Yearly Status Report - 2019-2020

| Part A |  |
| :--- | :--- |
| Data of the Institution | MGM'S COLLEGE OF ENGINEERING AND <br> TECHNOLOGY, KAMOTHE |
| 1. Name of the Institution | Dr. GEETA S. LATHKAR |
| Name of the head of the Institution | Director (in-charge) |
| Designation | Yes |
| Does the Institution function from own campus | 02227433421 |
| Phone no/Alternate Phone no. | 8767009107 |
| Mobile no. | director@mgmmumbai.ac.in |
| Registered Email | director@mgmcen.ac.in |
| Alternate Email | Plot no 1 and 2 , Sector -1 Kamothe <br> ,Panvel <br> Navi-Mumbai |
| Address Sion Panvel Expressway |  |
| Ctate/UT | Panvel |


| Pincode |  |  | 410209 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2. Institutional Status |  |  |  |  |  |
| Affiliated / Constituent |  |  | Affiliated |  |  |
| Type of Institution |  |  | Co-education |  |  |
| Location |  |  | Urban |  |  |
| Financial Status |  |  | Self financed |  |  |
| Name of the IQAC co-ordinator/Director |  |  | Prof. P. J.Salunke |  |  |
| Phone no/Alternate Phone no. |  |  | 02227433421 |  |  |
| Mobile no. |  |  | 9821771767 |  |  |
| Registered Email |  |  | salunke_pj@mgmmumbai.ac.in |  |  |
| Alternate Email |  |  | vice.principal@mgmmumbai.ac.in |  |  |
| 3. Website Address |  |  |  |  |  |
| Web-link of the AQAR: (Previous Academic Year) |  |  | http://www.mgmmumbai.ac.in/mgmcet/si tes/default/files/inlinefiles/NAAC SSR MGMCET.pdf |  |  |
| 4. Whether Academic Calendar prepared during the year |  |  | Yes |  |  |
| if yes, whether it is uploaded in the institutional website Weblink: |  |  | http://www.mgmmumbai.ac.in/mgmcet/acade mics/academic-calender |  |  |
| 5. Accrediation Details |  |  |  |  |  |
| Cycle | Grade | CGPA | Year of Accrediation | Validity |  |
|  |  |  |  | Period From | Period To |
| 1 | B+ | 2.61 | 2020 | 12-Feb-2020 | 13-Feb-2025 |
| 6. Date of Establishment of IQAC |  |  | 27-Feb-2017 |  |  |
| 7. Internal Quality Assurance System |  |  |  |  |  |
| Quality initiatives by IQAC during the year for promoting quality culture |  |  |  |  |  |


| Item /Title of the quality initiative by <br> IQAC | Date \& Duration | Number of participants/ beneficiaries |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Conduction of Academic <br> Administrative Audit | 26 -Aug-2020 <br> 2 | 126 |  |  |
| Faculty members have to <br> register for one day <br> workshop on NAAC PEER <br> TEAM VISIT CRITERIA <br> EXHIBITION organized by <br> VIT Mumbai | 27 -Jun-2020 <br> 2 | 8 |  |  |
| Smart India Hackathon | 01-Aug-2020 <br> 3 | 27 |  |  |
| View File |  |  |  |  |

8. Provide the list of funds by Central/ State Government- UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.

| Institution/Departmen <br> $\mathrm{t} /$ Faculty | Scheme | Funding Agency | Year of award with <br> duration | Amount |
| :---: | :---: | :---: | :---: | :---: |
| NIL | NIL | NIL | 2020 | 0 |


| 9. Whether composition of IQAC as per latest <br> NAAC guidelines: | Yes |
| :--- | :--- |
| Upload latest notification of formation of IQAC | View File |
| 10. Number of IQAC meetings held during the <br> year : | 3 |
| The minutes of IQAC meeting and compliances to the <br> decisions have been uploaded on the institutional <br> website | Yes |
| Upload the minutes of meeting and action taken report | View File |
| 11. Whether IQAC received funding from any of <br> the funding agency to support its activities <br> during the year? | No |

