provides financial support for innovative final year projects, after screening by a Committee.
- Through NCC, NGOs and as individual groups, students participate in various extension activities. NCC cadets organise Blood donation camps at college; through the NGO 'Street Cause', collect funds from activities to donate to orphanages; educate students on computer use in neighbouring schools. Students of IEEE chapter won Darrel Chong "helping hands" award, Gold and Silver medals in 2016-17 and 2017-18, for rendering services to society.
- Swatch Bharat activities were carried out for 100 hrs by many students and were awarded certificates.
- Participated in Rally for Rivers organized by ISHA Foundation.
- The institute has been recognised as participating institute in Unnat Bharat Abhiyan
- 5K Run has been organized for Road Safety awareness.

Infrastructure and Learning Resources

- The college has a built up area of 32,000 SqM, in a 18.275 acre campus. There are 66 classrooms, 6 Seminar Halls and 72 laboratories, areas more than fulfilling AICTE norms. All the classrooms are provided with LCD and WIFI.
- For outdoor sports, five acres of playground is set aside. For indoor games and student activities, RCC area of 400 Sqm is provided.
- Rs.31 crores is spent on infrastructure augmentation during the 5-year period.
- A separate Library building of 2,000 Sqm house central library facilities. Each department also has a separate library.
- Library has a rich collection of 67,345 Volumes in 14,714 Titles, which are augmented each year. 119 print journals and magazines, and thousands of e-journals are available to students through subscription to IEEE, ASME, ASCE, J-GATE, INFIBNET, DELNET,NDL etc.
- The expenditure on books and journal subscription was 82.27 lakhs during the last 5 years.
- NewGenLib is the Integrated Library Management System used for all services.
- Library has a media centre which is used for creating video content of important topics by faculty.
- There are over 1100 computer systems in laboratories in the college. The student: computer ratio is 3.549. The computers and software are continuously upgraded.
- The current bandwidth is 100 mbps, under upgradation to 300 mbps.
- Campus maintenance and security are carried out by 50 personnel from difficult agencies; UPS, AC systems are on AMC; Maintenance cell takes care of the electrical, plumbing and minor construction. Equipment maintenance, calibration of instruments are done regularly.

Student Support and Progression

The college has several practices and systems in place to support the student community to ensure effective instruction and all-round development.

- Nearly 40% of students of low income groups and minorities are benefitted by the tuition fee reimbursement schemes of State and Central Govt. Students also receive national merit scholarship, and scholarships from private agencies.
- Many students who are active in professional societies like IEEE, CSI, ISTE, SAE organise technical events regularly. Students are encouraged to lead and participate in cultural and co-curricular activities. Students chapters have also won awards for their contribution.
- An effective Anti-ragging committee has made campus nearly free from ragging. Student counsellors for each class also help in redressal of grievances. Course monitoring is done twice a semester for feedback or issues related to unbehaviour.
- About 50% of the final year students enrol for job-oriented career counselling and special training in skill development for competitive examinations.
- There are over 60 linkages with industries for student projects and internships.
- Major software companies visit the campus for placement each year. The average on-campus placements during the last five years is about 60%. Average of students 30% get off-campus placements within one year. About 30 % of students opt higher education.
- The college organises 5 to 6 intercollegiate sports and cultural competitions each year. Each department organises technical and cultural events.
- The alumni association of the college has membership of over 4500. Annual alumni meet is organised in the III week of December. Alumni contribute by donations, through guest lectures and organising Workshops for faculty and students.

Governance, Leadership and Management

- The strategic impetus by the Governing Body of the college and the Executive Committee (EC) of the management are in line with the Vision and Mission of the college.
- MVSREC has a structured system of governance and administration. The Governing body and EC of Maturi Education Society (MES) take major policy decisions regarding the infrastructure and quality issues of the programs. The recommendations on academic developmental issues and facilities emanate from various departmental committees which comprises of faculty members.
- Welfare measures like PF, gratuity, ML, EL and others initiated by college are extended to all the faculty and staff.
- Financial support is provided to faculty to take membership of professional bodies, publication of papers and attending FDP etc. Nearly 45% of staff attend such programs each year.
- The college has a well established annual Faculty Performance Appraisal (FPA) system, which provides a net index of performance. Faculty with low performance index are counselled and appropriate steps taken to redress the issue.
- The college has a long established student opinion poll system, in which students rate a teacher for each subject handled. The overall ratings are given to teachers for their perusal and positive improvement.
- An Internal Quality Assurance Cell in accordance by the norms of NAAC was formed in December 2018. The quality initiatives are monitored by a College Academic Council (CAC) consisting of HODs, various cells or section incharges. Each department has committees for Program Assessment, Academic Audit, Results Evaluation, Curriculum Review and Student Interaction that provide inputs to the Dept. Advisory Board. The Board reviews and its recommendations are forwarded to CAC.
- Six of the seven UG programs are accredited by NBA three or more times. The college is ISO

9001:2015 certified and has participated in NIRF. The college has also been conferred UGC 12(B) and 2(f) status.

- The quality initiatives by the various committees have resulted in better facilities to students, better awareness of outcome based education, improvement in the attainment of COs and POs in many cases, upgradation of equipment in laboratories and quality of student projects.

Institutional Values and Best Practices

- The strategic impetus by the Governing Body of the college and the Executive Committee (EC) of the management are in line with the Vision and Mission of the college.
- MVSREC has a structured system of governance and administration. The Governing body and EC of Maturi Education Society (MES) take major policy decisions regarding the infrastructure and quality issues of the programs. The recommendations on academic developmental issues and facilities emanate from various departmental committees which comprises of faculty members.
- Welfare measures like PF, gratuity, ML, EL and others initiated by college are extended to all the faculty and staff.
- Financial support is provided to faculty to take membership of professional bodies, publication of papers and attending FDP etc. Nearly 45% of staff attend such programs each year.
- The college has a well established annual Faculty Performance Appraisal (FPA) system, which provides a net index of performance. Faculty with low performance index are counselled and appropriate steps taken to redress the issue.
- The college has a long established student opinion poll system, in which students rate a teacher for each subject handled. The overall ratings are given to teachers for their perusal and positive improvement.
- An Internal Quality Assurance Cell in accordance by the norms of NAAC was formed in December 2018. The quality initiatives are monitored by a College Academic Council (CAC) consisting of HODs, various cells or section incharges. Each department has committees for Program Assessment, Academic Audit, Results Evaluation, Curriculum Review and Student Interaction that provide inputs to the Dept. Advisory Board. The Board reviews and its recommendations are forwarded to CAC.
- Six of the seven UG programs are accredited by NBA three or more times. The college is ISO 9001:2015 certified and has participated in NIRF. The college has also been conferred UGC 12(B) and 2(f) status.
- The quality initiatives by the various committees have resulted in better facilities to students, better awareness of outcome based education, improvement in the attainment of COs and POs in many cases, upgradation of equipment in laboratories and quality of student projects.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	MATURI VENKATA SUBBA RAO ENGINEERING COLLEGE
Address	MVSR ENGINEERING COLLEGE NADERGUL BALAPUR MANDAL RANGA REDDY DISTRICT
City	HYDERABAD
State	Telangana
Pin	501510
Website	www.mvsrec.edu.in

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	Ganapavarapu Kanaka Durga	08415-245180	9703804723	-	principal@mvsrec. edu.in
IQAC / CIQA coordinator	J Kandasamy	-	9441346022	-	iqac@mvsrec.edu.i n

Status of the Institution	
Institution Status	Private and Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular

Recognized Minority institution	
If it is a recognized minority institution	No

Establishment Details

Date of establishment of the college	01-01-1981
--------------------------------------	------------

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

State	University name	Document
Telangana	Osmania University	View Document

Details of UGC recognition

Under Section	Date	View Document
2f of UGC	31-01-2008	View Document
12B of UGC	27-06-2011	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	30-04-2018	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	MVSR ENGINEERING COLLEGE NADERGUL BALAPUR MANDAL RANGA REDDY DISTRICT	Rural	18.725	30369

2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Programme/Course	Duration in Months	Entry Qualification	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BE,Automobile Engineering	48	INTERMEDIATE TSEAMCET	English	60	53
UG	BE,Civil Engineering	48	INTERMEDIATE TSEAMCET	English	120	120
UG	BE,Computer Science And Engineering	48	INTERMEDIATE TSEAMCET	English	180	180
UG	BE,Electrical And Electronics Engineering	48	INTERMEDIATE TSEAMCET	English	120	119
UG	BE,Electronics And Communication Engineering	48	INTERMEDIATE TSEAMCET	English	180	180
UG	BE,Information Technology	48	INTERMEDIATE TSEAMCET	English	90	90
UG	BE,Mechanical Engineering	48	INTERMEDIATE TSEAMCET	English	120	120
PG	Mtech,Comp	24	UG	English	18	16

	uter Science And Engineering		TSPGECET GATE			
PG	ME,Electronics And Communication Engineering	24	UG TSPGECET GATE	English	18	13
PG	ME,Mechanical Engineering	24	UG TSPGECET GATE	English	18	7
PG	MBA,Master Of Business Administration	24	UG TSICET	English	60	59

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	13				38				185			
Recruited	10	3	0	13	27	11	0	38	105	80	0	185
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				93
Recruited	67	26	0	93
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				75
Recruited	57	18	0	75
Yet to Recruit				0

Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt/LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	9	3	0	9	6	0	5	12	0	44
M.Phil.	0	0	0	0	0	0	1	5	0	6
PG	0	0	0	18	5	0	98	64	0	185
UG	0	0	0	0	0	0	0	0	0	0

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

Part Time Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt/LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	1	0	0	0	0	0	0	0	0	1
UG	0	0	0	0	0	0	0	0	0	0

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

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

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	565	8	0	0	573
	Female	289	0	0	0	289
	Others	0	0	0	0	0
PG	Male	31	1	0	0	32
	Female	62	1	0	0	63
	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	74	72	69	66
	Female	35	38	37	37
	Others	0	0	0	0
ST	Male	25	34	28	25
	Female	13	13	15	14
	Others	0	0	0	0
OBC	Male	293	297	246	280
	Female	126	133	119	126
	Others	0	0	0	0
General	Male	255	241	287	263
	Female	140	138	155	147
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
Total		961	966	956	958

Extended Profile

1 Program

1.1

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

Response: 682

File Description	Document
Institutional Data in Prescribed Format	View Document

1.2

Number of programs offered year-wise for last five years

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

2 Students

2.1

Number of students year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
4007	3984	3999	3829	3756

File Description	Document
Institutional Data in Prescribed Format	View Document

2.2

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

2017-18	2016-17	2015-16	2014-15	2013-14
344	344	344	344	350

File Description	Document
Institutional data in prescribed format	View Document

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

2017-18	2016-17	2015-16	2014-15	2013-14
1006	1003	1011	877	846
File Description		Document		
Institutional Data in Prescribed Format		View Document		

3 Teachers**3.1****Number of full time teachers year-wise during the last five years**

2017-18	2016-17	2015-16	2014-15	2013-14
250	245	245	228	212
File Description		Document		
Institutional Data in Prescribed Format		View Document		

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

2017-18	2016-17	2015-16	2014-15	2013-14
250	245	245	228	216
File Description		Document		
Institutional data in prescribed format		View Document		

4 Institution**4.1****Total number of classrooms and seminar halls****Response: 72****4.2****Total Expenditure excluding salary year-wise during the last five years (INR in Lakhs)**

2017-18	2016-17	2015-16	2014-15	2013-14
664.77	553.82	564.25	441.1	421.17

4.3

Number of computers

Response: 1038

NAAC

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curricular Planning and Implementation

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

Response:

Curriculum for each discipline is designed so as to fulfill the Program Educational Objectives of each discipline. It is ensured through the following planned and documented processes.

Curriculum: The scheme of instruction and the curricular content for each program is essentially designed after due exercise by the University Board of Studies of the Department. Heads of Department of the affiliated colleges are members of the Board. HOD of the institution takes inputs from all faculty, holds meeting with senior faculty of the Department and gives recommendations to BOS.

Academic Calendar: The department prepares a semester-wise academic calendar within the University almanac, scheduling instruction, assignments, tests, projects, expert lectures, workshops etc

Timetable: HOD holds a faculty meeting one month before start of semester to discuss their choice of the subjects offered. Faculty are requested to give preference of subjects and based on the preferences, seniority, typicality of the subject, subjects are assigned to faculty. Timetables are prepared also considering the service courses offered with other departments. Additional classes are organized for the benefit of academically weak students.

Lesson Plan: Instruction is carried out in each course as per the Lesson Plan for the semester.

Instruction material and Course Files:

- Before start of instruction, laboratory manuals, records and assignment books, audiovisual aids for class rooms are made available.
- Each faculty member prepares a Course file for the courses offered, as per Outcome Based formats, and include the course outcomes as per Bloom's taxonomy, lesson plan, notes, handouts, assignments, tutorials, question papers and audiovisual material. HOD monitors the coverage of syllabus of all courses as per the lesson plan.
- HOD reviews student results of corresponding semester of previous year for teachers to focus on the need for special care in any Theory or Practical courses.
- Faculty are required to give write-ups for briefing final year students on projects at the start of first semester. After allocation of projects and student groups, the respective guides ensure that students complete the project as per schedules after review by a project committee.
- Expert lectures, Case studies and co-curricular activities are also arranged to make up the curricular gaps.

Laboratories: Laboratory in charges ensure equipment in good working condition, and laboratory reports are continuously evaluated.

Attendance: By a computer-based system, attendance is monitored, and made available to students and parents on the college website.

Student Feedback: Course monitoring visit is conducted for each class twice in a semester, to check any instruction-related issues faced by students, and redress them appropriately.

CO & PO attainment:

- A formal mechanism of quantitative evaluation of the COs measured through internal and University assessment is in place.
- COs of each course is mapped to POs.
- The POs of all courses for the four years, and results of stakeholder-surveys are considered to evaluate PO attainments.
- PO and CO attainments are an index of curricular delivery, and faculty work on continuous improvement of CO and PO attainments.

File Description	Document
Any additional information	View Document

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

Response: 0

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
0	0	0	0	0

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

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

Response: 20.34

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
11	12	5	13	7

File Description	Document
Details of participation of teachers in various bodies	View Document

1.2 Academic Flexibility

<p>1.2.1 Percentage of new Courses introduced out of the total number of courses across all Programs offered during last five years</p> <p>Response: 33.72</p>	
<p>1.2.1.1 How many new courses are introduced within the last five years</p> <p>Response: 230</p>	
File Description	Document
Details of the new courses introduced	View Document

<p>1.2.2 Percentage of programs in which Choice Based Credit System (CBCS)/Elective course system has been implemented</p> <p>Response: 100</p>	
<p>1.2.2.1 Number of programmes in which CBCS/ Elective course system implemented.</p> <p>Response: 11</p>	
File Description	Document
Name of the programs in which CBCS is implemented	View Document

<p>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</p> <p>Response: 0</p>	
<p>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</p>	

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

File Description	Document
Details of the students enrolled in Subjects related to certificate/Diploma/Add-on programs	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 his/her education and societal commitment. The institute offers courses in gender sensitization, environment and sustainability, human values and professional ethics, and also regularly conducts various related activities.

Gender Sensitization:

- Enables the students to be sensitized to the gender issues being faced globally as gender touches the sphere of every student's life, both personal and professional.
- Awareness on the issues pertaining to the social, economic, and political aspects of gender and the inequalities observed on the basis of gender in the society can be sensitized through discussions, debates, facts drawn from everyday experiences, literature and films.
- Students are better equipped in dealing with the challenges of gender sensitive issues and can assert themselves in issues pertaining to equality and dignity, as also help students to regard individuals as humans rather than as men or women, and instill a feeling of empathy against the gender inequalities in vogue in the society.

Environmental Science and Technology:

- Rapid innovations of science and technology have resulted in the neglect of the consequences of the ecological imbalance, which has a direct impact on the survival of human race.
- Raise students' awareness on the environmental policies and regulations and enable them to design suitable technologies in line with the ecological regulations thereby contributing to conservation of environment leading to sustainable development.

Disaster Management:

- Enables the students to gain practical awareness in dealing with disasters, both man made and natural, which can help them to address multi-layered issues as floods, hurricanes, fires, bombings, and even mass failures of utilities or the rapid spread of disease.

- Insightful in providing practical exposure to various aspects of emergencies and disasters thereby enabling them to realize the potential and limitations of science, its role in society and people's onus in mitigating the disasters.

Human Values and Professional Ethics

- Values form the base of any individual's character and account for the ethical behaviour as the individual progresses in the society.
- Enabling the students understand the values that ought to guide their profession helps in resolving the moral issues through moral judgment concerning the profession and can help them discharge their responsibilities with sincerity and integrity.
- Instilling the human values to be ethical and professional in one's domain can contribute to harmony at all levels, contribute to the students' finesse in dealing with different kinds of people in their profession.

