

SELF STUDY REPORT

FOR

1st CYCLE OF ACCREDITATION

**NAGARJUNA INSTITUTE OF ENGINEERING
TECHNOLOGY AND MANAGEMENT**

AT - SATNAVRI, AMRAVATI ROAD , NAGPUR

440023

www.nietm.in

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

February 2018

1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

- **Introductory Note**

Nagarjuna Institute of Engineering, Technology & Management (NIETM) village: Satnavri, Amravati Road, Nagpur was established in the year 2009 by Maitrey Educational Society, Nagpur. It is a self-financed unaided private institute approved by All India Council for Technical Education, New Delhi and Directorate of Technical Education, Maharashtra State. It is affiliated to Rashtrasant Tukadoji Maharaj (RTM) Nagpur University, Nagpur.

Nagarjuna Institute of Engineering, Technology & Management, Nagpur has established the quality in teaching learning process adhering to the ethical standards and professional integrity to enhance the satisfaction level of students and parents and hence Nagarjuna Institute of Engineering, Technology & Management, Nagpur become a preferred destination of the aspiring students.

It is an immense pleasure to submit self study report (SSR) of our institute to National Assessment and Accreditation Council (NAAC), Bangalore for first cycle accreditation. The report is an outcome of collective efforts of all HOD, faculties and staff. This report is prepared with sincerity and dedication as per the guideline laid down by NAAC authorities. I congratulate and thank the management, the steering committee members, IQAC and administrative department for sharing the responsibility for drafting self study report (SSR).

Vision

To develop a knowledge based society with clarity of thought. Come forward to learn, go forth to serve and excel.

Mission

To be the premier institute for promoting & pursuing multidisciplinary engineering. Attain a significant educational presence in the region. Develop a community of scholars with talent and expertise that will participate in engineering excellence and national development.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

Strengths:

- Dedicated, committed and fully supported Management
- Devoted, dedicated, determined and disciplined faculty members
- Adequate infrastructure and excellent teaching-learning environment

- Well-equipped laboratories
- Consistent academic performances in the University examinations
- Departmental student forums for overall development of students
- Students are rewarded at various inter collegiate competitions.
- Well groomed activities for Students for holistic engineering education including personality development, placement training, communication skills etc.
- Meritorious students reward scheme
- Need based scholarship scheme, accommodation, transportation, books and food for economically weaker students

Institutional Weakness

Weakness:

- The socio-economic background of many of the students admitted in the various courses is responsible for poor language competence.
- This leads to an unsatisfactory level of comprehension and communication.
- The institute needs to strengthen the research activities by taking more initiatives for formation of Centre of excellence.
- Lack of faculty with industry experience
- Lack of research attitude among faculty members

Institutional Opportunity

Opportunity:

- Strengthen industry-institute interaction to give better industrial exposure to the students.
- Improve the quality of research publications.
- Entrepreneurship development among student fraternity
- Innovations and creativities can be provoked through incubation cell.
- Improve an employability of the students

Institutional Challenge

Challenges:

- Retention of qualified and competent faculty
- To collaborate with reputed colleges / universities to promote student and faculty exchange programs.
- To mitigate the tough competition from IIIT, VNIT, Government college of engineering and

autonomous colleges in the region

- Campus placement in core engineering companies

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

Criterion I : Curricular Aspects

Being affiliated to RTMNU, the college follows the syllabi prescribed by the university. All four courses are offered and implemented choice based credit system (CBCS) since 2016. In addition, the college prepares the most suitable and innovative academic plans so that the syllabi can be delivered and taught to its best way. Faculties are always motivated for faculty Development Programme so that they will remain updated and their skills will be sharpened. The institute always takes initiative for workshops and Short Term Training Programs (STTP). Students are undertaking field projects and internships. Vision and Mission of the college are always priority in every activity. The college always encourages the students to apply their theoretical knowledge into practical. Therefore, the college has given due emphasis to the theory classes as well as practical's. While doing this, the Academic Calendar and the pattern of the University are taken into account. The feedback from the students is obtained on regular basis and so it is conveyed to the respective faculty members so that the required adaptation can be done because the students are always in the centre of planning and execution. The college runs all the programmes on self-financed mode and admission are done in accordance with the guidelines of the directorate of technical education (DTE), Government of Maharashtra and the RTMN University.

Teaching-learning and Evaluation

Criterion II : Teaching Learning and Evaluation

The Academic Calendar is prepared for curricular, co-curricular, extra-curricular activities and institute level examinations. Along with black-board teaching, some topics are taught through Power Point Presentations. For easy learning, learning videos are presented. The classroom teaching is accompanied by Industrial visits and Industry based projects. The extra ventures are provided if required for difficult subjects. Special arrangements of classes are done for Direct II year students. The Student-Mentor scheme is inculcated in the planning. Under this, a small group of students is assigned a faculty member as mentor. Faculty looks after the mental, intellectual and emotional counseling of students. The college assesses the learning levels of the students, after admission and organizes special programs for advanced learners and slow learners. The program outcomes, Program specific outcomes and course outcomes are offered and stated by the institute and displayed on website and communicated to teachers and students. Attainment of program outcomes, program specific outcomes and course outcomes are evaluated by the institute.

Research, Innovations and Extension

Criterion III : Research, Innovations and Extension

The institute gives emphasis on the Research and Development. The institute has formed a separate committee to develop research culture among faculty members and in-process engineering graduates. During last few years the faculty members have published their research papers in National and International journals, conferences and proceedings. The institute conducts industry-academia innovative practices. The institute provides incentives to teachers who receive state, national and international recognition/awards. The Institute has received excellence award by mediaZ group in 2016 at Mumbai. During the last years, the college has encouraged the faculty members for Ph.D. and consequently few are pursuing research. There is a great enhancement so far research paper publications are concerned. Over 02 scholars are pursuing Ph.D. in the college. The students are also assisted and guided for innovative projects which will cater the need of society as well as industry. In this context, the institute has functional MoU with industries. The Training & Placement cell provides a link with the industry. The student interacts with the industrial personnel and accordingly prepares their projects.

To bring the students in human and social touch, the programmes like Blood Donation, Swachh Bharat, Aids awareness, gender issues, Orphanage & Old age home visits, Tree Plantation, Empowerment of women especially in rural area, removal of superstitions in rural community, Donations to the needy, etc. are held. The NSS unit of the institute takes initiative in this regard. This helps to create philanthropic approach among students.

Infrastructure and Learning Resources

Criterion IV : Infrastructure and Learning Resources

The institute has furnished the infrastructure as per the norms laid down by AICTE. It contains the well modeled classrooms, Laboratories, Computing equipments, Common Rooms for girls and boys separately, Centralized Computer Centre. The Library is automated using integrated management system software with a large number of books with reputed journals. The central library has good ambience with well-arranged reading hall and availability of rare books like study smarter and not harder and remote access to e-resources. The central library is a member of shodhganga and integrated with e-books and databases with high speed broad band internet facility are available. The laboratories are well equipped with latest computers and machines. There is generator power back-up availability. Digital Classrooms are being developed as a prompt learning resource. The play-ground is available for sports activities and cultural activities. The kits for indoor and outdoor games are provided to the students for their physical fitness.

Student Support and Progression

Criterion V : Student Support & Progression

Every year annual prospectus is updated and provided to students to update them with information regarding admission, programs, facilities, etc. The college strives at all levels to facilitate the needs of the students of

academic, Co-academic and Extra academic.

The college provides scholarship in the form of fees concessions to the economically weaker students. SC/ST/NT/VJ/SBC students are given financial assistance in some cases. Through Professional Counselor and Teacher-Guardian scheme, one to one counseling is done. The students are encouraged for participation at collegiate and inter collegiate competitions. Every year a large number of students participate in inter-collegiate competitions like Model Exhibition, Paper Presentation, poster Exhibitions etc. and emerge as winners. The students are given the guidance and coaching for competitive exams on regular basis. The Guest lecturers for GATE and other exams are organized. The college has built and developed a culture which provides the required mechanism and training for growth and development of students, which eventually result in placement. For this the college has independent Training & Placement cell. It guides the student for personal and career perspectives. There are regular mentoring and Career counseling, soft skill development and meditational sessions. Remedial lectures, speaking English for slow learners, Anti-Ragging Cell, Continuous Feedback, Active Students Council, representation of students in academic and administrative committees of the institute etc. are the signature hallmarks of the college. "Study smarter and not harder" workshops are every year in the college.

Governance, Leadership and Management

Keeping in mind the vision of the institute, the efforts from all stakeholders are combined and properly guided. The Advisory Body gives the guidelines and directions towards governance and management. Organizational structure of the Institute includes governing body, Administrative setup, service rules, procedures, recruitment, promotional policies as well as grievance redressal mechanism. Effectiveness of various committees is evident through minutes of meeting and implementation of their resolutions. The institute has effective welfare measures for teaching and non-teaching staff. The Principal & Head of the Departments are entitled with academic autonomy concerned. Heads of the department ensure quality in teaching learning process. The management gives priority to appoint teaching and supporting faculty members because quality human resource adds quality to resources of college. Performance appraisal is done on regular basis. Every faculty member is aided to realize potential. The reward to the best performers and counseling to the low performers is provided. Faculty members are encouraged to attend Seminars, Workshops, FDP's, STTP's, Conferences etc. The institute is equipped with Internal Quality Assurance Cell (IQAC). The institute reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms. The rules and regulations of AICTE / DTE / University are always held into account. All finance and accounts are duly audited every year. The management extends full support for enhancing the professional development of staff members.

Institutional Values and Best Practices

Criterion VII : Institutional Values and Best Practices

The institute shows gender sensitivity in providing facilities such as Safety and Security, Counseling and Common Rooms for boys and girls. The institute is dedicated towards environment conservation. The good

green corner in the campus is properly maintained by the collective efforts of the faculty members and students. Every year, hundreds of plants are planted through “Tree Plantation Program” in the campus. The students are encouraged for participation in “Cleanliness Drive”. In order to have Environmental Consciousness and Sustainability, the institute has developed the Waste Management system and E-waste management systems.