## 12. Significant contributions made by IQAC during the current year(maximum five bullets)

1. To initiate setting of Innovation and Incubation cell. 2. Improvement in Provision of smart class room/digital interactive board facility for effective teaching learning in future scenario of academic and updating in the existing CCTV for upgradation of institute surveillance. 3. Mechanism for the conduct of Academic Audit at Institute level 4. Updating the content in course file for improving of $C O, P O$ attainment. 5. Preparation of work books to enhance the results of First year Engineering in the subjects like Engineering Mechanics,

## View File

13. Plan of action chalked out by the IQAC in the beginning of the academic year towards Quality Enhancement and outcome achieved by the end of the academic year

| Plan of Action | Achivements/Outcomes |
| :---: | :---: |
| To organize online webinars and classes | To expose the students in front of experts as guest for Webinars , online classes in the Pandemic situation, Internal/External online examinations in the Pandemic situation as per the guidlines of University of Mumbai. |
| To enroll the students for different online NPTEL,Swayam, Courses and Webinars | Students of various departments are encouraged to participate in various activities. |
| To organize various Training Courses through Training \& Placement Department like: communication skill, Aptitude \& Soft Skills Training, Hybrid Machine learning , 3-D printing , Artificil Intelligence InfyTQ Python etc | "The training helped the students for placement \& total 52 students of various Departments were placed in different Organizations in Academic Year 2019-20 " |
| View File |  |

## 14. Whether AQAR was placed before statutory body?

Yes

| Name of Statutory Body | Meeting Date |
| :--- | :---: |
| Governing Council | $14-$ Jun-2019 |


| 15. Whether NAAC/or any other accredited <br> body(s) visited IQAC or interacted with it to <br> assess the functioning ? | Yes |
| :--- | :--- |
| Date of Visit | 11-Feb-2020 |
| 16. Whether institutional data submitted to <br> AISHE: | Yes |
| Year of Submission | 2020 |
| Date of Submission | $27-$ Jan-2020 |
| 17. Does the Institution have Management <br> Information System ? | Yes |

If yes, give a brief descripiton and a list of modules currently operational (maximum 500 words)

The Institute has acquired Management Information System (MIS) which is Web based College Administration System named as ERP. Institution itself maintains inhouse ERP server. Earlier the system was paper based. However now it is online and paperless. ERP enhance Major Institutional functioning such as, Academic Administration, Financial Administration and General Administration Academic administration: The institutional unique login ID is given to all students and faculties. Academic calendar is sent to students taking care of all curricular and cocurricular activities, holidays, etc. The subject wise teaching plan and Timetable is made available online to all concerned students. For students' attendance, SMS after every 15 days are sent to the parents by class incharges of each class. Financial
Administration: All types of Students' fees are collected though SBI Collect and their personal ledgers get maintained 'SBI Collect' has reduced the overhead office staff for the collection of fees and students for the payment of fees by standing in a queue. Accounting, Fees, Scholarship and Salary modules are inculcated in TALLY. Cashbook, Bank Book, Daily Collection Report, Fees outstanding, and all related reports are generated through TALLY. Salary slips of employees get generated and handed over to the faculties. General Administration: Biometric attendance of all employees is maintained in ERP. Reports like daily attendance, shift wise attendance, movement register, late arrival, early departure, yet not reported are generated on daily, spanwise and person wise basis. In pandemic situation of COVID19 Webinars and expert talks were organized on recent developments in respective discipline and to share their views by respective departments. Online classes are planned and conducted by all. To complete the academics Google forms were created by each faculty staff members of respective departments and online exams for theory exams, oral or practical exams were conducted.