Typical Activities Organised:

- Tree plantation drives
- Energy Conservation Seminars / events
- Clay Ganesha
- World water / earth day
- Lectures on ethical values by Sri Ramakrishna Mutt and others
- Womens Day
- SHE Team talks by Police Dept for women

--

File Description	Document
Any Additional Information	View Document

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

Response: 13

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

Response: 13

File Description	Document
Details of the value-added courses imparting transferable and life skills	View Document

1.3.3 Percentage of students undertaking field projects / internships

Response: 4.42

1.3.3.1 Number of students undertaking field projects or internships

Response: 177

File Description	Document
Institutional data in prescribed format	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

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:

Response: B. Feedback collected, analysed and action has been taken

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: 0.17

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
11	10	5	7	0

File Description	Document
List of students (other states and countries)	View Document
Institutional data in prescribed format	View Document

2.1.2 Average Enrollment percentage (Average of last five years)

Response: 97.87

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
961	966	956	958	998

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
984	984	984	990	1002

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:** 100

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
344	344	344	344	350

File Description**Document**

Institutional data in prescribed format

[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:****Identification**

Advanced and slow learners are identified at the first year level,

- Based on the marks in the intermediate examination and the rank obtained in the common entrance examination EAMCET. These are checked for correlation with the assessments by individual teachers, and the student counsellors.
- The class room performance of each student is individually noted through tests and quizzes and by interaction in the laboratories.

In the later years, learning levels of students are observed by their performance in the Internal tests, assignments and laboratories, as well as by interaction of Counsellors. Once they are identified, they are encouraged to work focused in ways that suit their aptitude and progress.

Slow Learners:

For those identified as slow learners or poor performers,

1. Attendance is checked, and if poor, students are counseled by the mentors of the need to be regular and to catch up with bright students.
2. Presence in tutorial classes and remedial sessions is ensured to improve the problem solving skills, strengthen the concepts, and also to help in clearing any backlogs through interaction among the students and faculty members.
3. Personality Development Programs are conducted to build up confidence level, overcome their

weaknesses and to inspire them to work diligently.

4. In the laboratory classes, faculty pay attention to help them correlate theory with experimental process and results.
5. Special efforts are made to ensure that parents attend the teacher-parent meetings, to inform them of the attendance and performance in internals, so that they encourage their wards to perform better.
6. A qualified Counselor's help is sought, when necessary, in addressing psychological barriers, and to boost confidence levels, to help in their academic pursuits.

Advanced Learners: Advanced learners are given encouragement and incentives to perform better in academics, beyond curriculum, as well as to pursue their special interests or talents.

1. Short term courses are organized beyond curriculum topics.
2. Encouraged to register in student chapters of professional societies like ISTE, SAE.
3. Providing funds to build Automobiles to compete in National level competitions.
4. Academic Performance Awards are given to toppers of each section, for all the disciplines, based on University Examination performance.
5. Prescribed text books for the two succeeding semesters are presented to the students for their performance.
6. Campus Recruitment Training (CRT) classes are organised by the college so as to enable them to obtain placement through campus interviews.
7. Encouraged to take competitive examinations like GATE and Engineering services, by providing them with questions and solutions of the last few years.
8. For those within top 10 ranks in GATE, tuition fee is paid for PG studies.

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

2.2.2 Student - Full time teacher ratio

Response: 561:35

2.2.3 Percentage of differently abled students (Divyangjan) on rolls

Response: 0.15

2.2.3.1 Number of differently abled students on rolls

Response: 6

File Description	Document
List of students(differently abled)	View Document
Institutional data in prescribed format	View Document
Any other document submitted by the Institution to a Government agency giving this information	View Document

2.3 Teaching- Learning Process

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

Response:

The Teaching-learning process aims chiefly at outcome based education and the faculty adapt student-centric methods to enhance learning experiences.

Experiential Learning: Pedagogical initiatives are applied to all the theory and Laboratory courses.

- The theory courses mainly follow the lecture plan that emphasizes analytical thinking, comprehension and reasoning. Classroom teaching is supplemented with additional learner-centric activities such as seminars, problem solving through tutorials, assignments and guest lectures by eminent researchers, industrialists and academicians.
- The laboratory courses are designed with emphasis on hands-on experience required for comprehensive understanding of the subjects.
- College library has a good collection of text books, Journals and Magazines. Library also provides access to on-line Journals of ASME, IEEE, INFLIBNET, DELNET IEI etc. Thus the scope of learning widens giving students an education that is greater than the syllabus.
- Industrial visits are organized in all disciplines for the students to acquaint themselves with current industrial practices.
- Students are encouraged to undergo industry internship during semester break to gain core competency and hands on experience on latest technology.
- Short term courses on beyond curriculum topics are arranged during summer vacation.

Participative Learning:

- Mini projects help students with an ability to design and implement through hands on experience. Students are encouraged to use online database and domain specific open resources.
- All programs, both UG and PG, have mandatory project work in the final year, while some programs also have mini projects each semester. Many of these projects are in conjunction with industry and R&D labs. Students are also encouraged to carry out in-house fabrication projects. The assessment is based on type of the project viz., Application, Product development, Research and Review. It is also assessed for ethical responsibility, environment Safety, society, Innovation/IPR.
- A team of external judges from Industry, R&D, academic institutions and professional bodies evaluate and rank the projects in department wise. Certificates of Appreciation are given to the best projects.

- Student Chapters of Professional societies like IEEE, CSI, and SAE are encouraged and also provided funding for in-house fabrication of products which have potential for National level competitions. Institution is also associated with professional bodies ISTE,IE(India).
- An exclusive audio-visual facility is available for accessing NPTEL, QEEE lectures. The facility is being used by the faculty and students to upgrade their knowledge beyond classroom teaching.
- National level workshops on advanced technologies, Conferences, Technical fests with model, paper, poster presentations are organized for students to imbibe skills to solve real time problems and to compete with fellow graduates at National level.
- Project exhibitions are organized to showcase the fabricated models of various disciplines to faculty and students.

Problem Solving:

- Tutorial sessions are mainly devoted for instruction in problem solving methods
- Students participate in consultancy projects
- Students regularly participate hackathons involving in real time problem solving
- Alumni donation is used for prizes in 24-hour Codethon contest for students

File Description	Document
Any 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:** 94.4

2.3.2.1 Number of teachers using ICT

Response: 236

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:** 733:30

2.3.3.1 Number of mentors

Response: 164

File Description	Document
Any additional information	View Document

2.3.4 Innovation and creativity in teaching-learning

Response:

Innovative teaching approaches are encouraged for effective learning. Innovative teaching approaches adopted by different faculty include:

1. Exclusive notes on core subjects are prepared and distributed to the students. These notes contain important questions, critical analysis of problems with clearly depicted solution. These notes are available in the college website for easy access to students.
2. Exclusive Videos are collected and compiled by the faculty in different subjects for displaying them to students during discussions in class rooms.
3. Model presentation of mechanisms and systems are demonstrated in classrooms for active learning of subjects.
4. Exclusive NPTEL and QEEE lectures are provided to students. Interactive teaching tools like Google Classrooms, MOOCS are used by the faculty for better understanding of the subjects.
5. Students are encouraged to solve assignments in classrooms with open book system and discuss with their fellow students.
6. In the laboratories, emphasis is laid on students individually gaining in-depth knowledge while conducting the experiments..
7. Students are required to study their experiment before the class. Students are encouraged to discuss among themselves during this study and be ready to answer any queries by faculty. It is observed that this method of instruction made students prepare and correlate the experiments with the related theory and also made them confident on conducting the experiment on their own.
8. Experiments beyond curriculum are introduced in the laboratory manuals. Students are exposed to these experiments as additional information in the laboratory course work. Seminars and Projects encourage team spirit among students and ability to think independently on the problem. Faculty assist students in formulating their ideas, design of components and final development of the systems.
9. As per curriculum, general seminar and project seminar are arranged for final year students. All the students of the class are required to attend. After the seminar, students are randomly asked to sum up the seminar contents. Students are encouraged to raise questions. It is observed that this practice has improved the attention and engagement of students in new areas of technology in their discipline.
10. Final year students carry out in-house fabrication as a part of their project work and some of these successful projects form a part of experiments of the laboratory or experiments beyond curriculum too. Through such in-house fabrication projects, students are encouraged to innovate and come up with new ideas.
11. Special Assignments are given to bright students to encourage their abilities in interdisciplinary courses.
12. Students are trained so as to attain POs
13. Refresher courses and orientation programs are organized by experienced faculty to junior teachers to enhance their teaching skills, as also to gain confidence to handle new courses.

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: 99.81	

File Description	Document
Year wise full time teachers and sanctioned posts for 5 years	View Document

2.4.2 Average percentage of full time teachers with Ph.D. during the last five years	
Response: 15.84	

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
47	46	42	30	24

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

2.4.3 Teaching experience per full time teacher in number of years	
Response: 12	

2.4.3.1 Total experience of full-time teachers	
Response: 2999	

File Description	Document
Any additional information	View Document

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

Response: 5.93

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
3	3	2	5	1

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

2.4.5 Average percentage of full time teachers from other States against sanctioned posts during the last five years**Response:** 29.64

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
89	87	81	75	24

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

2.5 Evaluation Process and Reforms

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

The college being affiliated to Osmania University follows the norms stipulated for Internal examinations, which are changed from time to time. Also, at the college level, efforts are made to improve the system by decentralization.

Reforms at College level:

- **Outcome based:** From the year 2014-15 the questions were set as per Bloom's taxonomy levels and indicating the Course Outcome number. Assessment in internal and external examinations is carried out to find CO attainments which are later mapped to PO and PSO attainment for the course.
- Internal Examination Conduct responsibility shifted from Central College level to Departments. This change has avoided problems of allocation of Examination halls and invigilators and helped departments address specific local problems.
- **Better Confidentiality:** Earlier, teachers used to give manuscripts of question papers, these were collected by Examination in-charge, got them typed, take prints and arrange distribution. Now, teachers are sending soft copies to the HOD confidentially. This reform has reduced lot of manual work.
- **Check on Quality:** Evaluation and Result Analysis committee reviews all the question papers as to the correctness of questions, language, syllabus content and guidelines. The committee consists of 2 or 3 senior professors, and if the questions are improper the teacher concerned are informed to effect correction.
- Project guide alone used to award marks for project internals till 2013-14. Projects Review Committees are constituted in each department to review the aptness of the project, quality and quantity of work involved, and award 30 out of 50 marks.
- **Display of marks:** Earlier, subject wise internal marks used to be shown to students by individual teachers and consolidated marks are displayed in notice board, while they are now displayed on notice board and also put in college website, so that parents also can access them which help them track the progress of their wards. College is using MVSr.WINNOU.NET software for this purpose.
- Internal marks are also uploaded to OU, controller of exams online for more transparency.

Reforms at University level:

- Currently, College follows Choice Based Credit System (CBCS) for I & II years and non-CBCS for III & IV years, which has
- For non-CBCS Semester system is from II year, while for CBCS semester system is introduced from I year itself.
- Distribution of marks is revised to 30 from 25 for internal exams and 75 to 70 marks for external exams.
- Internal Evaluation now includes quiz tests for 5 marks.

Pass marks:

- In CBCS pass mark is 40% including internal evaluation while in the non – CBCS, pass mark is 40% of external exams alone (i.e. 30 out of 75). This reform has made students concentrate better on instruction during the semester.
- From the year 2018-19, Model Curriculum on the lines proposed by AICTE is introduced.

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

Response:

The mechanism followed for Internal assessment is described below.

The assessment process is outlined for theory and laboratory courses, which is common for all the years. Seminars and Project seminar currently applies to final year students.

Theory Courses:

- Two internal examinations are conducted in every semester, one each after 7 weeks of instruction.
- The subject coverage for each internal is 2 to 2.5 Units or 40% to 50% of the syllabus.
- The question paper is common for all 70 and odd students of a class. The time of examination for each subject is also common for all the students thereby ensuring utmost transparency.
- In the current practice, for I to III year students, assessment is also done through two quiz tests. Each quiz is conducted along with the Internal Tests
- The questions are followed by the Course Outcome (CO) number, to facilitate the student and the teacher about the attainment of the CO by the student as well as the class.
- The corrected answer scripts are given back to students and grievance of any student regarding valuation is addressed by the teacher.

Laboratory courses:

- Students are assessed on continuous basis by awarding marks for their performance of individual experiments which is communicated during the next class.
- The division of marks in the laboratory courses is
 - Laboratory Report – 15 marks
 - Viva- Voce or objective –type test-5 marks
 - Internal Examination – 5 marks.

The distribution could vary depending upon the nature of laboratory course.

Seminars:

A committee of three teachers evaluates the seminar given by students on the following criteria:

- Relevance of the material to the topic
- Survey of literature / Background work
- Methods employed or suggested
- Effectiveness of presentation
- Report submitted

The criteria are told beforehand to the students. The report carries 10 marks out of 25 marks, while the others depend on the nature of topic.

Final year Project: The final year projects are assessed in two stages.

In the first stage, the criteria are:

- Definition of the problem
- Survey of literature or of relevant existing systems
- Proposed methodology

- Report submitted
- Interaction with guide

In the final stage, the criteria are:

- Justification of equations, Algorithms or designs used
- Demonstration of the program or models developed
- Results obtained and inferences drawn
- Effectiveness of presentation
- Report
- Interaction with guide and outside organizations

Presentation is divided between the members of the project group, but each student is expected to know the complete system.

- The methods adopted are different depending on the nature of the subject. However, the assessment process for each type is well defined. Also, the tests and seminars follow the regular frequency as per the academic calendar.
- Thus the internal assessment processes are transparent and robust in terms of frequency and variety.

File Description	Document
Any additional information	View Document

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

Response:

Redressal Mechanisms Transparency and efficiency:

Internal examinations:

1. Teachers discuss the answer to the questions given in the internal examinations soon after the examination. Typical Assignment problems are also discussed in the class. The key for problematic questions is given to students either by display on notice boards or other means.
2. Answer scripts are given to students to report any grievance within a week after the test.
3. Students may report any discrepancies like disparity in marks awarded, method adapted etc., to the notice of the teacher concerned. Changes, if any, in the marks awarded are shown to students.
4. Marks awarded for assignments, quiz tests, seminars, mini projects and main projects are also shown to students.
5. The final marks are displayed well in advance, giving sufficient time to report errors or discrepancies in the award of marks, before sending the final internal marks to University.
6. If errors are still noticed in the final marks sheet, which can arise only while uploading to University portal, internal marks are corrected by paying stipulated penalty to the University.

External Examinations:

- On the day of exam, if there is any delay in the start of examination, necessary extra time to the extent of delay is given to students.
- If a student forgets to bring the Hall Ticket or loses it, a duplicate Hall ticket is issued on that day after ensuring his identity from the Exam in-charge of the concerned college.
- If some questions are out of the syllabus, students may bring the same to the notice of the concerned teacher in the college, who represents the same to the University through the HOD and Principal. If the grievance is found to be genuine by the Chairman, Board of studies, suitable amends are made in the marks awarded, after discussion with the Chief examiner for the subject.
- When the marks awarded in the final examination are found to be not commensurate with their expectations, or correction is found to be erratic, the same is represented to the University. In such cases, controller of examinations may take a decision to revalue the answer scripts.
- If some students find that the marks awarded are less, they may apply for revaluation paying the required fee. The answer scripts are then valued by two examiners independently, and best of the two is awarded. If there is a wide variation between the two, a third examiner evaluates the same.
- Student can also get a photocopy of his/her answer sheet to check the correctness of valuation. If the student finds that the valuation is improper, the same is represented to University for redressal.

Time bound

- Corrections in Internals are done within ten days of their conduct.
- Corrections in external examinations are completed well in advance so that students who pass in revaluation need not reappear.

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

Response:

University Calendar

- The Dean, Faculty of Engineering, Osmania University convenes a meeting with principals of all affiliated colleges under Osmania University generally during May/June to discuss & decide the almanac/academic calendar for the two semesters of the ensuing academic year.
- The Academic Calendar contains details that include starting day of instruction, the dates for the conduct of two internal examinations, last day of instruction, the last date for uploading internal marks etc.
- The institution follows strictly this academic calendar. The Internal examinations will be conducted as per the dates suggested in calendar except in the case of any exigencies or unforeseen circumstances with a maximum deviation of 3 or 4 days.

Department Calendar

- A semester consists of 16 weeks of instruction.
- Each department also prepares a calendar of academic activities to be carried out for each semester including schedule for internal examinations.

- I Internal and Quiz test are normally scheduled in the 8th week and the second Internal and Quiz are conducted in the 15th week.
- Internal examinations are conducted for II, III and IV year students on 3 to 4 days with two examinations per day.
- The component of assignment for five marks out of total 30 marks is also addressed by all teachers uniformly as per the academic calendar by giving first assignment before the conduct of first CIE and second one before second CIE.
- Internal examination is also conducted for Laboratory in many cases and these are scheduled in the 15th week of the semester.
- For final year project work also, minimum two reviews will be made by the project review committee to assess the progress of the project work. The dates of this review also are mentioned in the department calendar of events.

File Description	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:

Program Outcomes: For engineering programs there are twelve wholesome attributes, which are globally accepted as the Program Outcomes (POs) to be attained by the students by the end of the program.

These are Knowledge, Analysis, Design, Investigation of complex problems, Modern Tools usage, Role of Engineer in society, Environmental awareness, Ethics, Team spirit, Communication, Project management & finance and Life-long learning.

Program Specific Outcomes (PSOs) are those proposed by the department for a program, and are defined based on the strength of the faculty in certain technical areas and also the local requirements or conditions. Hence PSOs would be unique to a program in an institution.

Course Outcomes (COs) are 5 to 6 statements written for each course (i.e. subject), indicating the knowledge or skills that students would attain by the completion of that subject.

- These are written considering the syllabus designed for the course, and refer to the ability with respect to any of the six levels of cognitive domain, namely, knowledge, comprehension, application, analysis, evaluation and creation.
- COs are written starting with the action verbs as per Bloom's taxonomy, appropriate to the respective cognitive level.
- A Course Outcome, rather than an expectation or objective, is an assurance by the faculty of a certain ability of students by the time they complete the course. As such, a CO needs to be measurable to quantify the attainment.