The students and employees are utilizing public transport. The institute campus is absolutely free of plastic. It covers Green landscaping with trees and plants. The campus is friendly user for differently abled persons. The institute is located in rural areas and hence institute has noticed that large number of students especially from socially and economically weaker sections approaches for admission that could not afford in urban areas, career guidance counseling etc. The code of conduct handbook is available with the institute for students and teachers. The institute offers a course on professional Ethics. The institute is strictly abided by the rules and norms laid down by university, DTE, Govt. of Maharashtra and AICTE. Every year, the institute organizes the birth / death anniversaries of great Indian personalities. The institute maintains complete transparency in its financial, academic, administrative and auxiliary functions.

NAAC

2. PROFILE

2.1 BASIC INFORMATION

| Name and Address of the College | |
|---------------------------------|--|
| Name | NAGARJUNA INSTITUTE OF ENGINEERING TECHNOLOGY AND MANAGEMENT |
| Address | At - Satnavri, Amravati Road , Nagpur |
| City | Nagpur |
| State | Maharashtra |
| Pin | 440023 |
| Website | www.nietm.in |

| Contacts for Communication | | | | | |
|----------------------------|----------------|-------------------------|------------|-----|----------------------------|
| Designation | Name | Telephone with STD Code | Mobile | Fax | Email |
| Principal | S.M.Kelo | 07118-322211 | 9049472992 | - | maitrey.ngp@gmail.com |
| Associate Professor | M.K.Rahangdale | 0712-255654 | 9860595366 | - | mkrahangdale1234@yahoo.com |

| Status of the Institution | |
|---------------------------|----------------|
| Institution Status | Self Financing |

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

| Recognized Minority institution | |
|--|----|
| If it is a recognized minority institution | No |

| Establishment Details | |
|--------------------------------------|------------|
| Date of establishment of the college | 01-01-2009 |

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

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

Details of UGC recognition

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

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

| Statutory Regulatory Authority | Recognition/Approval details Institution/Department programme | Day,Month and year(dd-mm-yyyy) | Validity in months | Remarks |
|--------------------------------|---|--------------------------------|--------------------|-----------------------|
| AICTE | View Document | 10-04-2017 | 12 | Extension of approval |

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? | Yes |
| If yes, name of the agency | Directorate of technical Education Maharashtra Mumbai |
| Date of recognition | 12-08-2017 |

| Location and Area of Campus | | | | |
|------------------------------------|---------------------------------------|------------------|-----------------------------|---------------------------------|
| Campus Type | Address | Location* | Campus Area in Acres | Built up Area in sq.mts. |
| Main campus area | At - Satnavri, Amravati Road , Nagpur | Rural | 10.36 | 8812.91 |

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,Computer Science And Engineering | 48 | HSC CET EXAM | English | 60 | 36 |
| UG | BE,Electrical Engineering | 48 | HSC CET EXAM | English | 60 | 10 |
| UG | BE,Mechanical Engineering | 48 | HSC CET EXAM | English | 60 | 5 |
| UG | BE,Civil Engineering | 48 | HSC CET EXAM | English | 60 | 14 |

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 | 1 | | | | 1 | | | | 23 | | | |
| Recruited | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 15 | 8 | 0 | 23 |
| Yet to Recruit | 0 | | | | 0 | | | | 0 | | | |
| Sanctioned by the Management/Society or Other Authorized Bodies | 0 | | | | 0 | | | | 26 | | | |
| Recruited | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 8 | 0 | 26 |
| 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 | | | | 32 |
| Recruited | 21 | 4 | 0 | 25 |
| Yet to Recruit | | | | 7 |

| Technical Staff | | | | |
|---|-------------|---------------|---------------|--------------|
| | Male | Female | Others | Total |
| Sanctioned by the UGC /University State Government | | | | 0 |
| Recruited | 0 | 0 | 0 | 0 |
| Yet to Recruit | | | | 0 |
| Sanctioned by the Management/Society or Other Authorized Bodies | | | | 15 |
| Recruited | 12 | 3 | 0 | 15 |
| 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. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ph.D. | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
| M.Phil. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PG | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 17 | 0 | 49 |

| Temporary Teachers | | | | | | | | | | |
|-----------------------|-----------|--------|--------|---------------------|--------|--------|---------------------|--------|--------|-------|
| Highest Qualification | Professor | | | Associate Professor | | | Assistant Professor | | | Total |
| | Male | Female | Others | Male | Female | Others | Male | Female | Others | |
| D.sc/D.Litt. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ph.D. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| M.Phil. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| Part Time Teachers | | | | | | | | | | |
|-----------------------|-----------|--------|--------|---------------------|--------|--------|---------------------|--------|--------|-------|
| Highest Qualification | Professor | | | Associate Professor | | | Assistant Professor | | | Total |
| | Male | Female | Others | Male | Female | Others | Male | Female | Others | |
| D.sc/D.Litt. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ph.D. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| M.Phil. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| Details of Visting/Guest Faculties | | | | | |
|--|------|--|--------|--|-------|
| Number of Visiting/Guest Faculty engaged with the college? | Male | | Female | | Total |
| | | | | | |
| | 5 | | 2 | | 7 |

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 | 319 | 3 | 0 |
| | Female | 117 | 0 | 0 | 0 | 117 |
| | 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 | 170 | 145 | 128 | 111 |
| | Female | 63 | 65 | 74 | 55 |
| | Others | 0 | 0 | 0 | 0 |
| ST | Male | 4 | 20 | 12 | 7 |
| | Female | 0 | 6 | 4 | 4 |
| | Others | 0 | 0 | 0 | 0 |
| OBC | Male | 99 | 101 | 116 | 146 |
| | Female | 25 | 19 | 19 | 32 |
| | Others | 0 | 0 | 0 | 0 |
| General | Male | 34 | 38 | 39 | 63 |
| | Female | 8 | 7 | 6 | 8 |
| | Others | 0 | 0 | 0 | 0 |
| Others | Male | 23 | 19 | 19 | 16 |
| | Female | 6 | 8 | 11 | 5 |
| | Others | 0 | 0 | 0 | 0 |
| Total | | 432 | 428 | 428 | 447 |

3. Extended Profile

3.1 Program

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

Response : 152

Number of self-financed Programs offered by college

Response : 01

Number of new programmes introduced in the college during the last five years

Response : 00

3.2 Students

Number of students year-wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 447 | 428 | 428 | 432 | 487 |

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 120 | 180 | 180 | 180 | 180 |

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 119 | 141 | 64 | 99 | 98 |

Total number of outgoing / final year students

Response : 521

3.3 Teachers

Number of teachers year-wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 30 | 30 | 28 | 27 | 27 |

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 29 | 37 | 29 | 25 | 23 |

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 99 | 98 | 98 | 95 | 93 |

Total experience of full-time teachers**Response : 168****Number of full time teachers worked in the institution during the last 5 years****Response : 99****3.4 Institution****Total number of classrooms and seminar halls****Response : 19****Total Expenditure excluding salary year-wise during the last five years (INR in Lakhs)**

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 27.4 | 55.9 | 67.5 | 46.5 | 46.4 |

Number of computers**Response : 225**

Unit cost of education including the salary component(INR in Lakhs)

Response : 0.57

Unit cost of education excluding the salary component(INR in Lakhs)

Response : 0.17

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:

To achieve effective teaching-learning goal, various action plans are deployed in well planned manner. Such as:

- A meeting of staff conducted with IQAC committee to develop various action plans before starting of odd and even semester.
- In accordance with action plans of the institute and Rashtra Sant Tukdoji Maharaj Nagpur university academic calendar, the academic calendar for the institute is designed and developed for effective implementation of curriculum.
- Heads of individual department conduct meeting with respective staff members to complete respective subject syllabus effectively according to academic calendar.
- The subject distribution for next semester is done during the Preparation leave period of current semester. So that, proper preparation of each topic of syllabus is done before the session starts and teaching plan is designed according to that.
- Teaching plan is monitored and approved by HOD for every subject.
- Laboratories are updated with required instruments and laboratory manuals are prepared with updated syllabus of university.
- Well ventilated and spacious class rooms are provided.
- Monitoring of teaching and learning process is carried out by HOD of respective department and Principal by simply observing or by taking oral feedback from students.
- In addition with traditional teaching method, innovative teaching techniques are adopted to improve teaching-learning process.
- NPTEL lectures and learning videos are provided to students to improve self-learning capabilities.
- Expert lectures, seminars, summer-winter internship and industrial visits are conducted regularly in alignment to implement curriculum.
- Extra classes for academically weaker students are conducted during off days or working days if vacant time slot is available.
- Subject files prepared by respective staff contain teaching notes, teaching plan, question bank and performance detail of students.
- Unit test, mid-term test and Pre university tests are conducted to check the performance of students.
- Feedback from students is taken to improve the quality of education.
- Special additional technical inputs by industry/academic expert are given to students for project idea selection and implementation.

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

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

Response: 0

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 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: 3.5

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 1 | 0 | 0 | 0 | 0 |

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

1.2 Academic Flexibility

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

Response: 0

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

File Description**Document**

Details of the new courses introduced

[View Document](#)

Any additional information

[View Document](#)**1.2.2 Percentage of programs in which Choice Based Credit System (CBCS)/Elective course system has been implemented****Response: 25**

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

Response: 1

File Description**Document**

Name of the programs in which CBCS is implemented

[View Document](#)**1.2.3 Average percentage of students enrolled in subject related Certificate/ Diploma programs/Add-on programs as against the total number of students during the last five years****Response: 18.55**

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 138 | 103 | 67 | 55 | 46 |

File Description**Document**

Details of the students enrolled in Subjects related to certificate/Diploma/Add-on programs

[View Document](#)

Any additional information

[View Document](#)**1.3 Curriculum Enrichment****1.3.1 Institution integrates cross- cutting issues relevant to Gender, Environment and Sustainability,**

Human Values and Professional Ethics into the Curriculum

Response:

Institute follows the curriculum provided by University. Apart from that institute boldly thinks on social unbalanced issues, and makes efforts to overcome such issues so that students as well as staff will be good human beings at their societal level. Some of the efforts taken by institution are as follows:

1. Gender issue:

- Institute avoids gender partiality during admission process.
- Provides equal opportunity to both genders for the employment, speeches during functions, forum initiatives, incharge of events, sports, cultural activities etc.
- Encourage both genders to participate in various technical events held at inter college level by making mixed groups of boys and girls, such as paper presentation, poster presentation, quiz etc.
- Participation in National Service Scheme (NSS)
- Equal opportunities provided to gents staff and ladies staff to build the confidence.