## CRITERION I - CURRICULAR ASPECTS

## 1.1 - Curriculum Planning and Implementation

1.1.1 - Institution has the mechanism for well planned curriculum delivery and documentation. Explain in 500 words

The institution has the mechanism for well-planned curriculum delivery and documentation process. MGMCET, affiliated with the University of Mumbai and approved by AICTE conducts nine UG, five PG, and one research program in engineering and follows the curriculum approved by the University of Mumbai for UG and PG Courses. The Institute adopts a systematic approach for effective curriculum implementation. Faculty are involved in various university bodies such as Board of Studies (BOS), Syllabus setting, etc., and are actively involved and contribute to curriculum framework design. In line with academic calendar provided by university, Director and Heads discuss and prepare an academic schedule of the Institute. It is then distributed to the departments. Pre-semester activities which begin immediately after the preceding semester is over, start with allocation of courses to the faculty members to enable them to plan by preparing lectures plans, laboratory ready activities including upgradation of existing laboratory manuals, assignments for the students, tutorial sheets, up-gradation of existing workbooks, conceiving projects for advanced learners, identifying resource persons from industry, course files, course plan etc. with due attention to "Outcome Based Education (OBE)". Director, Dean Academics, Academic co-ordinator and HoDs monitors the progress of curriculum implementation at the end of every month. Classroom teaching is supplemented by seminars, mini-projects, expert lectures, industry and field visits, in-house and industry sponsored projects and is reviewed by the Departmental Performance Monitoring Committee (DPMC). Faculty members get support for workshop, seminar, conference, induction training program, FDPs. A detailed and well planned 'Academic Calendar", based on the University of
Mumbai Academic Calendar, helps execution of semester activities. Semester activities begin effectively with a full day "Orientation Program" for students of FE , DSE and students of $\mathrm{SE}, \mathrm{TE}$ and BE of various departments where the Heads of Departments present 'Departmental Activity Calendar'. Experts from Industry and Academia address the students and make them aware of Industry-Ready activities. Meticulous implementation of time table, and adhering to the assignment schedule help to achieve quality of teaching-learning process. Monthly class attendance is displayed and conveyed to students as well as parents. Academic monitoring takes place in monthly academic committee meetings under the Chairmanship of Principal by reviewing academic activities and ERP data. Continuous assessment of term work and well designed and pointed questions on each laboratory experiment make the students ready for oral examination. Use of Google Class Room and Moodle help paperless activities. Extensive use of ICT, NPTEL, MOOCs and faculty prepared MOOCs help the TeachingLearning more interacting. Internet and Wi-Fi facilities support these activities. 'Semester-end Feed Back' helps corrective actions. Institute also monitors at central level delivery of curriculum through 'Laboratory Week', 'Tutorial Week' 'ICT Week' etc. Advanced learners' projects are strictly monitored involving industry experts and concerned faculty. Final review of these projects is done with the help of Industry experts including Alumni towards end of the semester. 'Departmental Activity Calendar' is meticulously implemented by faculty including Industry Visits, Expert Lectures, and Workshops on Industry-Ready topics etc. and monitored by the Departmental Performance Monitoring Committee (DPMC).
1.1.2 - Certificate/ Diploma Courses introduced during the academic year

Certificate Diploma Courses \begin{tabular}{c}
Dates of <br>
Introduction

$\quad$ Duration $\quad$

Focus on employ <br>
ability/entreprene

$\quad$

Skill <br>
Development
\end{tabular}



## 1.2-Academic Flexibility

1.2.1 - New programmes/courses introduced during the academic year

| Programme/Course | Programme Specialization | Dates of Introduction |
| :---: | :---: | :---: |
| Nill | NIL | Nill |
| No file uploaded. |  |  |

1.2.2 - Programmes in which Choice Based Credit System (CBCS)/Elective course system implemented at the affiliated Colleges (if applicable) during the academic year.

| Name of programmes adopting <br> CBCS | Programme Specialization | Date of implementation of <br> CBCS/Elective Course System |
| :---: | :---: | :---: |
| Nill | Bio Medical Engineering | $03 / 07 / 2019$ |
| Nill | Biotechnology | $03 / 07 / 2019$ |
| Nill | Chemical Engineering | $03 / 07 / 2019$ |
| Nill | Civil Engineering Shift <br> I and II | $03 / 07 / 2019$ |
| Nill | Computer Engineering | $03 / 07 / 2019$ |
| Nill | Electrical Engineering | $03 / 07 / 2019$ |
| Nill | Electronics and <br> Telecommunications Shift | $03 / 07 / 2019$ |
| Nill | Information Technology | $03 / 07 / 2019$ |
| Mechanical Engineering | $03 / 07 / 2019$ |  |