- The measure of a CO is taken as the performance of students in internal evaluation (CIE) and semester end examinations (SEE).
- The questions in CIE and SEE are designed to cover all the Course Outcomes
- Typically, a program has about 60 courses for which the COs are prepared by the respective department and displayed on the website.
- Each course is mapped with POs and PSOs, and is indicative of the expected attainment of the PO/PSO by pursuing a course.

The above CO-PO relation is used to convert the CO attainments to PO and PSO attainments, which are obtained for all the courses in the program.

Communication to teachers and students:

- 1.The program Outcomes and Program Specific Outcomes are displayed prominently in the classroom corridors, near the office of HOD, and in the laboratories.
- 2.CO's are printed in the syllabus books given to students.
- 3.Teachers specifically mention the COs for the courses they handle.
- 4.CO's of laboratory courses are displayed in the laboratories, and are printed in the Laboratory manuals.
- 5.The website of the institution provides the COs for all courses offered by the department for each program.
 - There are over 400 different courses offered in the college. COs of all the courses are displayed on the college website.
 - The Vision and Mission of the College and the department, and the Program Educational Objectives and POs/PSOs are displayed in the corridors and conference halls of the department and also published in Laboratory Manuals, Department Newsletters, and Workshop brochures.

File Description	Document
COs for all courses (exemplars from Glossary)	View Document

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

Response:

POs and PSOs: As described in 2.6.1, the twelve POs are common globally for all technology programs, while PSOs are defined by the department offering the program.

- The attainment of POs/PSOs are quantified as levels 1, 2, 3 to indicate low, medium and high.
- The PO attainment value is made up of direct and indirect components.
- Direct component is based on CO attainments. CO attainment in a course is obtained typically from two internal examinations and two assignments (CIE) and the semester end university examination (SEE).

- CO attainments are found for each of the courses offered to I, II, III and IV year students and mapped to PO and PSO as per the CO-PO matrix of the course.
- component is determined from surveys of outgoing students, alumni, employers, and professional bodies.

CO attainment Procedure for CIE:

- Marks obtained by each student for each question in internal test covering a certain CO are tabulated.
- Tables are prepared similarly for each internal and assignments and quiz where applicable.
- The above tables are combined to evaluate the overall marks for each CO.
- Percentage of students scored >50% (>= 70% for Labs) of the maximum marks is determined.

For multiple sections, the average of each CO for all sections is determined, and a level is assigned to each CO.

External Examinations (SEE): Percentage of students scoring >50% in SEE is found, and a corresponding level is assigned to each CO.

Net CO levels are obtained by combining CIE and SEE in the ratio 30:70. The Course Outcome attainments and the targets set are also compared for faculty to reflect and improve where necessary.

- Average of CO attainment is mapped to PO/PSO attainment levels using CO-PO matrix of the course (Section 6.2.1).
- The above procedure is carried out for all the courses from I to IV years of the program, and PO/PSO attainment table is prepared.
- The average value of PO/PSO is calculated from the table based on the occurrence of the PO or PSO. These values are the direct attainment values of PO/PSOs.
- Indirect Component is obtained from Surveys and Rubrics.
- Survey forms are given to outgoing students, alumni and employers for the perceived attainment levels of PO/PSOs. Attainment levels are obtained by averaging values of each group.
- Rubrics are used for POs that are not easily quantifiable or are not adequately covered in curriculum. For all the extra-curricular activities covering the POs, attainments are obtained from the coordinating faculty.
- Direct and indirect components are combined in the ratio 80:20 from POs 1 to 5 and as 60:20:20 from PO6 to PO12 and the PSOs.
- Curricular gaps are fulfilled by co-curricular activities. Contribution of these activities is further added to obtain the net PO/PSO attainment levels for a program during an academic year. The overall process is given as flowchart.

File Description	Document
Any additional information	View Document

2.6.3 Average pass percentage of Students**Response:** 93.04

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

Response: 936

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

Response: 1006

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

2.7 Student Satisfaction Survey**2.7.1 Online student satisfaction survey regarding teaching learning process****Response:** 3.23

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: 157.29

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
15.65	20.14	55.3	49.65	16.55

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

3.1.2 Percentage of teachers recognised as research guides at present

Response: 5.6

3.1.2.1 Number of teachers recognised as research guides

Response: 14

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: 0.29

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

Response: 18

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

Response: 306

File Description	Document
Supporting document from Funding Agency	View Document
Any additional information	View Document

3.2 Innovation Ecosystem

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

Response:

The college has an ecosystem for innovations and management of intellectual wealth on a continuous basis and is in place and functional. Our organization structure, resources, continuously upgraded knowledge, qualifications and skill-sets of faculty and students, and their free and creative interactions provide the ecosystem for innovations.

1. The college has Entrepreneurship Development Cell and Innovations & Incubation Centre. We have Institution Innovation Council (IIC) established with Innovation Centre, MHRD (AICTE), 21 November 2018. We have development and fabrication space for development of prototypes.
2. The college offers Entrepreneurship and Intellectual Property Rights as formal courses in the curriculum to students of various engineering disciplines.
3. The college holds a regular annual event, "Projects Exhibition" showcasing some of the innovative projects developed into prototypes by students and faculty funded by the college. Students, Industry, Academia, Bankers & Investors, Government Policy Makers and other Support Institutions such as MSME, NI-MSME, THub, WeHub, etc., attend and participate to take this innovation initiative further.
4. The college supports innovations in Product/Technology development. Some Innovations in the field of electric cars and other vehicles are: Golf-Car, and powered wheel chair for disabled. Currently students are studying a list of 50 innovative projects listed in EDC & IIC portal of MVSR Engineering College.
5. The college provides ambience for Innovations in Laboratory through Design of Experiments and Laboratory Manuals, Development of Products, Development of Test-Rigs, Projects, Testing and Certification.
6. The college has designed courses and delivered week-long lectures and practical sessions at the request of organisations like BHEL, ISRO, MIDHANI, RCI, DRDO etc., to train their engineers.
7. Active student chapters of Professional Societies such as IEEE, CSI, and IETE provide innovation ecosystem. Student Clubs and Interest Groups, a highly organized and continually updated College Library, and a good Industry-Institution interaction are active components of the eco-system.
8. The college motivates and support creativity in students by encouraging them as members of various clubs, like literary, Fine arts and photography, music etc.
9. The college motivates and support innovations by students and help them participate in various Hackathons, Start-Up Challenges and Competitions:

Our students

- Hemalekha, Ishwarya, Simran, BhanuTeja, Sai Nikith and Karan have been finalists at Smart India Hackathon, Jaipur, 2017. This year we have 22 registered project ideas under Smart India Hackathon 2k19.
- Fazeel Hasan Usman is invited by Google in October 2018 to San Francisco, California, USA for his contribution to Google Maps.
- Automobile Engineering were finalists in SAE Baja All-Terrain Vehicle Competition, 2017 and students of Mechanical Engineering have held 17th position all over India in Efficycle 2017. Students are motivated and are participating at Atal New India Challenge and Innovations in Defence Excellence iDEX, DRDO Innovation Contest, Bizarena, and WeHub.

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: 5

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

2017-18	2016-17	2015-16	2014-15	2013-14
01	00	01	03	0

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:** No**3.3.3 Number of Ph.D.s awarded per teacher during the last five years****Response:** 0.5

3.3.3.1 How many Ph.Ds awarded within last five years

Response: 7

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

Response: 14

File Description**Document**

List of PhD scholars and their details like name of the guide , title of thesis, year of award etc

[View Document](#)**3.3.4 Number of research papers per teacher in the Journals notified on UGC website during the last five years****Response:** 1.19

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
86	63	67	41	25

File Description**Document**

List of research papers by title, author, department, name and year of publication

[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:** 0.49

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
41	29	18	20	07

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

3.4 Extension Activities

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

Response:

The college gives great importance to organising activities which will impact and sensitise students to social issues. Many such activities were conducted during the last five years. Around 300 students of professional societies and 50 students of NGOs are actively participating and volunteering activities addressing social issues in the neighbourhood community.

1. Blood donation camp: The college organises blood donation camp every year for the students and staff of the college. Around 300 units of blood collected from this camp is distributed to societies like Redcross, Durgabai Deshmukh Hospital etc.

2. Road Safety: “Road Safety Week” was organised by the Automobile Engineering Department of the college in the years 2015 & 2016. Also, a 5K run was organised on Necklace Road, Hyderabad and over 1000 students and staff actively participated. At main traffic junctions of Hyderabad the students made efforts to spread awareness about road safety.

3. Auto Cognizance: This is a biennial technical fest conducted by Automobile and Mechanical Engineering of the college. During this fest the students demonstrate the working of automobile engines to the students of neighbourhood schools also.

4. Street Cause: Around 50 students of our college are members of Street Cause, an international NGO. Funds from “Run For Cause”, and “Eco-Ganesh” (Clay idols) were used to adopt a village near Mahboobnagar, and to buy blankets for the poor people.

5. Activities organised by professional societies: The IEEE student branch of the college has been organising an event “Helping Hands” for the past 5 years. The funds raised were used to improve facilities in orphanages, blind and old age homes. This event is usually conducted on January 26th or August 15th. Some students trained students of the orphanages on basics of computers. The IEEE student branch won Darrel Chang International award for the years 2015 and 2016. Many Events are also organized under CSI and ITSA.

6. Lectures by eminent speakers: To inculcate human values and holistic development of the students,

lectures by eminent speakers like , Sri Swamy Bodhamayananda of Ramakrishna Mutt, as also by others on Independence Day and Republic Day, are regularly organised.

7. NCC Activities : The Airwing NCC of the college consisting of around 30 cadets has organised many activities like No Tobacco Day, Eradication of Child labour and awareness towards AIDS, in the past academic years.

8. Society Outreach Program: Students are encouraged to learn the concept of pay back to society and change the attitude of society.

9. Renewable Energy Club : Since the year 2015 the departments of EEE and Mechanical Engineering are conducting a technical festival called “Akshay Urja” to promote the usage of renewable energy, to create awareness among the students about usage of non-conventional energy sources for a pollution free environment. Bicycle rally was organised as a part of this festival.

10. Students of our college participated in the campaign “**Rally for Rivers**” organised by ISHA foundation in 2017, to create awareness about replenishing our vanishing rivers

File Description	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: 5

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
1	1	1	1	1

File Description	Document
Number of awards for extension activities in last 5 years	View Document
e-copy of the award letters	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: 13

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
6	4	1	1	1

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

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

Response: 7.64

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
457	358	340	280	75

File Description	Document
Average percentage of students participating in extension activities with Govt or NGO etc	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: 0

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
0	0	0	0	0

File Description	Document
Number of Collaborative activities for research, faculty etc	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: 63

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
30	13	9	7	4

File Description	Document
Details of functional MoUs with institutions of national, international importance, other universities etc during the last five years	View Document

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

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

Response:

The institute gives utmost importance to provide adequate facilities for teaching-learning process. The infrastructural facilities such as buildings, laboratory equipment, and learning resources of the institution are continuously augmented in order to improve the teaching – learning processes progressively.

Campus Features:

- The campus is built in 18.275 acres area.
- Total built up area is over 31000 sq.m. Six separate RCC buildings house all the departments and 4 workshop sheds.
- Two more RCC buildings accommodate the central library and canteen and indoor sports.
- Outdoor sports facilities are in 5 acres.
- The instructional facilities are more than those stipulated by the AICTE norms.

Classrooms:

- There are 64 classrooms of total area of 5000 sqm., for the UG and PG programs.
- All the classrooms have LCD projectors and Wi-Fi is available across the college.

Laboratories:

- There are 72 laboratories occupying 8,600 Sqm.area.
- Laboratories are well-equipped, catering to curriculum and beyond, and also to carry out mini projects and final year projects.
- Departments of ECE, CSE and Mechanical Engg. are recognized as Research Centres by the affiliating Osmania University for guidance of Ph.D scholars.
- Laboratories are provided with fire extinguishers and First Aid kits.

Seminar Halls:

- There are seven Seminar halls with areas varying from 80 to 320 sqm., the seating capacity ranging from 70 to 350. All are provided with LCD projector, ACs, Audio systems, and internet.

Computing equipment:

- The institute has over 1250 desktops and 10 servers to cater the needs of all the departments, and library. Laboratories have the latest softwares as per curriculum.
- Each of the department has one or more computer laboratories

Library:

- Central library is in a separate spacious library building of 2000 sqm.
- The facilities include open-access text book area, Reference section, Periodical section with 200 magazines and journals, e-reference centre, student discussion cabins, and media centre.
- There are currently 64,000 Volumes with 23,000 Titles.
- Department Library with relevant books and magazines, and access to e-learning resources such as NPTEL, Spoken tutorials etc.
- Staff and students have on-line access to thousands of journals of IEEE, ASME, ASCE, INFLIBNET, DELNET etc..

For differently-abled students, buildings have

- Elevator facility
- Ramps at the entrance
- Toilet for physically challenged

General facilities include:

- Power back-up with three Diesel generator sets of 250 kVA, 82.5 kVA and 50 kVA.
- RO plants of 2000 ltrs/hr capacity
- Wi-Fi enabled campus
- Separate or shared Girls lounge
- College Transport, Dispensary, Stationery shop, Reprographic facilities, Spacious Canteen, adequate vehicle parking, Bank with ATM facility and Ambulance.

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:

Sports

The institution has created adequate facilities and encourages students to participate in sports and games, and cultural activities. Every effort is made to promote fitness, health and wellness as part of development of holistic and all-round personality of the students.

A five-acre area is made available in the college campus for sports and games, besides an RCC structure for indoor games.

Department of Physical Education and Sports provide ample and diversity of activities to participate in the physical activity, exercise and sports and competitions.

College organizes annual inter college sports festival “Athlema” to showcase students sporting spirit to win and prove among the thousands.

Indoor Games Facilities

An area of 2,220 Sq.m. is available for indoor games of

Table Tennis, Badminton, Chess and Caroms.

Outdoor Games Facilities:

The college has 5 acres of ground providing

- Football Field,
- Hockey Field,
- Cricket ground
- Ball Badminton Court
- 2 Volleyball Courts
- Handball court
- Kabaddi Court
- Basketball Court (cement floor) and
- 200 m. Standard Track, Long Jump and High Jump pits.
- Students are encouraged to play during free time and after college hours and special buses are arranged at 6.00 pm.
- Regular training is provided to those students who demonstrate extraordinary skills in different sports. These students are selected through selection trials. They are trained and encouraged to participate in various levels.
- Transport facility for students playing outside Hyderabad is provided and registration fee is borne by the institution.
- All the participants representing Inter University, national international events are provided with equipment and track suits.

Sports Activities of the Department:

- Organizing intramural and extramural competitions and preparing the students for the same.
- Encouraging student participation in inter-collegiate, Inter University and other open tournaments in the state/country.
- Organizing Inter- Branch/Collegiate tournaments, coaching camps and open tournaments in various sports and games.
- Organizing tournaments for Teaching and Non-Teaching staff.

Over the years students of the college excelled at University level winning Gold and Silver medals and also represented the University in Swimming, Table Tennis, Tennis, Chess cricket, football, archery, ball badminton and yoga.

Cultural Activities:

College conducts biennial cultural fest “**Sangamam**” that infuses much needed enthusiasm for the

students.

College Celebrates Annual Day every year at the end of academic year. MVSR Engineering College felicitates its students in Annual Day who have brought laurel to the college in terms of learning and overall development.

MVSR Fine Arts club plays a major role in cultural activities. Many activities such as

- Photography, Debating, Poetry, Singing and Dance are organized.

A senior faculty member is associated with each club.

- The college organizes annually cultural events like Rangoli, Dandiya and Desi-day (Traditional Dressing).
- Department of Physical Education organizes International Yoga Day on 21st June every year. It also organizes health programs and blood donation camps in the campus, and Haritha Haram program for tree plantation.

File Description	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: 95.83

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 69

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: 23.4

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
270	127.3	89.5	29.45	130

File Description	Document
Details of budget allocation, excluding salary during the last five years	View Document
Audited utilization statements	View Document
Any additional information	View Document

4.2 Library as a Learning Resource

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

Response:

Description of the Features of library:

The Central Library of the college has a rich collection of 67,359 volumes. In addition, each department has a separate departmental Library.

The Central library is organized in a separate building with an area of 2000 Sq.m. The physical facilities include Open-access text book section with issue counter, Reference section, Periodicals section, e-resource centre, Conference hall, Reprographic facility and a back- volume section.

The library is manned by well qualified Librarian, an Asst. Librarian, and three Library Assistants, and qualified staff with computer and allied technical skills.

Working Hours: The Library is kept open upto 6.00 pm on all working days..Bus facility is provided at 6pm for students.

Every visitor to the Library has to sign the gate register.

- **Reference section:** The reference section has 9,476 volumes of textbooks, related reference books and handbooks across all disciplines.
- Separate discussion chambers are created for interaction of students in a group.
- **SC/ST Book Bank:** Students belonging to SC/ST can avail this book Bank facility.
- **MECT Book Bank:** Student toppers in each branch are given entire semester books on loan through MECT Book Bank.
- **Periodicals Section:**

The Library is subscribing the following number of periodicals.