1. Environment and Sustainability:

- Institute organizes Tree Plantation program regularly to encourage current generation for plantation.
- Arranges talk on climate change.
- Provide greenery campus to avoid soil erosion.
- Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

1. Environmental Education:

- A special environment education course named Environmental Engineering provided by University is compulsory to students.
- Under this course, a PPT presentation followed by report writing is carried out for each and every student.
- Institution organizes poster presentation competition on environmental education.
- Students are taking education about renewable energy sources to lessen green gases.

1. Human Values:

- Institute takes initiative to avoid ragging inside college campus by displaying human values for ragging over every floor of college.
- A committee formed by college for students to protect their values.

• Professional Ethics:

1. Spiritual lectures are organized by institution to realize students about prohibition of tobacco, liquors etc.
2. Lectures conducted by eminent personalities to feed moral and ethical values in students.
3. Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

Professional ethics subject is included in First year engineering, second semester curriculum. The subject on Environment Science is inducted in the sixth semester of Civil, Mechanical, Electrical and Computer Science engineering under graduate courses.

| File Description | Document |
|---------------------------------|-------------------------------|
| Any Additional Information | View Document |
| Link for Additional Information | View Document |

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

Response: 24

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

Response: 24

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

1.3.3 Percentage of students undertaking field projects / internships

Response: 34.45

1.3.3.1 Number of students undertaking field projects or internships

Response: 154

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

1.4 Feedback System

| <p>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</p> <p>A.Any 4 of the above</p> <p>B.Any 3 of the above</p> <p>C. Any 2 of the above</p> <p>D. Any 1 of the above</p> <p>Response: C. Any 2 of the above</p> | |
|---|-------------------------------|
| 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 |

| <p>1.4.2 Feedback processes of the institution may be classified as follows:</p> <p>A. Feedback collected, analysed and action taken and feedback available on website</p> <p>B. Feedback collected, analysed and action has been taken</p> <p>C. Feedback collected and analysed</p> <p>D. Feedback collected</p> <p>Response: C. Feedback collected and analysed</p> | |
|--|-------------------------------|
| File Description | Document |
| Any additional information | View Document |
| URL for feedback report | View Document |

NAAC

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: 1.64

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 4 | 4 | 17 | 5 | 6 |

File Description

Document

List of students (other states and countries)

[View Document](#)

Institutional data in prescribed format

[View Document](#)

Any additional information

[View Document](#)

2.1.2 Average Enrollment percentage (Average of last five years)

Response: 28.19

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 25 | 89 | 115 | 123 | 143 |

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 240 | 360 | 360 | 360 | 360 |

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:** 50.44

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 22 | 81 | 105 | 111 | 124 |

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

2.2 Catering to Student Diversity**2.2.1 The institution assesses the learning levels of the students, after admission and organises special programs for advanced learners and slow learners****Response:****For Advanced learners**

- Advanced learners are identified right from the beginning, from their score in the higher secondary, unit tests, mid-term exam, pre-university test exam and first semester University examination performance. They are called and their special interests and requirements are heard and all the help is rendered to sustain their enthusiasm and further improvement in performance.
- The institute organizes various competitions such as technical symposium; student entrepreneurship development programs under the cell of “**SEDP**”, innovative project competitions, poster presentations and quiz competitions in which they actively participate.
- Offering special coaching for AUTOCAD, CRIO, Matlab etc
- Encouragement given to them to prepare for competitive examinations like UPSC, MPSC, GATE, CAT, examination. The institute has to be provided facility of examination preparation at Dr. Babasaheb Ambedkar National Association of Engineers, Nagpur and in the campus at central Library.

For Slow learners

- Result analysis is done after each and every test. Those students who are not able to perform well are given counseling and additional training through special coaching classes, conducting re-test,

giving more emphasis on complex topics wherein the class strength is kept small so that individual attention could be given.

- Slow learners and poor performers are identified in the beginning of the semester itself and they are called, counseled and given adequate guidance and hence drop outs are almost minimum. Classes are conducted on Saturdays and during 3 pm – 5 pm on weekdays for slow learners.
- Mentor interacts regularly with students assigned to them and find out the academic performance of student and probable reasons for the same. He/she co-relates the result with the slow learners.
- Parent teacher meetings also provide an insight about problems of weak students.

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

2.2.2 Student - Full time teacher ratio

Response: 15.41

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

2.2.3 Percentage of differently abled students (Divyangjan) on rolls

Response: 0.45

2.2.3.1 Number of differently abled students on rolls

Response: 2

| File Description | Document |
|---|-------------------------------|
| List of students(differently abled) | View Document |
| Institutional data in prescribed format | View Document |
| Any additional information | View Document |

2.3 Teaching- Learning Process

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

Response:

For enhancing learning experiences the following student centric methods are drawn and deployed by the institute:

- Teaching plan for each subject is prepared by the faculty concerned well in advance and adherence to the lesson plan is duly checked by respective HODs.
- HODs conduct a meeting with the faculty members before commencement of the semester and subject allocation is made.
- Class time tables are prepared and displayed in all notice boards. Every faculty member prepares a course file which contains lecture notes, schedule, assignments, old question papers, content beyond syllabus, unit wise question papers etc.
- Lab manuals are prepared and supplied to the students at the beginning of semester. Review meetings are arranged periodically to review coverage of syllabus. Depending upon necessity, time tables are changed and modified in order to complete syllabus within the stipulated time.
- Faculty use teaching aids like models, PPTs and charts wherever necessary.
- Bridge courses are conducted for lateral entry students.
- The institute conducts remedial classes for slow learners in different subjects to enhance their skills and competence.
- Technical symposium, poster presentation & Personality Development programmes are conducted to improve their personality and to motivate them for an innovative and creative mindset.
- Expert lectures from industry resource persons, Industrial visits, summer-winter internship programs and Industry training are arranged to bridge the gap between industry-academia and prepare the students to improve their employability.
- Add-on courses are organized for advanced learners to enhance their learning abilities.(GATE,BANKING, student entrepreneurship programs)
- Career counseling for students by Training and Placement department regularly.
- All academic and overall growth activities are students centric.
- Institute conducts Campus Recruitment Training for final year students.
- Institute arranges NPTEL lecture series for student, to make the subject easy to understand and direct access to the library recourses through IMS software for independent learning.
- Computers and laboratories are made available to students as per their requirement for carrying out the project work and mini projects.
- Lecture notes are distributed / discussed after each module is covered in the class.
- Institute conducts poster presentation contest, project competition and other technical events for all engineering students of the group.
- Wi-Fi Campus connectivity is available in the college to provide students quick access to knowledge sharing through internet.
- Student's centric notice board is provided at each department.
- Motivation to appear for qualifying examinations like GATE and GRE by independent learning.

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

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

Response: 179.31

2.3.2.1 Number of teachers using ICT

Response: 52

| File Description | Document |
|--|-------------------------------|
| List of teachers (using ICT for teaching) | View Document |
| Any additional information | 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: 15.41

2.3.3.1 Number of mentors

Response: 29

| File Description | Document |
|---|-------------------------------|
| Year wise list of number of students, full time teachers and students to mentor ratio | View Document |
| Any additional information | View Document |

2.3.4 Innovation and creativity in teaching-learning

Response:

- Continuous efforts are made by the faculty to nurture critical thinking among the students through various strategies.
- In addition to lecture method, ICT tools are used to make space for experiential learning among the students.
- Project works are suitably integrated into the curriculum and the faculty encourage Peer Group work, group assignments and Group discussion for promoting qualitative learning process
- Guest lectures and seminars are organized in the college with eminent personalities in respective fields to enable the students to interact with them in the latest developments in the technology. This creates interest in the minds of students for further learning.
- Students are encouraged to gain knowledge in interdisciplinary subjects through selection of open electives, seminars and discussions with experts.
- To have critical thinking process of students, various group discussions, debates and seminars are organized in which students explore new ideas.

- Blind 'C' competitions, Bridge competition, solar panel design, transformers making, and Poster Making competition are organized to develop creativity and critical thinking among the students.
- Advanced knowledge imparted to the students through value added programmes on current developments in the respective fields and guest lectures by industrial experts.
- Students guided in organizing technical seminars on advanced topics and encouraged to refer articles published in reputed journals and prepare papers and present them in seminars conducted by other reputed institutions
- Faculties are encouraged to participate in short term training programmes, Faculty development programmes and workshops to enhance their knowledge.
- Faculty and students are encouraged to participate /present papers at different levels of seminars/conferences.
- The departments conduct different competitions like poster presentation, paper presentation etc., under departmental association for the benefit of the students.
- Industrial visits are arranged to expose the students on advanced machineries, equipment, processes and technology practiced in the industries.
- Institute has the student's forum in each department which organizes the events to expose the students for advanced level of technology.

| 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: 29.54

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

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

Response: 8.6

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 2 | 2 | 3 | 4 | 1 |

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

2.4.3 Teaching experience per full time teacher in number of years

Response: 5.79

| | |
|---|-------------------------------|
| File Description | Document |
| List of Teachers including their PAN, designation,dept and experience details | View 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: 0

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 0 | 0 | 0 | 0 | 0 |

| | |
|---|-------------------------------|
| File Description | Document |
| Institutional data in prescribed format | View Document |

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

Response: 0

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 0 | 0 | 0 | 0 | 0 |

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

2.5 Evaluation Process and Reforms

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

Response:

Academic calendar:

- It is issued by the affiliated RTMN University, Nagpur and it is followed.
- Principal, Vice- Principal and the Heads of Department prepares the academic calendar of the institute which includes Assessment Schedule ,commencement of the classes for the students of Various semesters, Academic events, Annual function, Sports Schedule, Extracurricular activities, List of Holidays, Unit Tests, mid-term test, Pre university test examination etc.