1.2.3 - Students enrolled in Certificate/ Diploma Courses introduced during the year

## 1.3 - Curriculum Enrichment

1.3.1 - Value-added courses imparting transferable and life skills offered during the year

| Value Added Courses | Date of Introduction | Number of Students Enrolled |  |
| :---: | :---: | :---: | :---: |
| Workshop on Hybrid <br> Machine Learning Using <br> Python | $27 / 09 / 2019$ | 69 |  |
| Soft Skills and <br> Aptitude Training | $15 / 07 / 2019$ | 129 |  |
|  |  |  |  |

1.3.2 - Field Projects / Internships under taken during the year

| Project/Programme Title | Programme Specialization | No. of students enrolled for Field <br> Projects / Internships |
| :---: | :---: | :---: |
| BE | Internship | 23 |
| BE | Field Project | 12 |
| BE | Major project | 124 |
|  | View File |  |

## 1.4 - Feedback System

1.4.1 - Whether structured feedback received from all the stakeholders.

| Students | Yes |
| :--- | :---: |
| Teachers | Yes |
| Employers | No |
| Alumni | Yes |
| Parents | Yes |

1.4.2 - How the feedback obtained is being analyzed and utilized for overall development of the institution? (maximum 500 words)

## Feedback Obtained

The Institute collects structured feedback from various stakeholders like students, teachers, alumni, employers and parents for continuous quality improvement in teaching learning process. Feedback obtained from students contains maximum possible aspects of the teaching process like punctuality for conduction of all the courses, concurrence with the academic calendar and the teaching plan given to the students at the start of the semester. The detailed feedback from students consists whether, the syllabus content is well understood, ensuring that everybody understand the contents, whether, the complete syllabus is covered in the class as prescribed by the University, number of practical conducted, regularity of conduction of classes and punctuality of the staff about subject conduction. Also, feedback includes availability of books, journals, e-journals as required in library. Behaviour and availability of the library staff, office administrative staff, store staff etc. behaviour of Head of the Department (HoD) with the students. Also feedback about various learning material available as required in store, various facilities available in office, availability and requirement of infrastructure including canteen facilities and cleanliness and general facilities they get. Feedback is analysed by respective class teachers and brought in the notice of HoD. Director together with HoD's will take the corrective actions and keep the essential in Board of Governance will take action on the feedback wherever necessary. Based on the feedback the necessary instructions to concerned
teachers regarding improvement in teaching are given. Feedback obtained from teachers contains the feedback about the courses they are taking, course content, course material and books to be refereed, new courses to be included, what should be new things included and what should be removed from the syllabus etc. Teacher's feedback is analysed by HoD. HoD will suggest the board of study members and Chairman- Board of study for revision of syllabus in the University. HoD and Faculty members also consult with their contacts in the industry and collects inputs from them regarding update in the curriculum development. Feedback is obtained from alumni about the curriculum, lab facilities, infrastructure available, software and tools used in industry, new courses required as per industry requirements, etc. The feedback received from alumni is analysed by departmental faculty-in-charge and if any suggestions which can be implemented will be brought in the notice of HoD. HoD will suggest with the permission of Director about syllabus up gradation, lab development etc. to the concerned authorities. Feedback obtained from parents about the regularity of conduction of the courses and overall development of their ward and if they have any specific requirement or complaint about any faculty or department / institution in general. Whether the performance of ward is satisfactorily or not. The qualified parents can also suggest what should be added and what should be removed from curricula as per need of current scenario and it is analysed by faculty members of each department and they will bring the suggestions given by parents to the notice of the HoD. HoD will inform the Director for appropriate implementations of the suggestions.