National Journals (Print version)	74
Technical Magazines	33
General Magazines	12

-
- **E-Resource Centre:** To access Internet and a large number of ASCE, ASME, ACM, IEEE, J-Gate, UGC-INFLIBNET, DELNET, IEI, NDL and Open source journals. CD-ROM based electronic information resources, such as NPTEL and membership of National Digital Library of India.
- **Audiovisuals:** 4508 numbers of CD ROMs of textbooks, E-Lectures, TOEFL, GRE, GATE, Spoken English and management skills are available.
- **Back Volumes Section:** The back-volume section contains 934 volumes of old periodicals.
- **Conference Hall:** The students are permitted to use the conference hall for seminars and group discussions.
- **Reprographic Services:** Any library material, subject to copyright restrictions, can be photocopied at nominal price.
- **OPAC - Online Public Access Catalogue:** It is an online database of materials held in Library. It can be used for checking particular material by author, titles or key-words. It can be accessed from a terminal within the Library.
- **Integrated Library Management System**
- Name of ILMS software: **NewGenLib**
- Nature of automation (fully or partially): **Fully**
 - Version: **2.1**
 - Year of Automation **2004**

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:

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

enrichment

Name of the books	Name of the publisher	Name of the author	Number of copies	Year of publishing
The Illustrated Chamber's Encyclopaedia: A Dictionary of universal knowledge	London W & R Chamber's Ltd	David Patrick, M	10 Volumes	1935
The Concise oxford Dictionary of current English	London Oxford University Press	Fowler, H W	01	1964
Audels New Electric Library	Bombay D.B.Taraporevala Sons & Co Pvt.Ltd		01	1968
The J & P Transformer Book: Practical Technology of the Power Transformer	London Johnson & Phillips Ltd		01	1941
An Introduction to the Theory of Newtonian Attraction	London The Syndicate of the University Press	A.S. Ramsey, M A	01	1952
Standard Handbook for Electrical Engineers	New York The McGraw-Hill Book Co.Inc		01	1957
National Electrical Code	Chicago NFPA	ASA	01	1962
Lent's Mechanical Engineers Handbook	New York John Wiley Son's Inc	J. Kenneth Salisbury	01	1950
Automatic Control Handbook	London George Newnes Ltd	G A T Burdett	01	1962
Webster's New World Dictionary	New Delhi Oxford & IBH Pub.Co		01	1972
ASME Handbook	USA, ASME	Newby, John R	13 Volumes	(1945-1973) 1985
Industrial Pollution Control Handbook	New York McGraw – Hill Book Co	Herbert F Lynd	01	1971
Guidebook of Electric Circuits	New York		01	1974

Rogers International Thesaurus	McGraw – Hill Book Co New Delhi		01	1978
Marks Standard Handbook for Material Engineers	Oxford & IBH Pub. Co New York McGraw – Hill Book Co	Theodore Baume star	01	1978
Mathematical Handbook	Moasow Mir Pub	Vygodsky, M	01	1979

4.2.3 Does the institution have the following:

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

Response: A. Any 4 of the above

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

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

Response: 6.94

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
14.69	8.88	2.77	8.13	0.25

File Description	Document
Details of annual expenditure for purchase of books and journals during the last five years	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:** 0

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

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:**

IT facilities are essential to any professional institution so that students can utilize these resources for effective learning. IT facilities are provided to meet the computing, networking requirements of the students and staff.

Computing resources:

College is equipped with the state of art equipment to support various labs which are part of curriculum. Faculty is provided individual desktops with connection to the Internet. There are currently about 1250 PCs in the college being used for various purposes in the labs, office and by faculty. The configuration of the PC's is being regularly upgraded to meet the requirements. Details of up-gradation of computing equipment across various labs are mentioned below:

Department	Equipment	Quantity	Year of Purchase
All departments	Intel i3 HP 4GB RAM Desktops	300	6/1/2018
CSE & Automobile Depts.	Server ML 10(GEN9)-HP Intel Xeon E3 Server Adapter, 1X350 non-Hot plug	3	6/1/2018
CSE Dept.	HP make Printers	3	10/1/2018
Placement and CSE Dept.	Xerox Work Centre 5021	2	2018

CSE Dept.	8 GB DDR4 RAM's	40	30/07/2018
Automobile	Intel i3 HP Desktops	3	28/11/2017
CSE Dept.	Microprocessor kits		8/3/2017
All Departments	i3 HP Desktops	110	26/08/2016
All Departments	Intel i3 HP 2GB RAM Desktops	70	18/02/2016
S&H (CSED Lab)	Upgraded to 4 GB RAM		3/2/2016
S&H (CSED Lab)	Printers	2	30/01/2016
ECE Dept.	Intel i3 ACER Desktops	8	28/10/2015
Mechanical Dept.	Intel i5 ACER Desktops	10	22/10/2014

Additional facilities have been created for improving the quality of learning experience in laboratories such as NPTEL lectures, QEEE, CISCO networking lab., Moodle Tool, Spoken tutorials etc. Details are enclosed as additional information

Network Facilities

Round the clock internet facilities are provided for the benefit of the students & the staff. Wi-Fi is available at various labs and staff rooms. The entire campus has a back bone connection and is connected through a fiber cable. All the systems are connected to managed switches and a security firewall. College has devices and software to restrict the accessibility of the networking sites.

Upgradation of Internet bandwidth

During the last five years, bandwidth has been increased from 50 Mbps to 300 Mbps(1:1). The network equipment like switches has been upgraded from unmanaged to managed. In addition a CISCO firewall has been installed to regulate the network traffic. A MICROTEK router with radius manager software is purchased to give internet access to the authorized users in the college. Details are mentioned in the table below:

Wifi is enabled across the campus.

Updation	Year
Bandwidth of 300 Mbps	Apr'2019
Bandwidth of 100 Mbps	Mar'2018

Manned switches from unmanned switches	Aug'2018
CISCO Firewall for 2000 users	Aug'2018
Bandwidth of 50 Mbps	Oct 2016
Microtek Router	2016
Bandwidth of 20 Mbps	07/2015
Bandwidth of additional 20Mbps	10/2015

File Description	Document
Any additional information	View Document

4.3.2 Student - Computer ratio	
Response: 181:51	
File Description	Document
Any additional information	View Document

4.3.3 Available bandwidth of internet connection in the Institution (Lease line)	
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
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: 69.61
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
448.23	408.39	434.68	309.33	251.50

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

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

Response:

The college has established procedures for maintenance of physical and academic support facilities.

Buildings:

College has an in-house maintenance department. It takes care of electrical, plumbing and civil works. There are trained technical staff members to look after the maintenance of the institution. For any kind of maintenance or repair, a duly filled & signed complaint form is forwarded to the maintenance department, which is attended to.

College has given Annual Maintenance Contract (AMC) to M/s KLTS who deploy exclusive staff to maintain cleanliness of the college. Twenty five staff are employed by them for dry and wet cleaning of class rooms, seminar hall, laboratories, faculty rooms, office, library, corridors and wash rooms daily. Daily cleaning chart is maintained for the same.

Class Rooms:

The environment of students when they study plays a pivotal role in their performance. It therefore becomes extremely necessary to provide them with a surrounding that is peaceful, comfortable and spacious. The college takes necessary steps to make this possible.

Utilization:

- Before the commencement of the academic year, depending on the intake of students, head of departments propound the requirement of classrooms to the Principal.
- The classroom allocation is done by the Principal and the HoDs in a meeting and the same is communicated to the faculty and students of the respective departments.

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, board, benches, electrical fittings, the class mentor brings it to the notice of the HOD by registering the problem in the complaint form. The necessary follow up is done by the department and steps are taken to fix whatever is broken.

Water:

- College has of 4 bore wells to meet the daily needs of water in the campus.
- Two RO plants of 2000 ltrs/hour total capacity are installed for providing clean water to staff and students.
- Periodical maintenance of RO plant, pumps, water dispenser, taps and related fittings is carried out.
- The RO plant waste water is utilized for watering the plants.

Electrical:

The college distributes the power through a transformer installed in the campus. Every year the govt. Dept. engineers inspect the sub-station and any wear and tear is rectified. The campus has three Diesel generators sets of 250kVA, 82.5 kVA and 50 kVA capacity as a backup. These generators are maintained periodically.

College has provided for uninterrupted power supply for 20 laboratories and computer facilities. Annual Maintenance Contract (AMC) is given to M/s Ram Engineering to periodically inspect these systems.

All the air conditioning units in the campus have AMC which is maintained by M/s General Electricals.

Waste management:

The waste management is executed by the garbage collection vehicle in collaboration with Municipal Corporation.

Landscaping:

AMC is given to M/s Rajadhani Nursery who have experienced gardeners to regularly maintain the lawns and flora of the College. Planting of seasonal trees is carried in the college regularly. Haritha Haram program is organized annually to augment the number of plants and to increase the green cover.

Sewage Treatment Plant:

College has a 20,000 ltrs/day sewage treatment plant. All the sewage first goes to the septic tank from septic tank to sewage treatment plant. Sewage is disposed periodically.

Laboratory

Major instruments & equipment usage is monitored through log books.

- The instruments and equipment are cleaned, calibrated and maintained on regular basis. All the laboratories have power backup. Also the instruments and equipments are serviced by the suppliers.
- Facilities in laboratories such as water taps, gas pipelines, and electrical fixtures are regularly checked by the respective laboratory and maintenance is carried out by technicians.

- Facilities like Fire extinguishers and First aid kits are checked regularly and their refilling is done before their expiry date.

Library

The books in library are accessioned, stamped and then shelved according DDC. Book binding is done for damaged books to prevent further damage.

- Library Management Systems Software is used for issues and returns of books. AMC is given to maintain library software.
- A suggestion box is kept in the library for improving library services & rendering the library user friendly.
- Library also has computer systems to access e-journals and e-books which are maintained by M/s Sanbay Systems.

IT facilities

College has given AMC to M/s Sanbay Systems for maintenance of computers and AMC to M/s Silicon Systems to maintain network facility of the institution. One full time computer technician is available for day to day maintenance of computers and other IT facilities.

- The institution takes measures to upgrade IT infrastructure as per requirement of faculty & students.
- Internet and Wi-Fi is controlled through Cisco Meraki MX 250 firewall.
- Working of LCDs, Overhead Projectors is checked on regular basis.

Canteen

The canteen committee takes care of quality, hygiene and other related issues.

- Tables and floor area inside the canteen are cleaned regularly with cleaning material. Waste disposal is taken care off. It is ensured that food storage area is properly maintained.
- Canteen Committee ensures better quality of food is served and the price tag on items is in the limit.

Sports

The college has facilities for both indoor and outdoor games such as Cricket, Football, Table Tennis, Badminton, Volleyball, athletics, Kabaddi, Caroms, and Chess etc.

Students are permitted to play or practice for any competition during free/sports hours or after college hours.

Students are permitted to utilize and take sports material with prior notice of the Physical Director. In case of any damage observed, the same is recorded in the register pending further action.

- All the grounds are inspected by the grounds men and maintained as per the requirements.
- Sports equipment is inspected periodically. Wear & tear is attended to and damaged goods are

replaced regularly.

- Auditing of the sports equipment is carried out annually.

File Description	Document
Link for Additional Information	View Document

NAAC

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: 44.78

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
1764	1777	1797	1702	1723

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: 0

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
0	0	0	0	0

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

Response: A. 7 or more of the above

File Description	Document
Details of capability enhancement and development schemes	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: 59.92

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
2845	2911	2605	2127	1309

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

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

Response: 0

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
0	0	0	0	0

File Description	Document
Details of the students benefitted by VET	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
Details of student grievances including sexual harassment and ragging cases	View Document

5.2 Student Progression

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

Response: 62.22

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
440	784	842	503	411

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: 5.17

5.2.2.1 Number of outgoing students progressing to higher education

Response: 52

File Description	Document
Details of student progression to higher education	View Document

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

Response: 94.3

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

2017-18	2016-17	2015-16	2014-15	2013-14
32	79	109	79	16

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
32	84	119	92	16

File Description

Document

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

[View Document](#)

5.3 Student Participation and Activities

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

Response: 8

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
2	02	03	01	0

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

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

Response:

College encourages students' representation in co-curricular, extra-curricular and academic bodies. Students of different committees are nominated by Heads of the Departments and faculty, based on the interest of the students and their academic performance. The student council helps to provide feedback on student-related issues to the organization.

- Every program has independent Students Associations in the departments led by students of B.E. II, III and IV year under the guidance of faculty. The functions of these associations are
- Personality Development, Sports, Art and cultural, Social Networking & Publicity, Event organization.
- These Associations release Newsletters of the departments produced by the students every year. The newsletters brief the events of the departments and also has articles by students.
- To nurture talents of young minds, college encourages FUEL (Foundation of United and Eternal Literacy) club to showcase their ideas, talent and work on social issues for the upliftment of the society. This club works on Literary, Fine arts, Sports, Seminars and Social Responsibilities –Social Relationships.
- Students are nominated as members in
 - Anti-ragging Committee
 - Women's grievance committee
 - Entrepreneur Development cell-student coordinators and
 - Placement cell-Student coordinators.
- National Cadet Corps (NCC) unit of the college is also active in organizing various programmes. Every year students attend camps at national level. Seven-day camp in rural areas is a major NSS activity taken up every year for the benefit of people in villages organizing Veterinary camps, Teaching Computer Basics in Schools, Cleaning educational institutions and temples etc.

- Student groups from each class are involved in organizing international Yoga day, Voluntary blood donation camps, General Medical camp and tree plantation.
- Heads of the departments nominate class toppers, one from each of II, III year classes and two each from IV year classes in **Student Interaction Committee**. The committee comprises of HOD, Student affairs I/C and student representatives. The function of this committee is to speak to student representatives and attend their complaints regarding facilities in the department and college as well. The committee meets twice a semester. The committee submits the recommendations and suggestions to Principal for necessary action.

File Description	Document
Any additional information	View Document

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

Response: 13

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
13	14	12	19	7

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

5.4 Alumni Engagement

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

Response:

Alumni Association:

- The college has a vibrant Alumni Association, with an Alumni Activities In charge for coordinating

the Alumni with the college.

- The college has department wise faculty coordinators, who are alumni themselves. Nearly thirty such Alumni are working in the institution.

Financial Contributions:

Over the years Alumni gave donations in cash or in terms of some equipment to the laboratories or funded to create or improve facilities in their departments. In the recent past,

- An amount of Rs.1,02,398/- is distributed by the Civil Engineering Alumni (1995 – 1999) to the financial deprived students as sponsorship of Civil Engineering from the academic year 2016 – 2017 onwards.
- Ms. Hari Priya Reddy Alumna of Mechanical Engineering (1989 - 1993) donated Rs.42, 500/- towards department development fund during in 2018.
- CSE Alumni of 2012 Batch, is organizing an event called MVSREC Programming League (MPL), a coding contest with a prize money of Rs. 25,000/- per year from 2017 – 2018 onwards. Students of all branches can participate and code in short time to win the prize. The prize money is distributed as Winner, Runner and Consolation prizes.
- Few alumni has donated books to main and department libraries.

Non-Financial Contributions:

- Alumni share their knowledge with the current students by providing internship and job opportunities.
- Several Alumni now occupying high positions like CEOs, Directors, Scientist H etc, have addressed both the faculty and staff and shared their areas of expertise and experience to particularly enlighten and motivate the students.
- Expert lectures are being organized by the departments with Alumni as Resource persons to utilize the proficiency of Alumni obtained over the years for the benefit of Faculty and Students.

Alumni Meetings:

- While department-wise Alumni meets take place separately, Alumni Reunion Meet of all departments is centrally organized during the third Saturday of December every year. The number of Alumni attending the event is increasing each year.
- The reunion of the Silver Jubilee Batch of that year is the highlight of the gathering.

File Description	Document
Link for Additional Information	View Document

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

Response: 1 Lakh - 3 Lakhs

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

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

Response: 3

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
01	0	01	01	0

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:

The Vision and Mission statements of the college are:

Vision

To impart technical education of the highest standards producing technically competent, confident and socially responsible engineers.

Mission

1. To impart adequate fundamental knowledge, technical and soft skills to students.
2. To make learning process exciting, stimulating and joyful.
3. To create a climate conducive to excellent teaching –learning process
4. To bring out creativity in students.
5. To contribute to advancement of engineering and technology
6. To make positive contribution to meet societal needs.

Governance & Leadership:

- The governance in the institution is completely in sync with the mission of the institution and eventually leads to realization of the conceptualized vision.
- The Management of the institution acts as a facilitator and a catalyst in matters of governance.
- Administrators comprising of Principal, Vice-Principal, HODs guide all others like section in-charges, faculty in a non-condescending manner that inculcates a spirit of participation amongst all.

Infrastructure:

- The augmenting of infrastructure in keeping with the needs of the stakeholders is undertaken on a regular basis after due discussions in the management sub-committees of Campus Development, Staff Affairs.
- The faculty, Heads and the Principal discuss proposals, fine tune them for presenting before the management committees, which also include top-level administrative staff.

Teaching Learning Process:

The dissemination of fundamentals in Engineering and to make this learning process stimulating is one of the core parameters governing this institution.

- This requires identification and recruitment of competent faculty in specialized areas in addition to providing a state-of-art infrastructure. The Staff Affairs sub-committee comprising of management

members and Top Administrative staff decide the faculty recruitments.

- The learning process is rendered stimulating and more meaningful on account of faculty of a high order being on rolls of the college.
- Students and Faculty as well are regularly assessed to ensure credible deliverables.