Teaching plan:

- Teaching plan for each subject is prepared by the faculty concerned well in advance and adherence to the lesson plan is duly checked by respective HODs.
- HODs conduct a meeting with the faculty members before commencement of the semester and subject allocation is made.
- Class time tables are prepared and displayed in all notice boards. Every faculty member prepares a course file which contains lecture notes, schedule, assignments, old question papers, content beyond syllabus, unit wise question papers etc.
- Lab manuals are prepared and supplied to the students at the beginning of semester. Review meetings are arranged periodically to review coverage of syllabus. Depending upon necessity, time tables are changed and modified in order to complete syllabus within the stipulated time.
- Faculty use teaching aids like models, PPTs and charts wherever necessary.

Evaluation:

- Continuous assessment and evaluation is carried out.
- Internal assessment of theory subjects is based on PUT, Assignments and University Guidelines.
- Assignments are given and are evaluated.
- University conducts semester end exams in both theory and labs and arranges evaluation.

Evaluation Blue Print:

- Academic preparation is verified before the commencement of each semester by the internal audit

committee.

- Shortcomings found are discussed with the concern departmental HOD and corrective measures are taken.
- Academic audit is also carried out before and at the end of each semester.

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

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

Response:

The measures of transparency and robustness in internal assessment are maintained and adopted based on RTMN University pattern. viz.

- Syllabus up gradation 2015-16.
- Online evaluation process introduced.
- Internal test papers carry questions similar to University examination.
- Internal assessment is awarded to the students as per the University criteria.
- Student centric learning through assignments, projects, seminars and practical sessions.
- The university has adopted major reform in evaluation by introducing grading system from the academic year 2012-13 and the institute has adopted the same.
- College has adopted new system of evaluation of projects where a team of faculties in each department is assigned the task of monitoring and evaluation of the work.
- Every batch of student should present the progress of the project at month end and marks are assigned to each presentation.
- Due weightage is given to these marks in the final calculation of term work and internal marks.
- New syllabus Credit Based System (CBS) has been introduced by the university and it is successfully implemented in the institution.
- Up-gradation and establishment of new laboratories are the hallmark of the institution.
- Any reforms or changes brought out by the university are available on the website of the university and they are also informed to the college through circulars.
- At the beginning of semester the intended activity is informed to all the teachers.
- At regular intervals the implementation is ensured by the Principal in meetings with Heads of Department.
- In addition to that student's feedback is also considered to review the effective implementation.
- College has its own internal evaluation process based on University Curriculum and scheme.
- Unit tests, mid-term test, pre-university test (PUT), Assignments are conducted per semester.
- Internal Viva-voce examination is conducted.
- Due credit is given for regular attendance.

- Assessment by teachers is displayed on notice board.
- Credit is also awarded to extracurricular activities and sports.
- Aptitude tests are conducted under the student cell of “Brain Spark”
- The progress of the students is monitored regularly through class tests, assignments, question sessions and viva-voce.
- The students are evaluated through internal tests. After evaluation, the report is sent to Head of the institution.
- The parents are informed about their ward’s performance in terms of class attendance, academic, extra-curricular through cell phones and letters. For weaker students, the parents are called and counseled to take care of their wards.
- The class teacher regularly monitors the progress of the students in terms of – attendance, marks, learning capability etc.
- The weightage is given for behavioral aspects, independent learning and communication skill about the student’s performance.
- Academic preparation is verified before the commencement of each semester by the internal audit committee.
- Shortcomings found are discussed with the concern departmental HOD and corrective measures are taken.
- Academic audit is also carried out before and at the end of each semester.

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

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

Response:

Grievance redressal at Institute level:

The continuous evaluation of students is carried out by faculty in terms of theory, labs, unit test, mid-term and pre-university test, assignments etc. The evaluation for each is communicated to the individual student. Query, if any, by student is discussed with the subject teacher or with mentor/ class-teacher. The issues are resolved before display of result. If students are facing any problem during the test, Exam coordinator solves it immediately.

Grievance redressal at University level:

For university result, students can apply for verification of marks, revaluation and demand for photocopy/ scanned copy of answer book. After receiving the scanned copy of answer book it is assessed by subject

teacher to suggest whether student should go for challenging the evaluation through university clerk of the college. The queries and complaints about University evaluation are raised by student through examination coordinator of the Institution and are put up to University exam department for corrective action in prescribed format. These corrective actions such as re-evaluation, re-checking, demand for photocopy of answer sheet to the student are facilitated by the student section of admin department of the institute within stipulated time from declaration of result.

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

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

Response:

The Academic calendar for an odd and even semester is prepared before one month prior to start of next semester giving due consideration to the academic schedule declared by affiliating RTM Nagpur University. Academic Calendar is uploaded on the Institution website and also displayed on all Notice boards. There is separate academic calendar for first year and second year to final year. The Academic Calendar consists of dates for commencement of classes for odd and even semesters, dates for Midterm test, Pre-university tests, mid-term submission, results dates for internal examinations, last working day, dates of major events, different celebration of days, industrial visit are also included, commencement of end semester practical etc. The schedule mentioned in academic calendar is strictly followed by the institution. The list of holidays for the Institution is separately displayed for the students and the staff well before the commencement of the semester classes to plan their teaching and internal assessment activities. The planning for project completion is done at the start of the semester with respect to academic calendar. The university communicates the specific date for internal marks submission as well as external practical marks submission on its portal. Each subject teacher uploads the respective marks on the specified date and submits its hard copy to university on given time through exam coordinator of admin department of the institute within stipulated time from declaration of result.

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

2.6 Student Performance and Learning Outcomes

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

Response:

Course Outcomes are displayed on the Institution website course wise so that everyone will get the information about it. Course outcomes of the practical subjects are displayed on the Lab Notice boards which are communicated to the students during practical hours. Faculties give the brief explanation of Course along with the outcome and attainment process during the academic session along with regular class room teaching. CO's are mentioned in the exam papers of mid-term examination, pre-university examination etc so that student gets information.

| File Description | Document |
|---|-------------------------------|
| COs for all courses (exemplars from Glossary) | View Document |
| Any additional information | View Document |
| Link for Additional Information | View Document |

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

Response:**Attainment evaluation:**

All the Course outcomes are prepared by respective course teacher and are circulated to students so that they are aware of it. For each Course, separate COs Sheet is prepared which consists of Blooms Taxonomy Level, PO mapped, and PSO mapped. CO attainment depends on the internal assessment through MTT, PUT, Assignment, Practical's, Project work etc. Course teacher mentions CO code for each question of exam paper for MTT and PUT and also decide the Target Mark. The CO attainment chart is provided to each course teacher in which he/ she has to fill the cover sheet containing course details, questions CO codes etc. At the end of evaluation, the exam wise attainment sheet is to be filled by subject teacher which consists of marks obtained by students question wise, no. of students who got targeted marks, no of student who have solved / attempted the question, % of CO Attained, overall Level achieved etc. Exam wise CO Code average is calculated and mentioned in Separate sheet. Likewise all the internal assessments is carried out and average of CO calculated is put in Average sheet to get final Average CO Wise.

Levels of attainments are decided by IQAC and are same for all courses of all programs. e.g. Level 1, if student got more than 40%, Level 2, if student got more than 50% , and Level 3, if students got more than 60% Weightage of each exam for taking final average is also decided by IQAC and is same for all courses of all branches. Self-assessment is done by students through course-end survey, which is carried out by the course teacher at the end of class room teaching using questioner feedback form. This CO wise average is then written in the CO PO PSO mapping Sheet for final PO PSO attainment of that Course. Then course wise PSO attainment level is written in Master sheet containing all courses name with PSO mapped details and its average level of attainment for final PSO attainment. Industry / Institute Feedback of placed or students taking higher education and from alumni are collected to evaluate the PSO level. The attainment evaluation process is being introduced from odd semester of AY 2017-18.

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

2.6.3 Average pass percentage of Students

Response: 57.98

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

Response: 69

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

Response: 119

| 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: 3.45

| File Description | Document |
|---|-------------------------------|
| Database of all currently enrolled students | View Document |

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: 0

3.1.1.1 Total Grants for research projects sponsored by the government/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)

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 0 | 0 | 0 | 0 | 0 |

| File Description | Document |
|-----------------------------------|-------------------------------|
| List of project and grant details | View Document |

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

Response: 0

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

| File Description | Document |
|---|-------------------------------|
| List of research projects and funding details | 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:

- We have innovative enhancement activities as well as advanced technical training modules are carried out and also centre monitors various research & development activities of the departments. However, at this juncture, the incubation centre is not available in the institute but we have initiated to seek such centre for our institute.
- Students and faculty members are having many innovative ideas and hence always they are in need

of appropriate guidance, facilities and encouragement. So it is necessary to have a research platform in the institute to address various research oriented issues like funding, expertise from Industry especially for multidisciplinary research areas and also issues related to research to society problems.

- We are motivating our staff to do research and enrolled for PhD. Our two faculties are pursuing PhD in Mechanical and Civil engineering and few more faculty members have appeared for PET exams scheduled on 18.1.2018 to upgrade their qualification.
- The institute is started to purchase print National / International journals for all courses in under graduate engineering program to expand knowledge base. In addition to this, open access research journals are available with central digital library with a view to transfer knowledge to students and faculty members.
- Our faculties and students are doing innovative projects which are relevant to the society.

| | |
|---------------------------------|-------------------------------|
| 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: 0

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 00 | 00 | 00 | 00 | 00 |

| | |
|--|-------------------------------|
| File Description | Document |
| Report of the event | View Document |
| List of workshops/seminars during the last 5 years | View Document |
| Any additional information | 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 |

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

Response: No

| File Description | Document |
|------------------------------------|-------------------------------|
| List of Awardees and Award details | View Document |

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

Response: 0.01

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 0 | 0 | 0 | 0 | 1 |

| File Description | Document |
|--|-------------------------------|
| List of research papers by title, author, department, name and year of publication | View Document |

3.3.4 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: 0.52

3.3.4.1 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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 2 | 2 | 6 | 2 | 3 |

| 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 National Social Service (NSS) of the institute comprised a unit of 50 students. The NSS unit is established in 2015 and sanctioned by RTM Nagpur University.
- Under the banner of NSS, we have adopted a village Satnavri whose population is around 2000. The NSS volunteers, students participated in various social issues and make holistic development towards the welfare of neighborhood community like disadvantaged village Satnavari.
- In the academic year 2015-16, students actively participated in “Van mahotsav” a tree plantation drive programme to make aware of the neighborhood community regarding environment and its sustainability.
- Under the mission of Swachha Bharat, students are sensitizing and promote this mission in the nearby rural area.
- Blood donation camp, health checkup camp are organized in the college regularly.
- As per collectorate directives students are actively participated in shala bahya vidyarthi abhiyan on 20.1.2016
- The students of the institute engage every year in 7 days special camp under the banner of NSS in the rural village satnavri.
- The students always take active part to celebrate sadbhavna diwas and preamble reading on Indian constitution day every year towards social activity.
- The NSS volunteers and the students of the institute are engaged in the social issues like empowerment of village women, movement of free open defecation in the nearby rural areas, awareness about road safety, providing information about farm technology, to make aware the public in the context of noise and air pollution etc.
- The NSS volunteers and the students of the institute addressed the various social issues in front of thousands of villagers in the 7 days special camp under the banner of NSS in the rural village satnavri held from 15.1.2018 to 21.1.2018 in the various issues like removal of superstitions, vyasan mukti, pashusavardhan, Nari sashaktikaran, swachhata abhiyan etc.