## CRITERION II - TEACHING- LEARNING AND EVALUATION

## 2.1 - Student Enrolment and Profile

### 2.1.1 - Demand Ratio during the year

| Name of the <br> Programme | Programme <br> Specialization | Number of seats <br> available | Number of <br> Application received | Students Enrolled |
| :---: | :---: | :---: | :---: | :---: |
| ME | Please see <br> the attached <br> file | 54 | 17 | 17 |
| BE | Please see <br> the attached <br> file | 630 | 229 | 229 |

## 2.2-Catering to Student Diversity

### 2.2.1 - Student - Full time teacher ratio (current year data)

| Year | Number of <br> students enrolled <br> in the institution <br> $(U G)$ | Number of <br> students enrolled <br> in the institution <br> (PG) | Number of <br> fulltime teachers <br> available in the <br> institution <br> teaching only UG <br> courses | Number of <br> fulltime teachers <br> available in the <br> institution <br> teaching only PG <br> courses | Number of <br> teachers <br> teaching both UG <br> and PG courses |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2019 | 2425 | 29 | 120 | 3 | 3 |

## 2.3 - Teaching - Learning Process

2.3.1 - Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), Elearning resources etc. (current year data)

| Number of <br> Teachers on Roll | Number of <br> teachers using <br> ICT (LMS, e- <br> Resources) | ICT Tools and <br> resources <br> available | Number of ICT <br> enabled <br> Classrooms | Numberof smart <br> classrooms | E-resources and <br> techniques used |
| :---: | :---: | :---: | :---: | :---: | :---: |


| 126 | 126 | 4 | 33 | 10 | 11 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| View File of ICT Tools and resources |  |  |  |  |  |
| View File of E-resources and techniques used |  |  |  |  |  |

2.3.2 - Students mentoring system available in the institution? Give details. (maximum 500 words)

MGMCET mentors the students for their benefits under active mentorship programme, which is very important to the mentee. The mentorship program mainly focusses on creating an environment for growth and development of the students to achieve their personal and professional goals, ambitions, and academic excellence. This mentorship programme helps the students to overcome their academic stress and also provide them carrier guidance. Each faculty member is allotted a group of 15-20 students for mentoring. Mentors and Class Advisors counsel the students regarding their performance and schedule additional lectures/practicals as per need of mentee. The meetings of mentorship are conducted every two weeks, in which students meet their mentors for academic and personal issues. Mentor also monitors the mentee's attendance and keeps track on results in internal assessment and university examination. Students who have less attendance and not appeared for their internal tests due to personal reasons, are paid special attention from mentor's side. MGMCET also conduct the parent-mentor meeting and convey strength and weakness of their wards. This helps to educate the parents if required about their wards performance, and the academic programs of the college as well as the support system and the monitor system the student and parents. The records and observations about the mentees are always kept confidential by mentors so that, mentee feel comfortable to share issues and concerns. This really helps in identifying the slow and advanced learners and planning of organizing appropriate events or carrying out some activities to excel them in academic and co-curricular activities. Mentor advises the students about their project work, other extra courses to be carried out and also counsels and motivates them in all academic mattersdirect or indirect. In pandemic situation, the same process is followed by institution through online mode.

| Number of students enrolled in the <br> institution | Number of fulltime teachers | Mentor : Mentee Ratio |
| :---: | :---: | :---: |
| 2454 | 126 | $1: 19$ |

## 2.4 - Teacher Profile and Quality

2.4.1 - Number of full time teachers appointed during the year

| No. of sanctioned <br> positions | No. of filled positions | Vacant positions | Positions filled during <br> the current year | No. of faculty with <br> Ph.D |
| :---: | :---: | :---: | :---: | :---: |
| 144 | 126 | 18 | Nill | 22 |

2.4.2 - Honours and recognition received by teachers (received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the year )

| Year of Award | Name of full time teachers <br> receiving awards from <br> state level, national level, <br> international level | Designation | Name of the award, <br> fellowship, received from <br> Government or recognized <br> bodies |
| :---: | :---: | :---: | :---: |
| 2019 | Please see the <br> attached file | Nill | Please see the <br> attached file |
| View File |  |  |  |