Creative and societal conscious environment:

- Many clubs which promote activities like Fine arts, Articulating skills, Photography are popular and facilitate in identifying creative talent amongst students. Their effective existence is an ample testimony to the conducive environment provided for their sustenance by the administration.
- Professional student bodies such as ISTE, IEEE,CSI,IETE and effective participation by a large section of students ensures new technologies get evolved and deliberated. The IEEE branch received international “Darrel Chong” award twice under “Helping Hands” category.
- The students who are ambassadors of the institution in the society visited several under privileged orphanages/schools and delivered basic necessities, motivational lectures etc.
- Few events organized under the student associations like MESA,ITSA etc are: Visit to Helping Home ,Sai Dhamam, Keseara,Hyderabad, Medical Camp at Kacharam, Nalgonda, Visit to Blind Girls Hostel, Malakpet .
- The institution is also a part of “Unnat Bharath Abhiyan” a MHRD initiative aimed at improving the quality of life in the neighboring villages. These initiatives cater to societal needs and are possible only because the governance is in tune with the avowed objectives in the mission of the institution.

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:

Participative Management

- The discussions normally emanate from the faculty, in the faculty meeting with the HOD, then in the HODs meeting with Principal, and then with Principal and HODs meeting with the Chairman,MES.
- Most of the information travel from bottom to top for approval by the management. If it is negated, reasons are given for negation.
- If there is a common rule governing all concerned, it comes from top to bottom, that too after initiating a talk with the faculty or HoDs as it might concern.

A case in point: Annual budget: Proposal, Approval and Allocation.

- The accounts department is incharge of maintaining the budget. They manage all the sections of the

college to ensure clarity of income and expenditure.

- There are various budgetary requirements at the institutional level. These include transport, career development centre, examination branch, research and development, teaching-learning and engineering education practices, and administrative processes. Addition of new programs or intake are also considered.
- All HODs are invited to submit their budget proposal for every academic year with an item-wise break up. This budget proposal is formulated after lengthy discussions at department meetings.
- Any infrastructure or otherwise requirements as per curricular changes, upgradation, and as perceived in student counseling or in course monitoring is presented.
- Laboratory in-charges are also asked to come up with a proposal of their requirements including purchase of new equipment, repairs and maintenances, service, consumable items, training and up gradation.
- All proposals from various persons in charge, faculty and students are discussed in department meetings and reviewed.
- A conclusive summary of budget to fulfill the needs of the department including the item-wise requirements for equipment, consumables, department facilities, student development activities like guest lectures, seminars, workshops and conferences, is prepared and forwarded to Principal for further processing.
- Principal and senior professors consolidate all the budget proposals received from the departments and sections and organize a meeting of HoDs and section in-charges for possible fine-tuning.
- Modified budget proposals of all departments is forwarded for the Chairman's approval.
- Chairman discusses the same in the Finance Sub-Committee for further refinement of the budget.
- A final proposed budget including all anticipated income and expenditure prepared by the accounts department is presented to the Executive Committee and Governing body for approval. As the document is an outcome of an integrated approach of participative process, it is approved by the governing body. Any objections or concerns by the members are discussed, recorded and decisions with majority of acceptance are made for making changes in the proposals.
- Approvals of budgets are communicated to all individuals who proposed them, through proper channels. Accounts department releases funds on a monthly basis, as planned.

Through effective decentralization, the institution practices successful delegation and enhances the productivity of the college. Through participative management, each person in-charge handles their allotted activity and ensures its complete and constructive delivery.

File Description	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:

The Management of the Matrusri Education Society Sponsors this Institution and provides direction with strategic structured planning. Issues relating to construction activities on campus, augmenting intake of

students, improving infrastructure to enhance academic ambience are deliberated by all stake holders and meaningful decisions emerge. The strategic planning is essential for an orderly and well intended growth of the institution. The focus on future projections of requirements from today's stand point ensures the system would be compatible with times in future. The management of the institution is carried out through several committees such as Staff Affairs Sub-committee, Campus development Sub-Committee, Finance Committee, Executive Committee, among others. The deliberations are recorded and decisions given for implementation. These Committees meet at regular intervals in keeping with the requirements of the institution.

In one of the meetings of the executive committee it was unanimously decided to apply for recognition of the college as the Research Centre for offering PhD programs in the Department of Computer Science Engineering (CSE), Electronics and Communication Engineering (ECE) and Mechanical Engineering (ME). The rationale behind this decision was to enhance the academic ambience by improving infrastructure for R&D in the college. It was imperative to introduce PhD programs to further development in research and consultancy. It was realized that time was the essence of this objective. Accordingly, college approached the affiliating University OU to recognize these departments as centers for research which could offer PhD. programs. Based on the recommendations of respective Expert Committees, OU approved establishment of research centers in the above disciplines. It was strategically assessed that such centers would facilitate research, generate publications of high order and also contribute to the growth of research based consultancy.

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 college has a Governing Body which is constituted as per the AICTE norms. It is the highest decision making body of the institution.
- Matrusri Education Society (MES) which sponsors the institution has 16 members, who are also elected as per norms to the Executive Committee of MES.
- College Academic Council, which consists of the academicians and section in-charges, is the other major body of the college that looks into various quality processes.

The governance of the college is effected through the following bodies:

- Governing Body of the college.
- Executive Committee (EC) of MES.
- Seven sub-committees consisting of members of EC. Chairman and Secretary are the Ex-Officio Members and Treasurer is special invitees in all committees.
- College Academic Council
- The constitution and functions of the above committees is annexed as additional information.
- The complete hierarchical structure of administration of the institution is provided in the **Organogram** as additional information.
- The service rules applicable to the staff of the college are kept with the office, in HOD office, and library. Staff are made aware of the rules at the time of joining and are made accessible to all.

- Faculty appointed on temporary basis are required to go through duly constituted University Selection Committee for that position. Promotion of faculty is as per AICTE / UGC norms. The **procedures for recruitment and promotions** are provided as additional information.
- The institute has a Grievance Redressal Cell to which staff may represent their grievance, if not satisfied at department / section level. If not satisfied, staff have recourse to apply to principal or Management. The details regarding the nature of grievances, and the stages of appeal are given as additional information under **Grievance Redressal**.

File Description	Document
Any 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

Response: A. All 5 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:

Interaction with Industry has been one of the activities that received special attention in the discussions in various bodies / cells of the college, and are being implemented successfully.

The Governing Body: The GB in its meetings advised the college to step up efforts for effective interaction with industry, as the same would help the college to improve placements, R&D projects, consultancy etc., and also give better exposure of the college.

College Academic Council: In the CAC meetings followed by various meetings of Principal with HODs,

decisions were taken

- To try to arrange atleast two lectures per semester by industry experts to students
- To encourage faculty to interact with industry more for internships, and formally recognise such effort
- To include PSOs that have industry relevance and orientation. Efforts to improve the attainments of the PSOs would involve industry-oriented student projects and training
- To encourage experts and participants in the FDP programmes and Workshops.
- Increase of Professional Society membership of students, and arrange expert lectures and Workshops
- To create Research & Development and Consultancy (RDC) Cell
- To create Entrepreneurship Development and Incubation Centre (EDIC)

Department Advisory Boards: The boards of each department resolved that efforts should be increased to get internships and initiate action on consultancy avenues.

Research & development Cell: A special RDC Cell has been created for encouraging faculty

- To apply for R&D projects with industry relevance, after review by experts
- Recommend funding of R&D projects of students that have practical potential, after review by expert team.
- Create awareness and encourage consultancy across all departments

Entrepreneurship Development and Incubation Centre (EDIC) organises Workshops on entrepreneurship. EDIC along with RDC also organises Project Expo annually showcasing the student projects of all disciplines. Personnel from industry are invited as judges. The college also explores possibilities of joint patenting of innovative and potential projects, and reaching MOUs.

Alumni Association: The college actively interacts with Alumni and organises annual meet. Alumni occupying senior positions in industry often come forward for placements, and internships, and also take part in talks or FDPs on latest industry practices and industry requirements for placement.

Campus Recruitment and Training Cell: CRT Cell of the college ensures placement training to students from II year onwards. The training content is continuously modified to suit the technical requirement of industry, besides interview skills.

The focussed efforts of the various bodies and cells have resulted in spurt of activity for better collaboration with industry and led to improvements in

- Student internships at industries
- Consultancy projects and involvement of more disciplines
- Experts from industry visiting the college
- Student memberships in Professional society chapters

The college also offered tailor made courses to industries like Midhani, ISRO and BHEL over the years to train their personnel at various levels.

6.3 Faculty Empowerment Strategies

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

Response:

Effective welfare measures are provided by the institution to motivate and support its employees.

1. **Employees Provident Fund as per PF rules:** The institute contributes specific amount towards PF of an employee as per PF rules.
2. **Medi claim-Health Insurance:** Institute contributes part of Medi-claim insurance for the employees.
3. Gratuity is applicable to every staff after five years of permanent service.
4. **Full paid Maternity Leave:** Institute provides 120 days full paid maternity leave to all female employees and is augmented to 180 days in the current academic year.
5. **Fee concession to wards of economically weak staff:** The provision is made for financial support to economically weaker staff of institute in the form of fees concession to their wards based on the merit.
6. **Encashment of Earned leave at the end of service:** At the end of service of an employee, he/she can encash his/her earned leaves as per the rules of institute.
7. **Reimbursement of Membership fees for the professional bodies:** The institute has the provision of reimbursement of 50% of membership fee of any professional body.
8. **Festival advance:** Non-teaching staff can avail interest free festival advance.
9. In addition to above, Institute contributes to LIC/GLIC, ESI facilities.
10. Institute also provides loans for Children education and medical requirements and also organized free medical camps regularly.

Support for Professional Development Activities:

- Faculty pursuing Ph.D are given one day OD in a week for three years.
- Faculty are encouraged to attend various workshops, conferences, FDP throughout the academic year by giving ODs, and paying for Registration fee.
- Financial support is provided to publish papers in conferences.
- Three Non compounded increments are provided to PhD holders.
- OD facility is provided to faculty appearing for M.Tech exams.
- Non-teaching staff are encouraged to attend Skill Upgradation workshops by giving OD and financial help when needed.
- Loan is provided to non-teaching staff for pursuing higher education.
- **Improved Quality of work life**
 - Ambulance and doctor are available in campus.
 - Bus transport facility is extended to all the employees at reduced cost. Staff who are bus coordinators are provided transport for free of cost.
 - Canteen facility is extended to all the employees
 - A Grievance Redressal Cell is formed and all faculty concerns are addressed

File Description	Document
Any 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: 23.29

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
50	59	55	60	50

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: 16.4

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
22	21	20	16	3

File Description	Document
Details of professional development / administrative training programs organized by the Institution for teaching and non teaching staff	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: 18.38

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
38	67	80	22	15

File Description

Document

Details of teachers attending professional development programs during the last five years

[View Document](#)

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

Response:

Performance Appraisal methods followed for teaching staff are:

1. Course Monitoring
2. Student Opinion Poll
3. Annual Faculty Performance Appraisal

Course Monitoring

This is done to monitor the progress of instruction in each subject, and take the required remedial measures.

- Conduct of courses is monitored twice during the semester, in the 7th and 12th weeks of instruction.
- HOD and two senior faculty visit each class and obtain student feedback regarding instructional issues.
- Feedback from the first meeting helps to check the pace of coverage and acceptability of the teacher to students.
- The second meeting is to take measures for completion of the syllabus and preparing students for examinations, as needed. Special classes are arranged in such cases.

Student Opinion Poll

The college has been conducting 'Student Opinion Poll' of teachers regularly for more than 20 years.

- Students are asked to rate the teacher as Excellent (4), Good (3), Fair (2) or Poor (1), for each subject on the six criteria:

- Explanation of Concept and Communication
- Interesting and enthusiastic lectures
- Test & assignment evaluation and feedback
- Punctuality and Regularity
- Syllabus coverage
- Accessibility inside and outside the class
- The average of the score obtained for all subjects handled by a teacher in two semesters is taken as teacher's score.
- Head of the department counsels teachers with low rating, and also suggests to the administration about remedial measures.

Annual Faculty Performance Appraisal

Annual Faculty Performance Appraisal is submitted by faculty each year towards the end of the academic year.

- The appraisal form consists of two parts. Part I consists of the information on the subjects handled, research, publications, other curricular and co-curricular activities and future plans. It also has the appraisal by the HOD on the personal and interpersonal traits of the teacher.
- Part II is an assessment that aims to obtain an overall index of performance of a teacher, by quantification and rating of various activities.
- The major activities of the teacher, referred to as Criteria, are divided into classroom instruction, participation in department activities, projects guidance, consultancy, publications and student feedback.
- Each Criterion consists of a number of specific minor activities or functions which are allotted certain marks. The total marks secured for a criterion are expressed as a ratio of certain maximum, and also assigned a relative weightage out of 100.
- The format consists of self-assessment as well as by HOD.

Performance Appraisal of Non-Teaching staff:

Performance of Technical staff and Office staff is continuously monitored by superior staff.

- Annual appraisal forms with comments on the performance in terms of regularity / punctuality, commitment to work assigned, maintenance, readiness to take up additional duties etc. are forwarded by the Head of the dept. / section in-charge, to the Principal.

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:

Internal Audit:

There is an internal mechanism for scrutiny and verification of books of Accounts. All required steps are taken to regularize the accounts, statutory formalities and reconciliation of Unit wise balances with the Control Accounts and bank reconciliations.

- a) All financial transactions are recorded and accounted on daily basis.
- b) Every payment is processed through 6 stage (Concerned Departmental Head, Accountant, Head-Accounts, Principal, Treasurer & Secretary/Chairman of the Society) verification and approval system. Verification of all financial transactions and scrutiny of General Ledger is conducted on half yearly basis.
- c) All statutory remittances viz., Income Tax Deducted at source (TDS), Employee Provident fund (EPF), Employee State Insurance(ESI), Professional Tax and other payments like Telephone & Electricity bills are done through “e-payment” system.
- d) Earlier Fee payments were accepted through Bank challans/direct online payment (RTGS/NEFT/IMPS/UPI/ATM Transfer/Wallets). Presently dedicated “Payment gateway (SBI Collect)” is introduced for payment of Tuition fee, special fees and Examination fee and only on special circumstances payment through Bank Challans is accepted. Online payment is beneficial to both the Institution and students as it facilitates easy payment and accounting of fee.

Timely compliance of statutory rules and close control over fee payment status has facilitated the internal audit mechanism.

External Audit:

- a) M/s. SWAMY & SESHADRI, a reputed Chartered Accountants firm is appointed as Statutory Auditors and they are conducting Audit for the past 16 years. The last audit was done in the month of June 2018 for the financial year 2017-18 and there were no major deficiencies found.

During the Audit they verify all the vouchers and connected records & documents, fee challans, Bank reconciliation statements, physical verification of Fixed Deposits, verification & scrutiny of Sub-Ledgers & General Ledgers, Receipts & Payments statements, Income & Expenditure statements and Schedules of Balance Sheet.

- b) The said auditors also audit and certify the financial data submitted to Fee Regulatory Committee appointed by state government for fixation of tuition fee.
- c) Funds received from government/govt. agencies as Grants are audited separately by the Auditor appointed for the purpose.
- d) Audited financial statements are made public by placing it on institute website. They are also sent to the statutory and regulatory bodies.

It may be noted that the prevailing internal audit system in the college has generally ensured that there are no major audit objections in the external audit during the last five years.

Financial Management:

An efficient and robust financial management system is in existence which contributes to achieve overall development and Academic excellence of the institution. The financial system is flexible and it allows spending more than the approved budget allocated on the merits of demands and requirement. Optimal utilization and execution of the budget is monitored by Executive Committee.

File Description	Document
Link for 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

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

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

Response:

Sources of Finances:

- The major source of funding is from Tuition fees paid by students admitted under convener quota, under management quota and NRI quota. Fee of students of all categories is decided and by Telangana State Admission and Fee Regulatory Committee and approved by Govt of TS. Fee collected from students under Management quota is the same as that of students of Convenor quota, excepting the case of NRI quota, who are charged upto a maximum of US\$5,000/- .
- In addition to this, revenues are received in the form of consultation fee paid by outside agencies like GHMC, DLRL etc for the consultancy work carried out by the staff of the various departments.

The institution being self-financing, it gives great importance for the generation and utilization of funds to meet the vision and mission of the institution.

- Quality enhancement is the primary strategy followed by institution to generate funds. This in turn ensures effective teaching learning and research oriented - work environment. This supports the increase in the students admitted, which in turn leads to improved funding from tuition fee.
- By quality enhancement, the scope for increasing consultancy widens which leads to generation of more funds.

Optimal Utilization of resources:

- Funds are utilized majorly for salaries of teaching and non-teaching staff, Purchase of equipment, infrastructure development activities, organizing Co-Curricular and extra-curricular activities.
- Governing body makes major policy decisions regarding financial planning.
- Budget proposals are invited annually from all the departments, sections, In-charge of infrastructure and building construction for approval of finance committee of Executive Council and Governing body.
- The expenses are authorized based on the budget approved by the Governing body.
- Income and expenditure statements are placed before Governing Body for perusal and approval.
- Purchase committee monitors and negotiates on the rates of purchase of any material.
- To ensure quality education adequate funds are allocated for conduct of FDPs, orientation programs, workshops, inter-disciplinary activities, training programs, project exhibitions, in-house projects and research and Development activities etc.
- Requisite funds are utilized for enhancement of library facilities
- Adequate funds are utilized for development and maintenance of good infrastructure
- The budget will be utilised to meet day-to-day operational and administrative expenses and maintenance of the fixed assets.
- The grants received from the external funding agencies are effectively utilized in implementation of projects by procuring the suitable equipment. This equipment is further utilized in the established advanced laboratories of the institute. Utilization certificates are submitted to the funding agencies on the completion of projects.
- Optimal utilization of funds is ensured by minimizing the redundancy in resources, decreasing the non-productive expenses, planning the development activities in phases.