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

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

Response: 0

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 0 | 0 | 0 | 0 | 0 |

| File Description | Document |
|---|-------------------------------|
| Number of awards for extension activities in last 5 years | 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: 34

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 9 | 21 | 4 | 0 | 0 |

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

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

Response: 43.66

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 217 | 222 | 175 | 204 | 145 |

| File Description | Document |
|---|-------------------------------|
| Report of the event | View Document |
| Average percentage of students participating in extension activities with Govt. or NGO etc. | View Document |
| Any additional information | View Document |

3.5 Collaboration

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

Response: 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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 00 | 00 | 00 | 00 | 00 |

| File Description | Document |
|---|-------------------------------|
| Number of Collaborative activities for research, faculty etc. | View Document |
| Copies of collaboration | 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: 0

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)

| | | | | |
|---------|---------|---------|---------|---------|
| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
| 00 | 00 | 00 | 00 | 00 |

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

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

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

Response:

The institute has adequate facilities as per the norms laid down in Approval Process Handbook as specified by AICTE from time to time, RTMN University, DTE of Govt. of Maharashtra for teaching-learning process for all specified courses viz. Civil, Mechanical, Electrical and Computer Science and engineering courses including first year B.E. The institute has been closed Electronics and Communication course in the year 2016-17. As per the minimum specified requirements by AICTE, the institute has 16 numbers of class rooms (each ? 66 sq. meter), 36 laboratories (each ? 66 sq. meter), computing equipment, three seminar halls (each ? 132 sq. meter carpet area) equipped with LCD projectors, tutorial rooms (each ? 33 sq. meter), one central computer laboratory (150 sq. meter carpet area), stand alone language laboratory, workshops, Boys and Girls common room separately, Stationary store, Reprographic facility, Ladies and Gents washroom separately, RO drinking water facility, Counseling room, Drawing hall, Garden, Library and reading room, Board Room, administrative Office, Exam Control Office, Departmental Office All, House Keeping, Maintenance, Canteen, Placement Office, Principal Office etc.

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

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

Response:

The institute always encourages students for participation in various inter-universities, university level, zonal, state, National and inter collegiate tournaments. College provides indoor and outdoor games facility to student. The institute provides free of cost kits required for the indoor and outdoor games. The college has well equipped hall having chess, carom as indoor games, outdoor games like cricket, volleyball, kabaddi, badminton etc. The institute has been closed Electronics and Communication course in the year 2016-17. As per the minimum specified requirements by AICTE, the institute has 16 numbers of class rooms (each ? 66 sq. meter), 36 laboratories (each ? 66 sq. meter), computing equipment, three seminar halls (each ? 132 sq. meter carpet area) equipped with LCD projectors, tutorial rooms (each ? 33 sq. meter), one central computer laboratory (150 sq. meter carpet area), stand alone language laboratory, workshops, Boys and Girls common room separately, Stationary store, Reprographic facility, Ladies and Gents washroom separately, RO drinking water facility, Counseling room, Drawing hall, Garden, Library and reading room, Board Room, Administrative Office, Exam Control Office, Departmental Office All, House Keeping, Maintenance, Canteen, Placement Office, Principal Office etc.

| Sr. no. | Name of indoor game | Specification / size | Year of establishment |
|---------|----------------------|----------------------|-----------------------|
| 1 | Chess | 13 X 13 inches | 2010 |
| 2 | Carom | 74 X 74 cm | 2010 |
| 3 | Name of outdoor game | Specification / size | Year of establishment |
| 4 | volleyball | 30 X 60 feet | 2010 |
| 5 | Cricket | 60 X 28 meters | 2010 |
| 6 | kabaddi | 10 X 12.5 meters | 2011 |
| 7 | badminton | 20 X 44 feet | 2012 |

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

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

Response: 26.32

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 5

| 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: 8.45

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 4.4 | 4.5 | 5.4 | 2.4 | 2.3 |

| 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:

| Sr.no. | Name of ILMS software | Nature of automation | version | Year of automa |
|--------|-----------------------|----------------------|---------------------|----------------|
| 1 | Synchronik.inc | Fully | Semantic H 2.0.0 | 2018 |

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

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

Response:

The institute has some rare books and knowledge resources for library enrichment. The few are mentioned as follows:

| Sr.no | Name of books /manuscript | Nature of publisher | Name of author | Number copies | Year of |
|-------|---|-------------------------------|-----------------|---------------|---------|
| 1 | Study smarter not harder | Jaico publishing, Mumbai | Paul K | 02 | 1999 |
| 2 | Memory unlimited | Fusion books, Delhi | Choudhary B. R. | 02 | 2016 |
| 3 | The sexual harassment of women at workplace | Sharieir Bodh, Kolhapur | Sakde R. | 05 | 2003 |
| 4 | Sheel Ka Jivan | Ashvgosh Prakashan, New Delhi | Roshi S.R. | 01 | 2016 |
| 5 | Ash Handling | USA | Jayant Khambker | 01 | 2012 |

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

4.2.3 Does the institution have the following:

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

A. Any 4 of the above

B. Any 3 of the above

C. Any 2 of the above

D. Any 1 of the above

Response: C. Any 2 of the above

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

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

Response: 5.98

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 2.93 | 3.36 | 10.3 | 8.17 | 5.14 |

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

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

Response: No

| File Description | Document |
|--|-------------------------------|
| Details of remote access to e-resources of the library | View Document |
| Any additional information | View Document |

4.2.6 Percentage per day usage of library by teachers and students

Response: 8.61

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

Response: 41

| File Description | Document |
|---|-------------------------------|
| Details of library usage by teachers and students | View 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:

Institution fulfills requirements of IT facilities for students and faculties which includes Local Area Network of desktop computers, thin-clients, internet facility and wi-fi. Every year institution updates IT infrastructure as per the requirement of every department. The institute has infrastructure as described below -

Computers and thin clients: Institute has 75 computers in the academic year 2012-13. Every year it has been added to almost 37 computers as per the demand of various courses. Now, the institute has total 225 computers.

Servers: 2012-13 onwards, one server for the library reading room and thin clients for different faculties.

Hardware equipments: Institute has total 18 printers located in different labs, six projectors for seminar hall and classrooms, one router for central computer lab which is in the main networking lab, 17 switches for LAN connection distribution to different labs since 2012-13.

Internet facility and Wi-Fi facility: Institute has internet radio link of total 32 Mbps serviced by BSNL under NMIECT scheme from BSNL. Wi-Fi facility was introduced in 2012-13 in institute as well as hostel and it has been upgraded in 2016-17 for stronger connectivity.

Software available: Various software packages are procured and installed in different labs according to the academic requirement. The latest versions of software packages such as MATLAB, Oracle, Auto CAD, CAD / CAM, Electrical CAD etc. are available in the institute.

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

4.3.2 Student - Computer ratio

Response: 1.99

| File Description | Document |
|----------------------------|-------------------------------|
| Student - Computer ratio | View Document |
| Any additional information | View Document |

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

>=50 MBPS

35-50 MBPS

20-35 MBPS

5-20 MBPS

Response: <5 MBPS

| File Description | Document |
|--|-------------------------------|
| Details of available bandwidth of internet connection in the Institution | View 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: No

| File Description | Document |
|---|-------------------------------|
| Facilities for e-content development such as Media Centre, Recording facility,LCS | 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: 68.98

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)

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 19.09 | 37.19 | 36.19 | 37.84 | 34.19 |

| File Description | Document |
|--|-------------------------------|
| Details about assigned budget and expenditure on physical facilities and academic facilities | View Document |
| Audited statements of accounts. | View Document |
| Any additional information | 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:

There are established systems and procedures for maintaining and utilizing physical, academic and support

facilities in the institute. The policy details of systems and procedures for maintaining and utilizing physical, academic and support facilities are uploaded on the website.

- An electrician is appointed in the institute on monthly salary basis. He visits daily to check the needs related to electricity. He takes care about the start and shut down of the generator backup in the absence of regular electricity supply. He maintains frequently about the requirement of diesel and maintains of battery of the DG set.
- Major maintenance requirements are solved through our Maitrey Education Society, Nagpur.
- Maintenance of overall campus, Garden, trees and sport ground is maintained by Gardener and other lower level staff members.
- For the safeguard of the whole infrastructure, security staff has been allotted.
- Since the maintenance of garden, trees and cleanliness of overall campus is a part of regular expenditure, separate budget is not allotted for the same. However the expenditure is done as per requirement from the amount allotted under the head of miscellaneous expenditure.
- Maintenance of the college building, classrooms, laboratories, computers, library, RO potable water system and furniture is done from time to time by the management.
- Plumber visits to check the problem related to water supply.
- Cleanliness of Class rooms, laboratories, seminar halls, board rooms etc. are properly maintained on daily basis by housekeeping agency.
- Purchases of consumable items required for the various laboratories are procured before the commencement of academic session.
- For procurement of non-consumable and heavy laboratory equipments, the institute calls minimum three quotations from the different vendors as per the specifications and the expert faculty and HOD under IQAC takes appropriate decision and finally proposal is submitted to the management for final approval.