## 2.5 - Evaluation Process and Reforms

2.5.1 - Number of days from the date of semester-end/ year- end examination till the declaration of results during the year

| Programme Name | Programme Code | Semester/ year | Last date of the last <br> semester-end/year- <br> end examination | Date of declaration of <br> results of semester- <br> end/year- end <br> examination |
| :---: | :---: | :---: | :---: | :---: |
| BE | Please see <br> the attached <br> file | Nill | Nill | Nill |


| ME | Please see <br> the attached <br> file | Nill | Nill | Nill |
| :---: | :---: | :---: | :---: | :---: |
| View File |  |  |  |  |

2.5.2 - Reforms initiated on Continuous Internal Evaluation(CIE) system at the institutional level ( 250 words)

MGMCET strives to asses Teaching, Learning and Evaluation Processes. Institution adheres to University of Mumbai (UoM) guidelines for an effective teaching learning and evaluation process. Evaluation Sheet is prepared according to the guidelines of the university which contains evaluation parameters like Attendance, Assignments, Experiments, and Performance. As per university guidelines, distribution of mark for 25 marks termwork is categorized as: 5 marks for Attendance, 5 marks for Assignments, 10 marks for student's Experiments, and 5 marks for performance. Students perform their lab work once or twice a week. Apart from this, we consider innovative mini projects, unique assignments, Unit tests and practical exams for Continuous Internal Evaluation (CIE). Institute's academic calendar is effectively used for CIE. As per academic calendar schedule, we conduct 2 Internal Assessment Tests, in which the 1st test covers a 40 percent syllabus, and the 2 nd test covers the remaining syllabus. Average marks of these tests consider as final marks for the student's theory exam. Students of final year are guided on innovative projects to accelerate research and publications. We also take care to incorporate bloom's taxonomy level questions in question papers to raise the difficulty level of question paper. The quality of question papers is assessed by Course coordinators. Final year project allocation is done by expert committee of faculty members. The best title is allocated to students out of three presented definitions. The expert committee also suggest problem definitions as per interest of student project groups. Project work is regularly monitored through project presentation scheduled after every two weeks. In pandemic circumstances also, all these activities are carried out through online mode.
2.5.3 - Academic calendar prepared and adhered for conduct of Examination and other related matters (250 words)

As MGMCET is affiliated Mumbai University, the academic calendar aligns with the term calendar of university. Principal of the institution conducts meeting of all the heads of departments to discuss preparation of academic calendar. University circular contains guidelines regarding the date of commencement of each semester, term-end, oral practical examination, End of semester examination. The academic calendar of the institute is prepared by the principal according to the university guidelines after discussion with head of departments. All faculty members prepare their theory and practical session plan according to the number of instructional days mentioned in calendar. They also plan extra lectures if required on non-instructional days. Students are also informed in advance about academic calendar to be followed throughout the semester. Apart from institutional academic calendar, department level activity plan is also prepared as per the need of each department. This helps to fulfil the requirements of each individual department related to curriculum enrichment
through activities like Expert Lectures, Training Activities and IndustryAcademia Interaction. Internal tests are conducted as per schedule and result is declared as per deadline mentioned in academic calendar. Each subject teacher discusses answer sheet with student to ensure fair assessment. Syllabus completion status is collected by class in charges to ensure regular audit of teaching learning process. Heads of each department also takes feedback in departmental meetings and initiate the steps for syllabus completion if required. Students are also assessed through other curricular, co-curricular and extracurricular activities organized by departments.