Link to fee details: <http://mvsrec.edu.in/index.php/fee-details>

File Description	Document
Link for Additional Information	View Document

6.5 Internal Quality Assurance System

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

Response:

The Internal Quality Assurance Cell was started in December 2018 to institutionalize the quality assurance strategies and processes. Prior to the establishment of IQAC, the quality processes were monitored and assured centrally by College Academic Council and various department level committees.

The College Academic Council consists of the Principal, Vice-Principal, HODs and senior Professors.

- The College is ISO 9001: 2008 certified from 2008 onwards assuring quality education in Engineering through continual up-gradation of teaching-learning process, human resources and infrastructure so as to produce competent and committed professionals. Quality System Procedure, QSP and Quality System Manual, QSM are in Place. ISO committee conducts internal audit every year. The college obtained ISO 9001: 2015 certification during 2018.

Quality is Internally Assured by the actions implemented through the following committees:

1. ISO Committee.
2. Department Advisory Board (DAB)
3. Program Assessment Committee (PAC)
4. Academic Audit Committee (AAC)
5. Curriculum Review Committee (CRC)
6. Evaluation and Result Analysis Committee (RAC)
7. Time-Table Committee (TC)
8. Student Interaction Committee (SIC)

These committees have contributed significantly in institutionalizing strategies and processes for Quality Assurance.

Two practices institutionalized through the initiatives of the existing quality assurance mechanisms are:

- **Academic Audit:** We have an institutionalized practice of conducting academic audit at the beginning of each academic year by the Academic Audit Committee (AAC) for each Department. AAC comprises of HOD, three senior members of faculty, including one senior faculty from another department.
- This committee studies the fulfillment of academic norms stipulated by University and AICTE and gives recommendations to make up the deficiencies. Inputs are provided by Head and Course Coordinators.
- Typically, the aspects reviewed are:
 - Faculty position with respect to SFR
 - qualifications and cadre ratio, Staff position
 - Class room adequacy with respect to number, area and ambience
 - Conduct of laboratories and tutorials, projects and seminars
 - Instruction material provided and quality, including for service courses

- Instruction timetables, teaching loads
- Student attendance records
- Course monitoring
- Quality of question papers and assignments
- Training programs to students, faculty and staff.

The minutes are sent to Principal for action.

- **Improvement of COs and POs:** Each department has a department Advisory Board, comprising of Head, three senior faculty members, one Professor from the affiliating University, and one distinguished Alumni.
- This Board meets at the beginning of each academic year, reviews the status as per inputs from the various committees, and recommends actions for improvement.
- Typically the aspects considered are
 - Attainment and targets of COs, POs, PSOs, PEOs
 - curricular gaps, additional training programs,
 - faculty and infrastructure and modernization
 - budget provision, R&D projects, and Consultancy.
 - Also reviewed are student counseling and impact analysis and actions taken.

File Description	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:

Review of Teaching Learning Process:

Based on the inputs from various committees listed in 6.5.1, the institution reviews the recommendations of the Departmental Advisory Board for implementation of the necessary teaching learning reforms. Some of the reforms due to such initiatives are:

Teaching Reforms:

Teaching methods have been continuously reformed to address challenges in teaching. The committees periodically assess the need for reforms and their impact. The following are the challenges addressed and reforms made by the teachers with a focus on Individual/Group/Class and Levels of Learning:

1. **Content development:** Central Ideas and Concepts are developed systematically and comprehensively. Slides, Posters, Handouts, Animation clips, Video clips, mathematical and physical models are prepared.

2. **Content presentation:** To ensure effective presentations, controlled quality and quantity of information, a judicious colour schemes are used while composing content.
3. **Content reception and assimilation by the student:** General Classroom ambience is maintained through proper seating, air circulation, lighting and effective audio levels for effective reception and assimilation.
4. **Content usage and Interaction between Teacher and Student:** Questions and Exercises posed by the Teacher are designed to make students use the content and interact with the Teacher.
5. Teachers illustrate concepts through a variety of examples and observe the understanding of the same. Extending the same, more complex problems are solved by the students.
6. **COs, POs and PSOs:** Question papers and assignments are prepared as per Bloom's taxonomy. Coverage of all COs at all learning levels are ensured. The attainments of COs are recorded and mapped to POs and PSOs, to address deficiencies and modify target levels.

Learning reforms:

1. **Activities of Professional Societies:** Professional societies like IEEE, CSI, ISTE, IETE, SAE etc., have been organizing events focussing on new technologies and reforms in student learning process. The various activities such as paper/ project / poster presentation, Group discussions, Mock interviews etc are the best examples of students showcasing their learning experience.
2. **Participation in AICTE competitions:** Students are encouraged to participate in All India Competitions such as Smart India Hackathons to provide solutions to real world problems.
3. **Student Projects / Internships with Industry:** Students are encouraged to do their projects with industries like DRDL, DRDO, RCI, NFC, ECIL, ANURAG, AMD and internships at industry, so that they work in the state of the art laboratories, and improve knowledge beyond the classroom learning.
4. **Skill Development Programs:** Our institution is a remote centre for IIT-Bombay programmes. Departments organize skill development programs such as IOT, Android, Bigdata, Manufacturing, Machine Learning and Signal Processing.
5. **Online course material/ Blogs:** To facilitate learning beyond classroom, many teachers upload to website their video lectures, notes, solutions to examination papers; some also maintain blogs for this purpose.
6. **Online Lectures:** Students access online lectures from NPTEL, QEEE, IIT-Spoken Tutorials. Most of the students of respective departments are registering with their course of interest with NPTEL, QEEE and many are completing certifications from them.
7. **Value added courses:** The students are also getting trained on value added courses conducted by CISCO such as IT Essentials, CCNA, Python, C and C++.

File Description	Document
Link for Additional Information	View Document

6.5.3 Average number of quality initiatives by IQAC for promoting quality culture per year**Response:** 1**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
1	1	1	1	1

File Description	Document
Number of quality initiatives by IQAC per year for promoting quality culture	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**

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

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:****Response:**

There has been continuous and consistent improvement during the last five years in several activities of the college.

1. NBA, UGC recognition and ISO:

- The undergraduate programme of Civil, CSE, ECE, EEE and Mechanical Engineering got accredited by NBA in the year 2018 for a period of 3 years. They were earlier accredited in 2013,2007 and 2002.
- The undergraduate programme of IT got accredited by NBA in the year 2018 for a period of 3 years. Earlier it got accredited in 2007 and 2002.
- The college got UGC 2(f) and 12(B) status by University Grants Commission in 2017.
- The institution was ISO 9001:2008 certified from the past five years. In 2018, the college obtained ISO 9001:2015 certification.

2. Research: The ECE,CSE and Mechanical Engineering departments of the college are recognised as Research Centres by Osmania University in the year 2017-18. Consequently, 8 faculty members of these depts. were allotted Ph.D students by Osmania University. Faculty of Civil, IT,CSE and Mechanical Departments are already acting as guides for scholars of other Universities. [lists of scholars assigned]

3. Consultancy and Industry Institute Interactions :

- Civil engineering department, over the last five years executed consultancy works of worth Rs.1 crore, related to quality control of roads and infrastructure in Hyderabad.
- CSE and ECE departments of the college have completed consultancy project with DRDL, Hyderabad worth Rs 5.65 lakhs in the academic year 2014-2015; of RCI, DRDO worth Rs 6.89 lakhs in 2016-17, and Rs 6.5 lakhs with DRDL in 2017-18.
- Mechanical Engineering department executed consultancy projects of DRDL, and private industries worth [consultancy carried by the college]

4. MODROBS & UGC grants:

- The college obtained grants worthRs 35 lakhs from AICTE under MODROBS scheme for modernization of ECE, EEE and Mechanical Engineering labs.
- UGC minor research project lakhs in 2017 were sanctioned to Mechanical Engineering. [link : <http://www.mvsrec.edu.in/index.php/industry-consultancy>]

5. Conferences/Seminars/ Workshops/ FDPs :

All the departments organize several conferences , seminars, workshops, and FDPs each year. [link: FDPs & Workshops organized]

- IT department organized a National Conference NCAIT-2K16 during 2015-16.
- Mechanical Engineering Department organized AICTE sponsored National Conference ITMAE-2016 in 2015-16.
- During the past five years, around 1700 students have been placed in the campus recruitments. Accenture, CTS, Infosys, Delloite, Capgemini. Hyundai, L&T etc are the major recruiting companies. About 200 students were recruited on-campus during 2017-18.[Campus placements]

6. Faculty acquiring Ph.D: Ten faculty members were awarded Ph.D degree during 2013-2018. [list of Ph.Ds]

7. MOUs :The college has signed many MOUs with reputed organizations. [list of MOUs]

8. Library

The library has a collection of over 67,359 volumes, and over 200 subscribed National and International journals and magazines. Each year about 3000 Volumes in 300-400 titles are added. A separate server for NPTEL lectures, access to IEEE, ASME, J-GATE, UGC-INFLIBNET, DELNET, IEI,ASCE journals, and NDL membership has been provided by the library.

NAAC

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: 10

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
3	3	2	1	1

File Description

Document

List of gender equity promotion programs organized by the institution

[View Document](#)

7.1.2

1. Institution shows gender sensitivity in providing facilities such as:

- 1. Safety and Security**
- 2. Counselling**
- 3. Common Room**

Response:

The Institution shows gender sensitivity in providing facilities such as:

1. Safety and Security
2. Women protection cell
3. Student Counseling
4. Ladies Common Room

1. Safety and Security: Precautions have been taken during transport, in the campus, canteen, and library, sports area to monitor the movement of students and ensure safety particularly of girl students. A woman security staff is specially employed to attend to the women staff and students.

2. Women protection cell: A Women Protection Cell is constituted in the college, consisting of senior Women faculty. This cell addresses the women staff and student grievances and also carries out regular

counseling to the female students in groups and at individual level.

3. Student counseling: Student counseling and mentoring is carried out by faculty members at regular intervals. Each faculty member is allotted with a group of about 20 students who interact with the students. Normally the same faculty member is associated a student from II to IV year. This builds rapport between the teacher and student and helps the student to open up his mind with the faculty member to share his problems and take guidance accordingly. The students are also encouraged to inform about any gender related issues, about which the students are counselled. If necessary they are communicated to the HOD or informed to Women's protection cell.

Various activities are organized under SAKSHAM for upliftment of girl students and faculty. Awareness programmes by SHE teams, self defense programs are organized regularly.

4. Girls Common Room – Girls Common Rooms of 80 to 100 sqm. are provided in each of the buildings with washrooms and furniture with resting facilities. Girl students use them during lunch break and study as well. Specific cleaning schedule is given to the housekeeping personnel and followed meticulously to maintain hygiene in common rooms.

5. Course on Gender sensitization: This subject is introduced at II year level to sensitize students to the gender issues being faced globally as gender touches the sphere of every student's personal and professional life. It helps the students to empathize and improves behavioral attitude and addresses various related social issues.

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: 2.43

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

Response: 8569.8

7.1.3.2 Total annual power requirement (in KWH)

Response: 353384

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

7.1.4 Percentage of annual lighting power requirements met through LED bulbs**Response:** 9.17

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

Response: 14400

7.1.4.2 Annual lighting power requirement (in KWH)

Response: 156960

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

7.1.5 Waste Management steps including:

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

Response:**Solid Waste Management:**

The institution has a proper procedure for the management of solid waste.

- It takes all measures required to ensure that the campus is free of plastic items and other wastes that harm the environment.
- All departments and classrooms are provided with dustbins for dry wastage which are emptied every evening.
- As part the initiative of Swatch Bharat, segregation of waste from the dustbins is done in other strategic locations, thus maintaining the Campus and keeping it clean and green.
- Efforts are made to reduce generation of paper by ensuring that most of the internal communication is on-line.
- The college has an arrangement with ITC agencies to collect waste papers and notebooks, in return for supply of white papers.
- Burning of dry waste is not permitted in the campus.
- Painting and other competitions are also held by the departments to promote environmental awareness among students.

Liquid Waste Management:

- The college has two RO water treatment plants of 2000 ltrs/hour total capacity. Waste water from RO plant is stored and used for the development of greenery.
- The sewage water from the entire campus is received through the underground pipe lines. The college has built a 20,000 ltrs/day Sewerage Treatment Plant. The sewage is treated by sedimentation process. The treated water is used for gardening.

E-Waste Management:

Waste management in the college aims at minimizing e-waste, and promoting refill and reuse.

- The e-waste from each department, including old PCs, Printers, Batteries, scrap of laboratory equipment, is collected at regular intervals and is disposed through authorized agencies.
- All the CRT terminals are replaced with LCD monitors.
- All lighting in the instructional and administrative areas is being gradually switched to LED bulbs. The college has installed a 10KW solar plant and it is planned to shortly install a 100KW solar plant in the college.
- Condemned UPS batteries are given away for refurbishing in exchange for new batteries.

File Description	Document
Any additional information	View Document

7.1.6 Rain water harvesting structures and utilization in the campus**Response:****Rain Water Harvesting structures and utilization in the campus:**

Rainwater harvesting is practiced in the campus. The rainfall data was collected from the surrounding rain gage stations and the consistency of the rainfall data was checked. The roof top areas in the campus are 9427 m². The 75% dependable rainfall was found to be 700 mm per annum. The estimated quantity of roof top rainwater is around 6500 cubic meter or 65, 00,000 litres per annum.

- Arrangements are made to collect and store this quantity of water. Rain water stored is used for gardening.
- Rain water harvesting structures are constructed at few locations in the campus to improve the groundwater table. Emphasis on the significance of water conversation is addressed to the student community.
- A weather station is located in the campus which is monitored by IMD, Hyderabad

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:

Following activities are initiated and working in the college to ensure Green Practices:

Public Transport and transport facilities provided by college: The college has about 4000 students and 420 teaching and non-teaching staff. The college has arranged 30 buses for their commute from various points in Hyderabad and Secunderabad. Students and staff are encouraged to use the buses rather than use their own means of transportation as a energy conservation measure. A large number of them also use public transport.

Plastic-free campus: Efforts are made to reduce plastic consumption by canvassing among students and instructions to canteens.

Paperless Office:

- Printing on paper is greatly reduced by electronic communication, either e-mail, or SMS, among Principal, HODs and faculty and between faculty and students.
- All kinds of paper waste are sent for recycling to the vendors.
- Usage of paper on campus is minimized and printing is done on two sides.
- Maximum communication to departments, recourses and students is made through mails and other electronic media.

Green Landscaping with trees and plants: Large number of shady trees are planted in the campus. Care is taken to restrict vehicle entry into the campus and specific parking area is allotted for faculty and students, thereby minimizing the carbon emission. As a part of Haritha Haram, large scale plantation is done in the campus every year.

Energy Conservation measures:

- Energy Savers Club is initiated
- Awareness among the students and staff on energy conservation is created by displays at appropriate places.
- Fluorescent tubes have been replaced by energy saving lights like CFL, LED in classrooms, laboratories and offices.
- Switching off all the electrical appliances whenever and wherever they are not required.
- The UPS batteries are maintained in good condition to reduce charging current of batteries.
- The buildings are fitted with glass windows for maximum utilization of natural light.
- Periodically equipment is checked and monitored to avoid drawing excessive current.
- With a built up area of 31,000 Sq.m, in 18.275 acres, the orientation and spacing of the buildings in the complex are designed in such a manner that it minimizes the heat inside the building.

- 85 % of the instructional areas are day lit. This has been achieved by optimizing window sizes.
- The college provides bus facilities to the students, faculty and nonteaching staff to all corners of the city to avoid the use of individual vehicles and thus reducing the carbon emission.
- The college has a 10 KW Solar energy plant, and is planning to shortly establish a 200 KW solar power plant, to ensure major dependence on renewable energy and even supplying power back to the grid.

File Description	Document
Any 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: 1.45

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
8.11	4.49	4.32	5.33	13.63

File Description	Document
Details of expenditure on green initiatives and waste management during the last five years	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)

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

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

Response: 2

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
02	0	0	0	0

File Description	Document
Number of Specific initiatives to address locational advantages and disadvantages	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: 20

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
4	6	6	3	1

File Description	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
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
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: 22

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
6	4	5	4	3

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:

- Independence Day and Republic Day are celebrated every year. Eminent persons are invited to address on topics like the responsibilities of citizens, Independence, current national issues and freedom movement.
- Every year Bharath Ratna Sir Mokshagundam Visheshwaraih's birthday on 15th of September is celebrated as Engineers' Day. On this day, college also invites Engineers of distinction to address the students and faculty on the technology trends. These Engineers are also felicitated in appreciation of their contributions to Technology.
- Teachers day is celebrated on 5th of September every year in memory of Sarvepalle Radhakrishnan, first President of India.
- Telangana formation day is celebrated every year on 2nd, June.
- Guru Poornima is celebrated every year. On this occasion eminent speakers are invited to address the staff members and students. They are felicitated on this occasion in recognition to their

contributions to the society. HoDs and senior faculty are felicitated by the Society on the occasion.

- National Science Day is celebrated on 28th February.
- National Mathematics Day is celebrated on 22nd December.
- International Yoga Day is celebrated on 21st June.
- International Womens day is celebrated on 8th March.
- Pi day is celebrated on 14th March.
- Gandhi Jayanthi is celebrated on 2nd October.

Death anniversaries of persons of great national importance are marked by paying homage and recalling their contributions to the nation.

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:

Financial:

Student tuition fee is collected through bank. It constitutes more than 95% of the college annual revenue. The fee structure is determined by TS Govt., and is known to all stake holders, so is the total revenue on this count. Salaries of all employees are deposited in bank accounts. Audited reports are posted on the website.