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

Criterion 5 - Student Support and Progression

5.1 Student Support

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

Response: 95.79

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 415 | 422 | 411 | 420 | 459 |

| 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: 4.21

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 32 | 6 | 17 | 12 | 28 |

| File Description | Document |
|---|-------------------------------|
| Number of students benefited by scholarships and freeships besides government schemes in last 5 years | View Document |

5.1.3 Number of capability enhancement and development schemes –

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

A. 7 or more of the above

B. Any 6 of the above

C. Any 5 of the above

D. Any 4 of the above

Response: D. Any 4 of the above

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

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

Response: 1.65

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 5 | 6 | 11 | 10 | 4 |

| 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: 1.78

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 08 | 10 | 11 | 06 | 04 |

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

5.2 Student Progression

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

Response: 14.34

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 14 | 09 | 18 | 10 | 15 |

| 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: 0.84

5.2.2.1 Number of outgoing students progressing to higher education

Response: 1

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

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

Response: 11.5

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 02 | 03 | 00 | 00 | 00 |

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 10 | 08 | 12 | 10 | 14 |

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

5.3 Student Participation and Activities

| 5.3.1 Number of awards/medals for outstanding performance in sports/cultural activities at national / international level (award for a team event should be counted as one) during the last five years. | | | | |
|--|---------|---------|---------|---------|
| Response: 1 | | | | |
| 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 | | | | |
| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
| 1 | 0 | 0 | 0 | 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 |
| e-copies of award letters and certificates | View Document |

| 5.3.2 Presence of an active Student Council & representation of students on academic & administrative bodies/committees of the institution | |
|---|--|
| Response: | |
| <p>With reference to direction 39 of 2017 and under section 12(7) of Maharashtra Public Universities Act 2016, the institute has constituted the selected members for student council for RTM Nagpur University for the session 2017-18. The institute's Student Council mission is to provide participation of students in academic and administrative bodies with a view to develop positive student leaders who will promote a quality institute and community environment. The student's role in academic & administrative bodies includes some of the following:</p> | |
| The student's role in academic committee: | |
| <ul style="list-style-type: none"> • Student Forum under mechanical engineering student association (MESA), Civil engineering | |

student association (CESA), Electrical engineering student association (EESA) & Computer & Science engineering student association (CSESA) organizes coursewise workshop, expert lecture, industry visit etc.

- Library Committee
- Academic Calendar Committee
- Practical Monitoring Committee
- Result Analysis Committee
- Student Aptitude committee under “Brain Spark”
- Cultural Committee
- Class representative committee
- Training & Placement committee

The student’s role in administrative committee:

- Students Welfare & Disciplinary Committee
- Student Grievance Redressal Committee
- Sports Committee
- Canteen Committee
- Transport Committee

| File Description | Document |
|---------------------------------|-------------------------------|
| Link for Additional Information | View Document |

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

Response: 0

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 00 | 00 | 00 | 00 | 00 |

| File Description | Document |
|--|-------------------------------|
| Report of the event | View Document |
| Number of sports and cultural activities / competitions organised per year | View Document |
| Any additional information | View Document |

5.4 Alumni Engagement

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

Response:

Alumni association

- The institute has registered Alumni Association which keeps in touch with all ex- students and their current employment status.
- Alumni meet is arranged once in an academic year, which gives updated information about alumni.
- The faculty members of the institute maintains contact with the ex-students and invite especially on annual day to share their work experiences to existing students
- The staff of the institute maintains contact with the teachers who have left the organization. These former faculties are invited for giving guest lectures.
- We communicate with Alumni through social networks like Facebook and LinkedIn.
- We are collecting their latest data every year through Google docs

Former faculty

- The former faculty members share their views about the activities in their institution and academic methodology adopted at their institute which helps in inter-exchanging the ideas of different work culture.
- The institute greets former faculty members by sending greeting cards and messages on special occasions.
- During cultural programme/Alumni meet of the institute former faculty members are invited.
- The staff of the institute maintains contact with the teachers who have left the organization. These former faculties are invited for giving guest lectures.
- We communicate with Alumni through social networks like Facebook and LinkedIn.
- We are collecting their latest data every year through Google docs

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

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

? 5 Lakhs

4 Lakhs - 5 Lakhs

3 Lakhs - 4 Lakhs

1 Lakh - 3 Lakhs

Response: <1 Lakh

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

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

Response: 0

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 00 | 00 | 00 | 00 | 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:

Vision:

To develop knowledge based society with clarity of thought. Come forward to learn, go forth to serve and excel.

Mission:

- To be the premier institute for pursuing and promoting multidisciplinary engineering
- Attain a significant educational presence in the region
- Develop a community of scholars with talent and expertise that will participate in engineering excellence and National development
- **Nature of governance**
- The governing body of the society do not interferes in the day to day administration of the academic and the other functions of the institute.
- The institute delegates authority and provides operational autonomy to the departments to work towards decentralized governance system. The policies largely aim at reducing central management size, reorganizing delivery, expanding private initiatives, and creating new partnerships. Academic and administrative responsibilities are fairly divided among all the faculty members, HOD's including student council members.
- The Management renders sufficient freedom to the Principal, who is the head of the institution to function in order to fulfill the vision and mission of the institution. There is complete autonomy in the teaching – learning process for the HODs and the faculty members and any problems is immediately addressed in the weekly meeting of HOD and setting right mechanism arrived at in consultation with the Principal.
- The HODs are at liberty to formulate the modalities for effective functioning of the department including work allocation and delegation of other responsibility. Again, the HODs do not take an autocratic approach but a participatory approach in making decisions and every faculty member has the opportunity to express his /her views.
- The faculty members are therefore able to make academic plans suited to their course and execute the plans in a congenial atmosphere. This enhances the productivity to a large extent.
- The organizational chart given below explains the delegation of authority at different levels and flow of work

| 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:

The policy of the management of the society is democratic, believes in decentralization of power and delegation of authority to faculty at all levels. The participation of faculty members in the decision making bodies helps faculty members to develop democratic leadership qualities and build a balanced and confident personality.

The freedom and the support will motivate faculty members in developing creative and innovative practices with mutual coordination and team work.

Some of the committees and the responsibilities that are shouldered by the faculty members are mentioned below:

- Mentor for mentee (a small group of students)
- Class teacher
- Laboratory incharge
- Committee for Time table at department and institute level
- I/C for Pre-University examination
- External / Internal practical I / C
- Course coordinator
- NAAC coordinator
- Entrepreneurship Development Cell coordinator
- Discipline Committee
- Training & Placement coordinator
- Anti-Ragging Committee
- Hostel Committee
- Transportation committee
- Grievance Redressal Cell
- Extra- Curricular Clubs coordinators/ Advisors

| 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:**Education**

- Faculty development in the context of dynamically changing technology in the core and IT sector
- Build on research skills of faculty and for innovation-Next
- Initiate the spirit of research amongst students
- Create professional ethics amongst students
- Promote human values and sensitize students towards environment and its sustainability
- Promote students for higher learning
- Promote maximum number of faculty members for PhD
- Promote entrepreneurship amongst students to prepare them job giver instead job seeker

Administrative

- 100 % digitization of entire process in the campus
- Digital class rooms year wise across all departments
- Strong focus on gender equity

Leadership and Governance

- Long term leadership development among faculty members
- Promote all HOD's, junior and senior level faculty members for e-governance

| File Description | Document |
|----------------------------|-------------------------------|
| Any additional information | View Document |

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

Response:

At the top of the organizational structure there is a President and Secretary of the management trustee and Principal and Vice-Principal of the institution. This is the top level body of the institution. The prospective plan and strategic decisions of the institution are taken by this body. The meeting of the president and secretary with the principal and vice-principal is held every 1 to 2 months to review progress of the college, give approval to various college activities, sanctions funds for procurement. Teaching and non-teaching staff act as interface between Principal and management, thus ensuring smooth functioning and timely implementation of policies. The Principal of the institution is responsible for day to day academics, financial and administrative activities. He works for the development of College. He also monitors admissions, teaching-learning mechanism, placement activities in coordination with Placement officer, creates an environment for industry institute interaction, and discipline among students and staff. The college appoints teaching faculty according to the norms of the AICTE and affiliating university. At the next level in a hierarchy are the different cells/ departments like Administration, Academics, Training &

Placement, Cultural, sports and IQAS. Each department consists of qualified teaching faculties. Head in coordination with other teaching faculties ensures strict conduct of academic and other curricular activities. All academic related activities are monitored by Academic monitoring committee. The training and placement cell is responsible for conduct of Campus Recruitment Training. Under Campus Recruitment training, the students are trained for competitive examinations along with communication skills, group discussion and interview techniques. The three cells viz. Industry institute Interaction (III Cell), Entrepreneurship development cell (ED Cell) and R&D Cell come under T&P Cell. The basic objective of III Cell is to improve the Industry institute Interaction which will enhance the employability of students. The purpose of ED cell is to motivate and support the students to start their own industry/ startup. The goal of R&D cell is to encourage students for research activities and thereby improving the chances of getting government grants / funds for further development of students and institution. The roles and responsibilities of librarian are as follows:

He/She is Custodian of the library. Maintains documentations of books, journals, magazines, newspapers, CD's & library materials Prepares a periodical requirement of books and journals to students and Faculty Member. Keeps record of library materials and report to the Principal for any discrepancy. Arranges periodic inventory of library materials. The cultural committee encourages extra-curricular and cultural activities for the overall development of students. This also helps to improve the leadership qualities and decision making abilities of the students.

The major role of Internal Quality Assurance System is to ensure quality in education which is being imparted to the students by the teaching faculties. The IQAC is supposed to review the quality of academics and facilities being provided to students and faculties on regular basis. It is also expected from IQAC to suggest, monitor and control the quality initiatives for the betterment of students and faculties.

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

6.2.3 Implementation of e-governance in areas of operation

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

- A. All 5 of the above
- B. Any 4 of the above
- C. Any 3 of the above
- D. Any 2 of the above

Response: E. Any 1 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 |

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

Response:

All the committees operate as per the standard operating procedures. Before conducting any activity, detailed planning is done. Responsibilities are attributed to various members, as per requirements. If an external guest is invited, all communications are carried out well in advance to finalize the schedule. Various events such as expert lecture, Chief guest for inaugural function for annual day etc. are organized by the institute through proper planning and collaboration among various committees.

One such example of an event organized is the National level project and poster competition “KRITARTHA 2017” held on 21.3.2017. During the course of its publicity, the publicity committee visited number of engineering and polytechnic colleges in and around Nagpur and Amravati region so as to explore the hidden technical talent might be useful to society in large and to create innovative technical spirit among budding technocrats. A total of around 255 UG and diploma students took part in a day national level project and poster competition.

The institute level committees involved in National level project and poster competition “KRITARTHA 2017” were as under:

- Poster committee
- Project committee
- Registration committee
- Report writing committee
- Publicity committee
- Food committee
- Press note committee
- Discipline committee
- Planning committee
- Valedictory ceremony committee

The tasks were distributed among the committees which consisted of faculty members as well as students from the institute so as to carry out the activities and to run the whole program smoothly. The registration committee was responsible for registering the student delegates. The poster and project committee looked

after the overall arrangement in the seminar halls before each and every session, which was scheduled to take place in seminar hall within the campus. While the sessions were going on, expert judges were responsible for taking notes of the different level of projects and poster presentations and accordingly prepare the reports for first, second and third winner from among the category of UG and diploma category from project and poster presentation. Discipline committee was responsible for maintaining discipline. They were also looking after the authenticity of the participating members. During the event, the food arrangements for participants, guests and all the organizing members were made by food Committee. The overall planning and execution of a daylong national level event was meticulously carried out by planning committee.

| File Description | Document |
|----------------------------|-------------------------------|
| Any additional information | View Document |

6.3 Faculty Empowerment Strategies

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

Response:

Welfare schemes are available for teaching and non-teaching staff. Staff welfare schemes are as follows:

1. The ward of a teaching & non-teaching staff member will be provided with a concession of 50% in tuition fees will be given to the first ward and concession of 25% in tuition fees will be given to second ward.
2. Facilities shall be promoted for consultancy projects. Amounts received will be shared in the proportion of 70:30 proportions between the Faculty and the institute respectively.
3. Employee provident fund facility is provided to non-teaching staff.
4. Free transportation facility is given to all staff members from Nagpur to college and vice-versa

| File Description | Document |
|---------------------------------|-------------------------------|
| Link for Additional Information | View Document |

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

Response: 7.07

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 2 | 2 | 3 | 1 | 2 |

| 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: 0.4

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 01 | 00 | 00 | 00 | 01 |

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

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

Response: 0

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 00 | 00 | 00 | 00 | 00 |

| File Description | Document |
|--|-------------------------------|
| IQAC report summary | View 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:

The format for performance appraisal system is prepared for teaching and non-teaching staff separately. In a particular semester faculty members are supposed to perform academic, co-curricular, extra-curricular activities in the interest of students. In addition to this, faculty members are participated in STTP, National / International conferences, research publications etc. At the same time, student feedback is taken on semester basis. According to the quality policy developed by IQAC, quantitative and qualitative measures of the faculty members are assessed from the Performance Appraisal system and submitted to the management in the presence of Principal and vice-principal for further corrective measures and action. Similarly, services provided by supporting staff and Behavioral approach towards the students are assessed at the end of semester. The quantitative and qualitative measures of non-teaching staff are assessed from the Performance Appraisal system of non-teaching and submitted to the management in the presence of Principal and vice-principal for corrective measures and action. Full transparency is maintained and ensured in the process. On review of the appraisal reports, the Management arrives at conclusions and decisions for each faculty members and non-teaching staff. Where ever the situation warrants – for example, the application for promotion of raise in salary has not been considered – the individual faculty is called for a personal discussion and the appraisal and the decision is taken by the management is communicated to the concerned faculty and non-teaching member. Faculties who have consistently been sub - standard in their performance are replaced. Faculty and non-teaching members who have consistently been outstanding in their performances are appreciated in person and rewarded with hike in salary. Retention of faculty in the same level is also decided based on the level of performance and this is communicated to each faculty in person by the Management.

| File Description | Document |
|----------------------------|-------------------------------|
| Any additional information | View Document |

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

The internal and external financial audits of the institute are carried out on yearly basis. The accounts of

the Institute are audited regularly as per the Government rules. An internal auditor audits accounts of the institute on half yearly basis. The internal audit covers examination of revenues and payments. The external auditor conducts statutory audit at the end of financial year. The report of the last five years (2012-13 to 2016-17) of external auditor along with audited Balance Sheet and Income & Expenditure account are available in the institute.

| File Description | Document |
|----------------------------|-------------------------------|
| Any additional information | View Document |

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

Response: 0

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 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:

The Institute has very effective strategies for mobilization of funds and optimal utilization of financial resources. The Principal of the College ensures that expenses are incurred for the purpose of implementing institutional plans. For any requirement for major equipments of laboratories of various courses, books for library or any other major items, requisition is submitted to the Chairman and Secretary of the Maitrey educational society (MES) duly signed by Principal and Vice-Principal. Quotations are then invited from various vendors. Their quotations are evaluated, comparative statement is prepared, vendors are called for personal discussion and after comparing all aspects from various vendors, orders are placed. This ensures that right equipments are purchased at the most competitive prices. Further, accounts of the institution are subject to regular audit. Also, budget is prepared at the beginning of the year and submitted to the governing body of the MES, Nagpur for final approval and actual expenses incurred during the year are compared with the budget of a particular financial year and any major variation is discussed by the

principal with the Hon. Chairman and Secretary of the society.

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:

Internal Quality Assurance Cell (IQAC) is established in January 2015 under the Chairmanship of Principal of the Institute. It has contributed significantly for institutionalizing the quality assurance strategies and processes framed under the IQAC. There are number of quality policies being institutionalize. However, following two examples of best practices institutionalized are as follows:

1. Organization of workshops, seminars, industry visit and expert lectures for students
2. Summer-Winter internship programme for students.

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

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

Response:

Teaching plans are prepared for an odd & even semester which are get verified and checked at different stages in accordance with the syllabus and scheme of examination given by RTMNU, Nagpur. With the support from the qualified, trained and experienced faculty members facilitates the teaching-learning process. Along with the classroom studies, students are encouraged to use library and internet facilities available in the institute. The records and logs of daily instructions delivered, classes and practical are conducted and other Co-curricular activities performed are maintained by the faculty members. The extra lecture for slow learners, seminar, workshops, expert lectures from industry resource persons are properly informed and recorded to concerned authorities. The review is taken on regular basis for the effectiveness of teaching-learning process.

The institutional reviews and implementation of teaching learning reforms facilitated by the IQAC are based on the following two examples:

1. Students feedback
2. Results of Internal tests

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

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

Response: 0

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 00 | 00 | 00 | 0 | 0 |

| | |
|--|-------------------------------|
| File Description | Document |
| Number of quality initiatives by IQAC per year for promoting quality culture | View Document |
| IQAC link | View Document |

6.5.4 Quality assurance initiatives of the institution include:

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

A. Any 4 of the above

B. Any 3 of the above

C. Any 2 of the above

D. Any 1 of the above

Response: E. None of the above

| File Description | Document |
|---|-------------------------------|
| e-copies of the accreditations and certifications | View Document |
| Details of Quality assurance initiatives of the institution | View Document |
| Any additional information | View Document |

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:

The major incremental improvements are listed below in chronological order of implementation -

1. New labs like AUTOCAD, CAM/CAD in Civil, Mechanical and Computer project Lab were developed in 2013-14 and 2014-15 to meet the requirements revised University curriculum.
2. ICT facility consisting of LCD projector and screen was provided in each department of institution in 2014-15.
3. Formal formation of IQAC in AY 2015 as per norms specified in NAAC.

The other quality improvement initiatives are listed below -

1. Financial assistance in hostel accommodation and transportation to the needy and poor students from AY 2014-15. The Institution provides free hostel accommodation and transportation to all such students. The concession is continued for those students who perform better in academics, clearing all subjects in University exams in the first attempt.
2. NPTEL lectures made available in Library since 2014.
3. Wi-Fi facility is made available to student and faculty from 24 April 2013 in college.
4. The training and Placement cell was started in Nov 2014 with the aim of preparing the students for campus interviews.
5. Started providing CRT to students from Jan 2015.
6. The NSS unit has been sanctioned by university and started effectively in the year 2015 and students are doing well towards the social issues.
7. CCTV for e-surveillance of entire campus: CCTV Surveillance facility was installed in the college campus premises in 2016.
9. e-journals (open access) made available in library since Jan 2016 to provide free access to students and faculties to the latest and past journal publications.

10. Indoor and outdoor sport activity at University level to be fully functionalized from the year 2015.
11. Student forum activity: To improve the technical competency and to develop leadership/ team spirit in the students, Student forums were formed in June 2015. The forum conduct activities like technical training of junior students, group discussions, quizzes and coding practice etc.
13. Landscaping of campus: A green natural surrounding keeps healthy atmosphere. The large scale tree and flower plantations and lawns were developed in the campus.
14. LED lighting to save energy since July 2016 In order to go green and reduce power consumption, light fittings were replaced by LED.
15. Aptitude test for the students under the title of *Brain Spark* has been initiated from Nov 2015 with a view to compete in the various competitive examinations.
16. Installed potable water RO systems in 2009.
17. Reading room with E learning facility was developed 2016-17.
18. Formation of III and ED cells in July 2017 Each cell has following objectives -

III CELL: To give proper industrial exposure by arranging industry visits and summer/ winter internships to students.

ED CELL: This cell mentors, motivates and assists aspiring students to start their own venture by arranging entrepreneurship development seminars and guest lectures.
19. Internet bandwidth was increased from 10 mbps to 16 mbps to meet the increased need of usage in the year 2016.