HODs give budget proposals annually, which are consolidated across all departments under each head, and put up to Executive Committee for approval. Sanctioned budgets are sent to departments. HOD informs the sanction under each head to the concerned faculty in the HOD meeting.

Academic:

- The departmental calendar is displayed at the beginning of the semester.
- Course content and Outcomes are explained by faculty and also given in syllabus books given to all students.
- Attendance in each class is uploaded in the website daily and SMS sent to each parent.
- Parent meetings are arranged twice a semester to inform them of their ward's performance in exams and attendance status.
- Corrected Internal answer scripts and assignments are given to students and their doubts and grievances are addressed.
- Final internal and external marks are displayed in the University website.
- Course monitoring surveys of students are conducted twice a semester to inform faculty of any deficiencies for correction during the semester.
- Student Opinion Poll is conducted at the end of the semester and the rating under 6 different criteria is given as feedback.

- Annual Faculty Performance Appraisal is conducted on-line in which faculty give their self-assessment, and final ratings are informed to them.
- Faculty participate in the meetings to consider syllabus revision, or any major new academic initiatives.
- Graduate Exit survey is taken from final year students where feedback is provided on facilities, Infrastructure, Teaching Learning process, curriculum, attainment of outcomes etc.

Administrative:

- Faculty selections are through open advertisements, followed by a duly constituted University selection panel.
- Ad-hoc selections made are through common test, and demo, and the short listed candidates face an interview by a committee of HOD, a senior faculty from Dept., Principal and a member of management.
- Salaries of all staff are deposited in bank accounts, and individual salary slips are given.
- Status of leaves ie., CL/EL/ML is given to all staff members.
- Faculty and staff association representatives participate in the pay revision calculations.
- Grievances of staff and students are put up to respective Committees for redressal.

Other functions:

- Proposals for projects are informed to all faculty and any screening is done by committees.
- Any R&D and consultancy funding proposals are routed through Principal to the respective department, which are discussed in open meetings before deciding on the faculty to handle the assignments.
- Faculty is involved in many curricular and co-curricular activities. Appointment of conveners, co-conveners and members is done through meetings.
- Various committees like Library, Timetable, Canteen, and Sports are constituted with members from all departments and the minutes are accessible to all.

Through practices cited above, the institution has been able to maintain complete transparency in all its major functions.

File Description	Document
Any additional information	View Document

7.2 Best Practices

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

Response:

Two best Practices

Over the years, in its continuous efforts towards imparting the best technical education, the college

introduced, tested and established many practices, which are continued till day. Many of these have become examples for colleges that came up later in the state, and were emulated. Two of such practices are given below, in the prescribed format:

BEST PRACTICE 1:

1. Title of the Practice – *Annual Faculty Performance Assessment*

2. Objectives of the Practice:

The effort involves obtaining quantitative assessments of various functions of a teacher so as to arrive at an overall index of his/her performance. This index will provide feedback to teacher on the aspects in the instructional practices to be addressed to evolve as a better teacher and also play a better role in the growth of the institution.

The assessment includes various components that define the role as a teacher in a technical institute.

The main objectives are to:

- Make faculty be aware of the various important components of the duties of a teacher in an engineering college
- Help improve certain functions by additional / focussed efforts
- Participate effectively towards attaining the Vision and Mission of the department as well as of the College.

3. The Context:

Teaching is one function that is difficult to quantify, as the logic behind such quantifications are prone to debate in academic circles. It is one of the reasons why most institutes desist from making such effort, and generally restrict to some qualitative indices like Good, Moderate etc.

However, if there are many functions expected of teachers, the quality attributed to each needs mapping to certain numbers in the process of arriving at an overall qualitative index. If there are many parameters under each function, the overall qualitative index loses significance, and teachers display indifference of sorts to such outcome.

In the changing scenario of technical education, like introduction of outcome based education, going through various types of accreditations, opinion polls by various stakeholders, there is currently a greater need for pinpointing the areas for improvement of teachers in order to collectively contribute to the qualitative progress of the institution.

Administration prefers a quantitative index to provide incentive to good performers, and to counsel others.

In this context, the college evolved a Faculty Performance Assessment.

4. The Practice:

At the end of each academic year, each faculty member is required to complete a Faculty Performance

Assessment (FPA) format, which is currently online. The format consists of Parts I & II. Part I contains data of subjects handled in the two semesters, projects, publications, Research projects taken up, major administrative functions in the previous academic year, and the works planned for the ensuing year.

It also contains a quantitative rating of the teacher by the HOD on six different traits.

Part II is a self-assessment sheet by the teacher. This contains four headings, each having many parameters like those listed in brackets, which are:

- Instruction Related (Courses handled, course file, periods handled, assignments, correction of answer scripts in time, results etc.)
- Departmental activities (UG/PG projects handled, attendance / marks compilation duties, Seminar / Workshop organization functions, Counsellor etc.)
- Publications and consultancy (papers published in journals, papers presented, Books or chapters written etc.)
- Student feedback: (Semester-wise Student opinion poll results and the remarks by students in the Course Monitoring sessions each semester for each subject)

Student opinion Poll is a long-established practice in the college [Section 6.3.5]

Each parameter is self-assessed by the teacher and also assessed by the HOD, after due verification.

Obtaining an Overall index: The total values obtained for the above four heads and the assessment of the HOD from Part I are entered in a table. Each of the above five heads is given a weightage, which are different for Asst. Prof. from those of Associate Prof. or Professor. The totals are assigned due weightages to a single Performance Index.

Calculations are performed on-line, and the final results sheet is available to HOD, and Principal. Principal forwards the same to management for further action.

Scores obtained for each function and the overall assessment is made available to the teachers. Faculty who perform poorly in the HOD evaluation in Part I are informed about areas that need improvement.

This practice was introduced after deciding on the major heads and parameters in many brainstorming meetings of the College Academic Council, and also Principal with HODs. The finalized format was tested for the opinion of the faculty of all cadres, for inclusion or deletion of any parameters, change in weightage for each head etc. The format was finalized after due concurrence of faculty and management. The format also went through certain evolution each year to reach the current form.

5. Evidence of Success:

Evidence of success with respect to the FPA practice is seen from the attainment of the objectives set out initially. Objectives-wise:

- Faculty members became better aware and clear about the various activities, both teaching-learning related and other academic pursuits, in the context of a technical institution.
- This FPA practice is in contrast to the earlier situation in engineering colleges, when the main goals are considered as completion of syllabus, and effective teaching which is vaguely defined. Other

activities were being performed with certain casualness and to a great extent individual initiative based. Also, faculty appeared disinclined to take up miscellaneous additional duties, student projects, and R&D activities.

After adaption of this practice, it is observed that faculty are aware of all the parameters, and are volunteering to take up duties under each criterion, which is a sea change in their attitude.

- An increased focus is evident in the attitude of teachers. It has resulted in visibly greater initiative. To an extent, HOD's job of attending to various functions has also become easy. Course files are better maintained, handouts to students on instruction and beyond curriculum material are increasing in quantity and quality.
- The functions / criteria and the parameters under each in the FPA format are prepared considering the Vision and Mission statements of the college, outcome-based education, as well as UGC / AICTE requirements, NBA and NAAC assessment. Better awareness of faculty and efforts with increased focus are seen as continuous improvement towards attainment of the Vision of the college and attaining excellence.

6. Problems Encountered and Resources Required.

- Any new system that tries to quantify faculty performance on annual basis will be viewed with suspicion and also as abnormal, and meets with resistance from faculty. Even if faculty finally agree on it, each of the various heads and the constituting parameters, marks assigned for each activity, and final weightages, become subjects of intense debate at department and college level. To finally adapt the system needed a number of brainstorming and debating sessions.
- Faculty and HODs wanted to revisit the system for modification and fine tuning in the initial years.
- Variance of Management's perspective on the parameters and weightages also needed many sessions of brainstorming. Management's inputs played a part in its evolution.
- Initially the FPA was done manually, but made on-line since 2015. This aspect also encountered typical problems associated with computerization.
- Resource required was mainly of an intellectual nature, being a large number of manhours of academicians for inputs during the evolution.

7. Notes:

- The institution, i.e., management, academic administrators, and faculty feel that the exercise is well worth it, as it addresses many aspects of the teaching-learning process, and in attaining excellence and growth of the college as envisioned.
- Our institute is one of the few that implemented the idea of quantification of teacher functions to an acceptable level after considerable exercise. At present faculty are feeling quite comfortable with the process.
- Visiting experts of NBA had appreciated the process. Matrusri Engineering College, Hyderabad has adapted nearly the same model. Many other colleges have seen our format and expressed a desire to develop teacher evaluation models on the same lines.
- The FPA process initiated by our college is worth emulation by other engineering colleges and other colleges of higher education, with due modifications to suit the particular needs. Implementation of the same is very likely to bring about better and effective participation of faculty in the qualitative improvement of the teaching-learning process in the institute.

BEST PRACTICE 2:

1. Title of the Practice: *Laboratory Manual and Workbook*

2. Objectives of the Practice:

The main objectives in developing the system of preparing Manual and Workbook for each Laboratory course can be stated as:

- Development of a laboratory reporting system based on the manual as standard bench mark.
- Creating a formal system that prompts students take the lab work seriously.
- Make students appreciate better the relevance of the lab experiments to the theoretical concepts.
- To provide correct information and also to train students properly in the experimental methods.

3. The Context:

Each BE programs has about 12 laboratory courses. The experiments aim at giving a feel of real engineering situations through the equipment or their models, and provide opportunity to verify the major concepts taught in the theory courses.

Earlier practice used to be giving a brief, page or two, write-up for an experiment, as is many other institutions.

Problems experience with this method were:

- Procedure are written incorrectly
- Specimen calculations are not uniform
- Sketches of equipment are incorrect
- As students have a tendency to write reports based on previous batch records, there is a certain progressive degeneration in quality
- Students are not applying themselves well enough, and do not study the function of the equipment properly
- However, the question is to what extent the details should be given in writing, because the students would copy all the material and tend to think and reflect less on the processes, which will defeat the very concept of a practical.

After due debate with faculty and HODs, the college decided to try and see the effect of providing each student with comprehensive manuals along with observations and calculations.

4. The Practice

For all the laboratories, with some exceptions in case of CSE, Manual cum Observation books are being printed. They consist of, for each experiment, the equipment & specifications, working diagram, brief theory, procedure, table of observations and calculations, a specimen calculation, graphs to be drawn, and conclusions. A set of fundamental short answer questions are also given at the end of each experiment. The manual is also provided with graph sheets. The annuals are given to students at the beginning of each semester.

Students are expected to study the experiment to be carried out in a session. In the beginning students of that experiment, about four per group, are encouraged to study the equipment, components, the parameters affecting performance etc. for about 15 minutes after which the teacher queries the students about the set up, to ensure that the students have a good idea beforehand of the experiment and what theoretical aspects are going to be verified.

Students complete the experiment as per the procedure and take observations. They do a sample calculation and show to teacher, after which they proceed to complete the remaining calculations in the space provided in the manuals. They also draw the necessary graphs and show to the teacher in the same session.

Students are required to write in the record book all of the above neatly, and submit by the next class. They are expected to prepare to answer the short answer questions

5. Evidence of Success:

Success of this practice is evidenced in the fulfillment of objectives.

After implementation of the practice over the last 10 years, it is observed that

- Reports submitted are written as per the format of manual, with correctness in the associated theory, equipment specifications, procedure and calculations, including the specimen calculations.
- Students are able to better appreciate the relevance of the experiments in relation to theory and comment on the differences or discrepancies with respect to real systems
- Manuals given each year being the reference, a progressive degeneration is avoided.
- Students are preparing for the experiments in advance and in preparing for the viva questions given in the manuals, their understanding of the fundamentals is better.

6. Problems encountered and resources required:

Problems encountered are:

- Initial resistance from senior faculty that system amounts to spoon feeding
- Faculty took about two years to come up with manual write-ups to arrive at good standards. The process also ensured clearing of some basic confusion or doubts about various issues such as equipment specifications, methods of experimentation, better focus on calibration, appropriateness of short answer questions, etc. Such exercise helped to improve the quality of laboratory work.
- Printing of elaborate manuals each ranging from 40 to 70 pages for each lab, for all students, means printing about 8000 manuals each semester. The manuals are to be made available before start of the semester which needs financial resources. It also needs proper planning, coordinating with all departments, as faculty in-charges are required to make any changes needed each year.

7. Notes:

After starting this practice, faculty have been open to inputs from various sources.. The manuals are updated each year to make changes needed in write-ups, to make changes with curriculum, and also to introduce experiments beyond syllabus.

These manuals were appreciated by visiting committees. Professors visiting from other colleges have lent

advice on improvement in some respects, and also taken them as models. Our institute encourages other colleges to take copies of the manuals to develop them on similar lines for their use.

Our college believes that the practice of issuing Laboratory Manual and Workbook to each student for the laboratory courses is a good practice worth emulation by other technical institutes

File Description	Document
Any 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:

MVSR Engineering College has major priority domains (in sync with the Institutional Vision) being imparting high quality Technical Education and producing, competent, socially responsible engineers. All major stake holders in the institution namely the Management, Faculty & Students work with a missionary zeal to achieve the intended objective. Technical Education of a high quality is provided through Meticulous class room instruction by highly experienced and qualified faculty. Modern Teaching aids, pedagogical approaches and outcome based educational practices further enhance the quality of Engineers graduating from this institution.

The college has institutional membership of several professional societies notably Institution of Engineers India (IEI), Institutional of Electronics and Telecommunication Engineers (IETE), Computer Society of India (CSI), Indian Society of Technical Education (ISTE), Institution of Electrical and Electronics Engineers (IEEE) among others. The exposure of faculty to deliberations at such professional bodies enhances industry relevant knowledge which is transmitted eventually to students.

The Instructional quality is assessed periodically through structured course monitoring committees twice a semester and appropriate follow up action is initiated. The percentage of students who pass out each year is close to 90% and nearly 60% of these students get distinction. Students from each department invariably secure 3 to 4 University ranks each semester. As a result of rigorous academic training as above students are confident of their core competence and would responsibly foray in the societal domains leaving their indelible foot prints.

The metamorphoses of a personality in a student from raw potential to a socially responsible engineer with high degree of technical core competence in a period of 4 years association with this institution deserves a special mention.

- One of our students Mr. Fazeel Hasan Usman belonging to the Department of the Information Technology was invited to be the guest of the Google LLC during October 2018 in recognition of extraordinary demonstrated talent in improving ways people connect with information.
- In an instance of extraordinary societal out reach the IEEE – MVSR Student branch (School Code:

41329276, STB Code: 12161) won the Darrel Chong Student Activity award (Silver & Gold), 'Helping Hands', during 2016 and 2017. This award was won amongst competitors from the entire international IEEE student's community and acknowledges exemplary student activities apart from ensuring that they are more value driven.

- The college is selected as a participating institution for "Unnat Bharath Abhiyan (UBA)" a flagship program of Ministry of Human Resource Development (MHRD), Government of India with below mentioned objectives

1. To engage faculty and students to work with the people of rural India.
2. Customize available technologies or develop new technology as per local needs
3. Improve the implementation of existing Government programmes amongst

cluster of villages Adibatla, Badangpet, Kurmalguda, Nadergul, Kongrakalan surrounding this institution.

- 14 students participated in the "Swatch Bharat Summer Internship Programme-2018" and performed activities in the following three clusters

1. Information – Education – Communication activities
2. Solid Waste Management related activities
3. Support in Toilet, Construction activities in rural villages

- 15 teams comprising of nearly 90 students from various branches participated in "Smart Indian Hackathon 2k19" under the aegis of Institution Innovation Council (IIC) in accordance with the norms of the Ministry of HRD, Govt. of India. Results in some sectors are awaited.
- Establishment of Entrepreneurship Development Cell (EDC) in the Campus is an initiative taken by the college to prepare students in their future journey as Entrepreneurs. It facilitates incubation of ideas and recommendations of today's youth and allows them to transform these ideas into upcoming venture by providing them necessary resources to execute their well-thought out plans in the future. Entrepreneurship Development Cell (EDC) at MVSR Engineering College is operational with a Vision to develop a Center of Excellence for creation of Entrepreneurs. At the EDC, the Mission is to identify, train and develop successful Entrepreneurs contributing to economic prosperity with the following objectives.

1. To Motivate and train students to become Entrepreneurs generating jobs for themselves and for others.

2. To conduct

- Entrepreneurship Awareness Camps (EAC)
- Entrepreneurship Development Programs (EDP)
- Faculty Development Programs (FDP)
- Skill Development Programs (SDP)

3. To Assist in starting Enterprises/Industries by comprising:

- Product/Service Identification
- Market Survey
- Preparation of Project Reports
- Financial Assistance

4. To Develop Technology Business Incubation (TBI) Centers

Several programs were organized to meet the above objectives. The EDC is managed with a high priority by all related stake holders.