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: 21

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 04 | 04 | 04 | 04 | 05 |

| File Description | Document |
|---|-------------------------------|
| Report of the event | View Document |
| List of gender equity promotion programs organized by the institution | View Document |
| Any additional information | View Document |

7.1.2

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

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

Response:

The institute has always given top priorities towards institutional values and social responsibility especially in the area of Gender equity and its sensitivity in providing facilities such as safety and security, counseling to girls and boys students and providing common room separately to girls and boys students. The institute has undertaken the following initiatives towards the gender equity:

- The security is necessary aspect of safety. The institute has provided security personnel in the campus during 24 hours.
- The institute has provided three buses for students to traverse from college to Nagpur and vice-versa. Institute has provided girls hostel at Trimurti nagar, Nagpur. Especially lady warden has been deployed at hostel. The arrangement for full security for their safety is made. The norms and rules are displayed in the hostel premises. Bus facility round the year is available for girl students from college to hostel premises and vice-versa also bus facility is made available for all students at the time of University examination to reach to their respective examination centre safely.

- Adequate toilets for girls and women employees with sufficient water are provided in the main as well as workshop building of the college campus.
- Health workshop is regularly organized in the campus to address the health issues of girl students and women employees.
- College bus / college car is available to take sick students to nearby doctors for his / her health checkup and diagnosis.
- Anti-sexual harassment committee is established in the institute. More than 50% women employees are nominated and monthly meeting is conducted along with minutes of meeting.
- Counseling services are institutionalize in the college campus
- Adequate lighting arrangement is made in the campus for safety of students.
- CCTV surveillance system and fire extinguisher system is installed in the campus.

| 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: 13.11

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

Response: 31500

7.1.3.2 Total annual power requirement (in KWH)

Response: 240276

| File Description | Document |
|---|-------------------------------|
| Details of power requirement of the Institution met by renewable energy sources | View Document |
| Any additional information | View Document |
| Link for Additional Information | View Document |

7.1.4 Percentage of annual lighting power requirements met through LED bulbs

Response: 0.5

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

Response: 70

7.1.4.2 Annual lighting power requirement (in KWH)

Response: 14016

| 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 & liquid waste management

- There are no hazardous chemicals used in the college laboratory.
- As per the total strength of the students and employees technically designed drainage system, chambers and septic tank have deployed in the campus for solid and liquid waste management.
- Water based chemical reactions are carried out minimizing hazardous solvent chemical usage.
- Polythene bags and other non-decomposable are separated and sold to vendors who do the recycling.

E-Waste management:

- Non-working computers, monitors and printers are discarded and scrapped on a systematic basis. If some parts are useful in other systems they are kept aside for future use. Obsolete computers, printers and other equipments are sold to vendors who do the recycling.
- The E-waste management committee is formed under the supervision of Principal to reduce e-wastages.
- Adequate lighting arrangement is made in the campus for safety of students.
- CCTV surveillance system and fire extinguisher system is installed in the campus.

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

7.1.6 Rain water harvesting structures and utilization in the campus

Response:

Institute is located near wild nalha. Rain water harvesting system includes proper pipelines from roof top towards the front side and back side of the college main building. This water then perforates into the soil and helps to increase the ground water level. Pedestrian roads behind the main college building are not tarred or cemented so as to ensure proper perforation of rain water in the soil. On similar line, rain water harvesting system at workshop building includes out lays with proper slope level from the roof top towards the front side and then this water perforates into the soil and helps to increase the ground water level.

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

7.1.7 Green Practices

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

Response:

Every year, the institute is taking great effort towards green practices on the campus. The institute campus is sprawling with hundres of trees like sagwan, ashoka, neem, palm trees, apte etc along with lush green lawn including rose plants, shewanti etc. Every year institute under the banner of NSS unit is increasing number of plants on the campus preferably in the month of July-August. Round a year students and staff are using public transport. The college campus is absolutely free from plastic and polythenes.

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

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

Response: 2.25

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)

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 1 | 1 | 1 | 1 | 1 |

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

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

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

A. 7 and more of the above

B. At least 6 of the above

C. At least 4 of the above

D. At least 2 of the above

Response: D. At least 2 of the above

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

7.1.10 Number of Specific initiatives to address locational advantages and disadvantages during the last five years**Response:** 0

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 00 | 00 | 00 | 00 | 00 |

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

7.1.11 Number of initiatives taken to engage with and contribute to local community during the last five years (Not addressed elsewhere)**Response:** 0

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 00 | 00 | 00 | 00 | 00 |

| File Description | Document |
|--|-------------------------------|
| Report of the event | View Document |
| Details of initiatives taken to engage with local community during the last five years | View Document |
| Any additional information | View Document |

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

Response: Yes

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

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

Response: Yes

| File Description | Document |
|--|-------------------------------|
| Any additional information | View Document |
| Provide URL of website that displays core values | View Document |

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

Response: Yes

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

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

Response: Yes

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

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

Response: Yes

| File Description | Document |
|----------------------------|-------------------------------|
| Any additional information | View Document |

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: 5

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

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

Response:

The institute organizes National festival such as Independence Day, Republic day, Sadbhavna divas etc. In addition to this, college organizes birth and death anniversaries of great Indian personalities like Pandit Jawaharlal Nehru, Priyadarshani Indira Gandhi, Rajiv Gandhi, APJ Abdul Kalam, Swami Vivekananda, Dr. Babasaheb Ambedkar etc with a view to inspire today's youth. Every year on the occasion of Dhamma chakra pravartan din at holy place Deekshabhoomi, Nagpur, institute has its own stall to promote the thoughts and principles of Dr Babasaheb Ambedkar to large crowd. Institute celebrates Engineers day on the birth anniversary of Sir M. Visveswaraya with a view to motivate the young budding engineers.

| 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:

The internal and external financial audits of the institute are carried out on yearly basis. The accounts of the Institute are audited regularly as per the Government rules. An internal auditor audits accounts of the institute on yearly basis. The internal audit covers examination of revenues and payments. The external auditor conducts statutory audit at the end of financial year. The report of the last five years (2012-13 to

2016-17) of external auditor along with audited Balance Sheet and Income & Expenditure account are available in the institution. Academic audit system is established in the institute and academic monitoring committee ensures smooth functioning of academics in every semester by conducting academic audit at the end of the semester. The administrative and other auxiliary functions are monitored on regular basis.

| 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 are described here. The details as per format are given in the uploaded document.

Best Practice 1: Promotion of Industrial activity

1. Title of the practice: To promote latest industrial activities by the faculty members and students

2. Objectives of the practice

- To cultivate the strong liaison with core and IT industry
- To promote latest industrial activities by the faculty members and students
- To make aware of the students and faculty members about the trends of the industry
- To increase the employability of the students
- Students be able to work on industry sponsored project
- To promote the students for summer and winter industrial internship programme.

Best Practices 2: Financial assistance to students for hostel & transportation facility

Objectives of the Practice:

To motivate economically backward, rural and tribal students for higher studies

To provide financial support to needy students

To motivate students for excellence in studies

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

7.3 Institutional Distinctiveness

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

Response:

Maitrey Educational Society's Nagarjuna Institute of Engineering, Technology & Management, Nagpur is working towards empowerment of young professionals who will be academically and technically sound along with strong ethics. Institute's distinctiveness is elaborated in following paragraphs Institute has management members from diversified field who have dedicated themselves to social cause. The exposure of students to the latest engineering applications through industrial training and internship along with training for ethics and human values making them a good citizen and then a professional is the distinct feature of the institute. The institute's activities towards its distinctiveness are enumerated below –

Many times due to lack of financial support, the students including boys and girls especially from highly economically poor background family of rural and tribal areas are not able to afford engineering educational costs. Nagarjuna engineering College especially provides financial support to needy and poor students who are not able to afford accommodation and transportation charges in urban area like Nagpur which fully supports the students making them worry-free of finances for education and helps them to excel in their engineering program. The Institute works towards empowerment of rural and tribal young professionals through education, innovative training of life skills and job skills for pioneering the entry of young professionals in latest technological areas and job domains. The one area where our performance had been distinct is in our efforts in enhancing employability, giving maximum opportunities for placements to our students. Normally, dream status and core companies do not visit engineering campus placement drive in Nagpur. However, institute has made available opportunity through pooled campus in these companies. Many students are benefited by this initiative. Till date, 65 students are placed at different companies. To name a few companies such as Manish construction, PKN construction, Pix transmission pvt. ltd., Reliance power plant, Tata power, Tata motors, etc.

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5. CONCLUSION

Additional Information :

- **Additional information**

Nagarjuna Institute of Engineering, Technology & Management established in the year 2009 - is one of its kind of institute promoted and managed by a team of well qualified engineers having vast industry experience in diverse fields. Its sprawling campus spread over 12 acres of land situated in the outskirts of Nagpur city is a testimony to the commitment of management to quality education and all round grooming of student. Keeping the institution's vision, mission and policy in focus, Maitrey Educational Society (MES) has brought under its umbrella highly experienced professionals on advisory board having diverse industrial exposure in engineering for guiding the institution & designing curriculum apart from regular University syllabus. This is the only institute in and around Nagpur region which provides free accommodation, transportation, books and food to SC, ST, NT students that are not admitted in Govt. hostels.

Concluding Remarks :

Nagarjuna Institute of Engineering, Technology & Management (NIETM) is affiliated to Rashtra Sant Tukdoji Maharaj Nagpur University (RTMNU), Nagpur and implemented choice based credit system (CBCS). The students are undertaking field projects and internships. Vision and Mission of the college are always priority in every activity. The Academic Calendar is accompanied by Industrial visits and Industry based projects. The Student-Mentor scheme is inculcated in the planning. The college assesses the learning level of the students for advanced learners and slow learners. The Training & Placement cell provides a link with the industry. The socio-economic programmes are conducted in order to bring the students in human and social touch. The Library is automated using integrated management system software (IMSS). The laboratories are well equipped with latest computers and machines. Digital Classrooms are being developed as a prompt learning resource. The play-ground is available for sports activities and cultural activities. The college provides scholarship in the form of fee concessions to the economically weaker students. The students are encouraged for participation at collegiate and inter collegiate competitions and the guidance for competitive exams on regular basis. The institute shows gender sensitivity and environmental conservation. The students and staff are utilizing public transport. The campus is friendly user for differently abled persons. The code of conduct handbook is available with the institute for students & teachers. The institute organizes the birth and death anniversaries of great Indian personalities and maintains complete transparency in its financial, academic, and administrative functions.