- The BAJA SAE Series is an event for the undergraduate engineering students, organized globally by the society of Automotive Engineers, USA. The event originated in the name of Mini-BAJA, in the year 1976 at University of Carolina, Since then, the event has spanned across six countries – USA, Mexico, South Africa, Korea, Brazil and India. The BAJA SAE tasks the students to design, fabricate and validate a single seater four-wheeled off road vehicle to take part in the series of events spread over a course of 3 days that test the vehicle for sound engineering practices that have gone into it, the agility of the vehicle in terms of gradability, speed, acceleration and maneuverability characteristics and finally its ability to endure that back breaking durability test.
- EFFI-CYCLE is an intercollegiate design competition under the umbrella of SAE India, for undergraduate and graduate engineering students where the teams have to design and fabricate an energy efficient Hybrid-human powered three-wheeled-electric vehicle. It provides an opportunity for engineering students by setting up a trend of using eco-friendly vehicles. In all 64 teams were registered for Effi-Cycle event, and only 31 teams were qualified for the final endurance and MVSR is one among those qualified teams. Finally the institution stood at 17th position in all over India and in 2nd place from Telangana state and at 3rd position in entire south India region.
- This is the saga of the journey of the Institution which is indexed by its superlative performance in its priority domain which intended to impart technical education of a high order and generate competent and socially responsible Engineers.

5. CONCLUSION

Additional Information :

MVSREC is making every effort to continuously improve the quality with regard to:

- Instructional Infrastructure, learning resources, and student amenities.
- Imparting technical knowledge and career-oriented skills in an environment conducive to all-round development of students.
- Academic ambience and research culture among faculty.
- Curriculum catering to the current and future national and global needs .
- R&D activities and Consultancy by collaborating with industry, academia and R&D organizations.
- Creation of efficient academic and administrative mechanisms.

Backed by a visionary management, committed faculty and staff, and their conscious efforts for growth with quality, we trust that MVSREC will be able to attain international recognition and play an important role in education and technological progress of India.

Concluding Remarks :

MVSREC was established in the year 1981 by Matrusri Education Society. It is situated within 16 Kms from the city centre Koti of Hyderabad, in a sprawling campus of 18.275 acres in Nadergul village, Balapur Mandal. The college offers 7 UG & 3 PG programs in Engineering, in addition to MBA.

MVSREC is one among the few colleges in the combined Andhra Pradesh state that pioneered engineering education in private sector, to produce quality graduate engineers. The confidence of all stakeholders in the quality of education delivered by MVSREC and others led to a further sanction of over 700 engineering colleges in AP.

MVSREC has produced more than 20,000 graduate engineers and 500 MBAs, many of whom are occupying high positions in industry, research laboratories, and the Universities in India/abroad.

Most of the UG programmes are accredited multiple times by NBA. The college has ISO 9001:2015 certification. It is also accorded with 12(B), 2 (f) status by UGC.

MVSREC is making every effort to continuously improve the quality with regard to:

- Instructional Infrastructure, learning resources, and student amenities.
- Imparting technical knowledge and career-oriented skills in an environment conducive to all-round development of students.
- Academic ambience and research culture among faculty.
- Curriculum catering to the current and future national and global needs .
- R&D activities and Consultancy by collaborating with industry, academia and R&D organizations.
- Creation of efficient academic and administrative mechanisms.

Backed by a visionary management, committed faculty and staff, and their conscious efforts for growth with

quality, we trust that MVSREC will be able to attain international recognition and play an important role in education and technological progress of India.

NAAC

6.ANNEXURE

1.Metrics Level Deviations

Metric ID	Sub Questions and Answers before and after DVV Verification																				
1.1.2	<p>Number of certificate/diploma program introduced during the last five years</p> <p>1.1.2.1. Number of certificate/diploma programs introduced year-wise during the last five years</p> <p>Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> <th>2013-14</th> </tr> </thead> <tbody> <tr> <td>12</td> <td>6</td> <td>6</td> <td>4</td> <td>2</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1"> <thead> <tr> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> <th>2013-14</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> </tbody> </table>	2017-18	2016-17	2015-16	2014-15	2013-14	12	6	6	4	2	2017-18	2016-17	2015-16	2014-15	2013-14	0	0	0	0	0
2017-18	2016-17	2015-16	2014-15	2013-14																	
12	6	6	4	2																	
2017-18	2016-17	2015-16	2014-15	2013-14																	
0	0	0	0	0																	
1.1.3	<p>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</p> <p>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</p> <p>Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> <th>2013-14</th> </tr> </thead> <tbody> <tr> <td>19</td> <td>12</td> <td>12</td> <td>13</td> <td>7</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1"> <thead> <tr> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> <th>2013-14</th> </tr> </thead> <tbody> <tr> <td>11</td> <td>12</td> <td>5</td> <td>13</td> <td>7</td> </tr> </tbody> </table>	2017-18	2016-17	2015-16	2014-15	2013-14	19	12	12	13	7	2017-18	2016-17	2015-16	2014-15	2013-14	11	12	5	13	7
2017-18	2016-17	2015-16	2014-15	2013-14																	
19	12	12	13	7																	
2017-18	2016-17	2015-16	2014-15	2013-14																	
11	12	5	13	7																	
1.2.1	<p>Percentage of new Courses introduced out of the total number of courses across all Programs offered during last five years</p> <p>1.2.1.1. How many new courses are introduced within the last five years</p> <p>Answer before DVV Verification : 307</p> <p>Answer after DVV Verification: 230</p>																				
1.2.3	<p>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</p> <p>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</p> <p>Answer before DVV Verification:</p>																				

2017-18	2016-17	2015-16	2014-15	2013-14
1892	1099	640	416	427

Answer After DVV Verification :

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

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

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

Answer before DVV Verification : 48

Answer after DVV Verification: 13

Remark : The HEI input updated after considering one value added course once during the five years even if it was conducted more than once in different academic year.

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

2.3.2.1. Number of teachers using ICT

Answer before DVV Verification : 250

Answer after DVV Verification: 236

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

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

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
47	46	42	30	24

Answer After DVV Verification :

2017-18	2016-17	2015-16	2014-15	2013-14
47	46	42	30	24

2.4.3 Teaching experience per full time teacher in number of years

2.4.3.1. Total experience of full-time teachers

Answer before DVV Verification : 3026 years

Answer after DVV Verification: 2999 years

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

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

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
9	3	3	6	1

Answer After DVV Verification :

2017-18	2016-17	2015-16	2014-15	2013-14
3	3	2	5	1

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)

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

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
44.28	20.14	55.3	49.65	16.55

Answer After DVV Verification :

2017-18	2016-17	2015-16	2014-15	2013-14
15.65	20.14	55.3	49.65	16.55

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

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

Answer before DVV Verification : 20

Answer after DVV Verification: 18

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

Answer before DVV Verification : 306

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

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

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
7	12	7	9	1

Answer After DVV Verification :

2017-18	2016-17	2015-16	2014-15	2013-14
01	00	01	03	0

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

Answer before DVV Verification : Yes

Answer After DVV Verification: Yes

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

Answer before DVV Verification : Yes

Answer After DVV Verification: No

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

3.3.3.1. How many Ph.Ds awarded within last five years

Answer before DVV Verification : 7

Answer after DVV Verification: 7

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

Answer before DVV Verification : 14

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

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

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
89	43	54	38	12

Answer After DVV Verification :

2017-18	2016-17	2015-16	2014-15	2013-14
86	63	67	41	25

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

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

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
50	56	27	28	10

Answer After DVV Verification :

2017-18	2016-17	2015-16	2014-15	2013-14
41	29	18	20	07

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

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

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
2	8	4	1	1

Answer After DVV Verification :

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

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

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

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
27	7	2	2	2

Answer After DVV Verification :

2017-18	2016-17	2015-16	2014-15	2013-14
6	4	1	1	1

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

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

Answer before DVV Verification:

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

2452	2478	2615	2300	2065
------	------	------	------	------

Answer After DVV Verification :

2017-18	2016-17	2015-16	2014-15	2013-14
457	358	340	280	75

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

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

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
59	78	79	26	10

Answer After DVV Verification :

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

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)

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

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
30	13	9	7	4

Answer After DVV Verification :

2017-18	2016-17	2015-16	2014-15	2013-14
30	13	9	7	4

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

4.1.3.1. Number of classrooms and seminar halls with ICT facilities

Answer before DVV Verification : 72

Answer after DVV Verification: 69

4.2.6	<p>Percentage per day usage of library by teachers and students</p> <p>4.2.6.1. Average number of teachers and students using library per day over last one year Answer before DVV Verification : 300 Answer after DVV Verification: 0</p> <p>Remark : Opted out metric as per HEI clarification response.</p>																				
4.3.3	<p>Available bandwidth of internet connection in the Institution (Lease line)</p> <p>Answer before DVV Verification : >=50 MBPS Answer After DVV Verification: >=50 MBPS</p>																				
4.3.4	<p>Facilities for e-content development such as Media Centre, Recording facility, Lecture Capturing System (LCS)</p> <p>Answer before DVV Verification : Yes Answer After DVV Verification: Yes</p>																				
4.4.1	<p>Average Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, as a percentage during the last five years</p> <p>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)</p> <p>Answer before DVV Verification:</p> <table border="1" data-bbox="306 1066 1046 1200"> <thead> <tr> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> <th>2013-14</th> </tr> </thead> <tbody> <tr> <td>744.53</td> <td>634.59</td> <td>634.57</td> <td>509.12</td> <td>512.62</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1" data-bbox="306 1279 1046 1413"> <thead> <tr> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> <th>2013-14</th> </tr> </thead> <tbody> <tr> <td>448.23</td> <td>408.39</td> <td>434.68</td> <td>309.33</td> <td>251.50</td> </tr> </tbody> </table>	2017-18	2016-17	2015-16	2014-15	2013-14	744.53	634.59	634.57	509.12	512.62	2017-18	2016-17	2015-16	2014-15	2013-14	448.23	408.39	434.68	309.33	251.50
2017-18	2016-17	2015-16	2014-15	2013-14																	
744.53	634.59	634.57	509.12	512.62																	
2017-18	2016-17	2015-16	2014-15	2013-14																	
448.23	408.39	434.68	309.33	251.50																	
5.2.1	<p>Average percentage of placement of outgoing students during the last five years</p> <p>5.2.1.1. Number of outgoing students placed year-wise during the last five years</p> <p>Answer before DVV Verification:</p> <table border="1" data-bbox="306 1615 1046 1749"> <thead> <tr> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> <th>2013-14</th> </tr> </thead> <tbody> <tr> <td>450</td> <td>810</td> <td>879</td> <td>526</td> <td>422</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1" data-bbox="306 1827 1046 1962"> <thead> <tr> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> <th>2013-14</th> </tr> </thead> <tbody> <tr> <td>440</td> <td>784</td> <td>842</td> <td>503</td> <td>411</td> </tr> </tbody> </table> <p>Remark : The HEI input updated as per attached HEI details of campus placements reports.</p>	2017-18	2016-17	2015-16	2014-15	2013-14	450	810	879	526	422	2017-18	2016-17	2015-16	2014-15	2013-14	440	784	842	503	411
2017-18	2016-17	2015-16	2014-15	2013-14																	
450	810	879	526	422																	
2017-18	2016-17	2015-16	2014-15	2013-14																	
440	784	842	503	411																	

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)

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

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
32	84	119	92	16

Answer After DVV Verification :

2017-18	2016-17	2015-16	2014-15	2013-14
32	79	109	79	16

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

Answer before DVV Verification:

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

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.

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

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
48	24	33	37	18

Answer After DVV Verification :

2017-18	2016-17	2015-16	2014-15	2013-14
2	02	03	01	0

Remark : The HEI input updated after considering only FIRST, SECOND and THIRD Position holders as its list. No participation certificate is accepted.

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

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

Answer before DVV Verification:

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

8	1	8	8	0
---	---	---	---	---

Answer After DVV Verification :

2017-18	2016-17	2015-16	2014-15	2013-14
01	0	01	01	0

Remark : As per HEI clarification, Alumni Meetings held in a single day will be counted one even though they are conducted department wise.

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

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

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
72	78	79	75	66

Answer After DVV Verification :

2017-18	2016-17	2015-16	2014-15	2013-14
50	59	55	60	50

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

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

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
132	147	144	83	46

Answer After DVV Verification :

2017-18	2016-17	2015-16	2014-15	2013-14
38	67	80	22	15

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

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

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
42	14	13	3	2

Answer After DVV Verification :

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

Remark : The IQAC MoM attached doesnot mention any intention to conduct the mentioned quality initiatives by IQAC, neither HEI has highlighted any of the line of IQAC MoM. Moreover most of the MoM are of AY 2018-19 which are not in assessment period. Hence HEI input cannot be verified.

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

Answer before DVV Verification : A. Any 4 of the above

Answer After DVV Verification: B. Any 3 of the above

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

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

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
14	8	2	1	1

Answer After DVV Verification :

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

7.1.3	<p>Alternate Energy initiatives such as:</p> <ol style="list-style-type: none"> Percentage of annual power requirement of the Institution met by the renewable energy sources <p>7.1.3.1. Annual power requirement met by the renewable energy sources (in KWH) Answer before DVV Verification : 8569.8 Answer after DVV Verification: 8569.8</p> <p>7.1.3.2. Total annual power requirement (in KWH) Answer before DVV Verification : 353384</p>																				
7.1.9	<p>Differently abled (Divyangjan) Friendliness Resources available in the institution:</p> <ol style="list-style-type: none"> Physical facilities Provision for lift Ramp / Rails Braille Software/facilities Rest Rooms Scribes for examination Special skill development for differently abled students Any other similar facility (Specify) <p>Answer before DVV Verification : B. At least 6 of the above Answer After DVV Verification: B. At least 6 of the above</p>																				
7.1.10	<p>Number of Specific initiatives to address locational advantages and disadvantages during the last five years</p> <p>7.1.10.1. Number of specific initiatives to address locational advantages and disadvantages year-wise during the last five years</p> <p>Answer before DVV Verification:</p> <table border="1" data-bbox="306 1267 1046 1402"> <thead> <tr> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> <th>2013-14</th> </tr> </thead> <tbody> <tr> <td>7</td> <td>9</td> <td>9</td> <td>4</td> <td>6</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1" data-bbox="306 1480 1046 1615"> <thead> <tr> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> <th>2013-14</th> </tr> </thead> <tbody> <tr> <td>02</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> </tbody> </table>	2017-18	2016-17	2015-16	2014-15	2013-14	7	9	9	4	6	2017-18	2016-17	2015-16	2014-15	2013-14	02	0	0	0	0
2017-18	2016-17	2015-16	2014-15	2013-14																	
7	9	9	4	6																	
2017-18	2016-17	2015-16	2014-15	2013-14																	
02	0	0	0	0																	
7.1.11	<p>Number of initiatives taken to engage with and contribute to local community during the last five years (Not addressed elsewhere)</p> <p>7.1.11.1. Number of initiatives taken to engage with and contribute to local community year-wise during the last five years</p> <p>Answer before DVV Verification:</p> <table border="1" data-bbox="306 1895 1046 2029"> <thead> <tr> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> <th>2013-14</th> </tr> </thead> <tbody> <tr> <td>8</td> <td>19</td> <td>12</td> <td>5</td> <td>1</td> </tr> </tbody> </table>	2017-18	2016-17	2015-16	2014-15	2013-14	8	19	12	5	1										
2017-18	2016-17	2015-16	2014-15	2013-14																	
8	19	12	5	1																	

	<p>Answer After DVV Verification :</p> <table border="1"> <thead> <tr> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> <th>2013-14</th> </tr> </thead> <tbody> <tr> <td>4</td> <td>6</td> <td>6</td> <td>3</td> <td>1</td> </tr> </tbody> </table>	2017-18	2016-17	2015-16	2014-15	2013-14	4	6	6	3	1										
2017-18	2016-17	2015-16	2014-15	2013-14																	
4	6	6	3	1																	
7.1.12	<p>Code of conduct handbook exists for students, teachers, governing body, administration including Vice Chancellor / Director / Principal /Officials and support staff</p> <p>Answer before DVV Verification : Yes Answer After DVV Verification: Yes</p>																				
7.1.15	<p>The institution offers a course on Human Values and professional ethics</p> <p>Answer before DVV Verification : Yes Answer After DVV Verification: Yes</p>																				
7.1.17	<p>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</p> <p>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</p> <p>Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> <th>2013-14</th> </tr> </thead> <tbody> <tr> <td>13</td> <td>13</td> <td>13</td> <td>13</td> <td>13</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1"> <thead> <tr> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> <th>2013-14</th> </tr> </thead> <tbody> <tr> <td>6</td> <td>4</td> <td>5</td> <td>4</td> <td>3</td> </tr> </tbody> </table>	2017-18	2016-17	2015-16	2014-15	2013-14	13	13	13	13	13	2017-18	2016-17	2015-16	2014-15	2013-14	6	4	5	4	3
2017-18	2016-17	2015-16	2014-15	2013-14																	
13	13	13	13	13																	
2017-18	2016-17	2015-16	2014-15	2013-14																	
6	4	5	4	3																	

2.Extended Profile Deviations

ID	Extended Questions										
1.1	<p>Number of courses offered by the institution across all programs during the last five years</p> <p>Answer before DVV Verification : 775 Answer after DVV Verification : 682</p>										
2.1	<p>Number of full time teachers year-wise during the last five years</p> <p>Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> <th>2013-14</th> </tr> </thead> <tbody> <tr> <td>250</td> <td>245</td> <td>245</td> <td>228</td> <td>212</td> </tr> </tbody> </table>	2017-18	2016-17	2015-16	2014-15	2013-14	250	245	245	228	212
2017-18	2016-17	2015-16	2014-15	2013-14							
250	245	245	228	212							

Answer After DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
250	245	245	228	212

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

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
247	251	240	228	216

Answer After DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
250	245	245	228	216

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

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
764.04	650.33	643.08	524.37	526.42

Answer After DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
664.77	553.82	564.25	441.1	421.17

3.3 Number of computers

Answer before DVV Verification : 1129

Answer after DVV Verification : 1038