## 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 in website of the institution (to provide the weblink)

## http://www.mgmmumbai.ac.in/mgmcet/sites/default/files/inlinefiles/PO PSO CO.pdf

### 2.6.2 - Pass percentage of students

| Programme <br> Code | Programme <br> Name | Programme <br> Specialization | Number of <br> students <br> appeared in the <br> final year <br> examination | Number of <br> students passed <br> in final year <br> examination | Pass Percentage |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Please see <br> attached <br> file | ME | Please see <br> attached <br> file | 14 | 14 | 100 |
| Please see <br> attached <br> file | BE | Please see <br> attached <br> file | 746 | 746 | 100 |

## 2.7-Student Satisfaction Survey

2.7.1 - Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design the questionnaire) (results and details be provided as weblink)
http://www.mgmmumbai.ac.in/mgmcet/sites/default/files/inline-files/SSS\ Report\ AY\ 2019-20.pdf

## CRITERION III - RESEARCH, INNOVATIONS AND EXTENSION

## 3.1 - Resource Mobilization for Research

3.1.1 - Research funds sanctioned and received from various agencies, industry and other organisations

| Nature of the Project | Duration | Name of the funding <br> agency | Total grant <br> sanctioned | Amount received <br> during the year |
| :---: | :---: | :---: | :---: | :---: |
| Major <br> Projects | 730 | BRNS | 24.82 | 0 |
| Major <br> Projects | 730 | BRNS | 24.11 | 0 |
| Major <br> Projects | 1095 | BRNS | 30.66 | 7.72 |
|  |  |  |  |  |

## 3.2 - Innovation Ecosystem

3.2.1 - Workshops/Seminars Conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the year

| Title of workshop/seminar | Name of the Dept. | Date |
| :---: | :---: | :---: |
| Five Days online Faculty <br> Development Program on | Electronics and <br> Telecommunication <br> Engineering | $22 / 05 / 2020$ |
| Smart health care and <br> artificial intelligence | Biomedical Engineering | $13 / 01 / 2020$ |
| Challenges faced by <br> freshers in corporate | Biomedical Engineering | $31 / 01 / 2020$ |


| world |  | $03 / 02 / 2020$ |
| :---: | :---: | :---: |
| Technical Talk on <br> Audiometry | Biomedical Engineering | $02 / 05 / 2020$ |
| Aspects of radiotherapy <br> for cancer treatment in <br> proton beam | Biomedical Engineering | $03 / 11 / 2020$ |
| Ideas in cognitive <br> neuroscience of <br> creativity: an FMRI <br> approach | Biomedical Engineering | $11 / 06 / 2019$ |
| National Conference on <br> "Industry 4.0" | Electronics and <br> Telecommunication, <br> Mechanical and Computers <br> Engineering |  |
| Industry visit to <br> National Skill Training <br> Institute v N Purav Marg <br> Eastern Express Highway <br> Sion Chunabhatti Mumbai | Electronics and <br> Telecommunication <br> Engineering | $20 / 02 / 2020$ |

3.2.2 - Awards for Innovation won by Institution/Teachers/Research scholars/Students during the year

| Title of the innovation | Name of Awardee | Awarding Agency | Date of award | Category |
| :---: | :---: | :---: | :---: | :---: |
| NIL | NIL | NIL | Nill | NIL |

No file uploaded.
3.2.3 - No. of Incubation centre created, start-ups incubated on campus during the year

| Incubation <br> Center | Name | Sponsered By | Name of the <br> Start-up | Nature of Start- <br> up | Date of <br> Commencement |
| :---: | :---: | :---: | :---: | :---: | :---: |
| NIL | NIL | NIL | NIL | NIL | Nill |
| No file uploaded. |  |  |  |  |  |

## 3.3 - Research Publications and Awards

3.3.1 - Incentive to the teachers who receive recognition/awards

| State | National | International |
| :---: | :---: | :---: |
| NIL | NIL | NIL |

3.3.2 - Ph. Ds awarded during the year (applicable for PG College, Research Center)

| Name of the Department | Number of PhD's Awarded |
| :---: | :---: |
| Chemical Engineering | 1 |

3.3.3 - Research Publications in the Journals notified on UGC website during the year

| Type | Department | Number of Publication | Average Impact Factor (if <br> any) |
| :---: | :---: | :---: | :---: |
| International | Electronics and <br> Telecommunications | 3 | 1.34 |
| International | Biomedical <br> Engineering | 26 | 6.51 |
| View File |  |  |  |

3.3.4 - Books and Chapters in edited Volumes / Books published, and papers in National/International Conference Proceedings per Teacher during the year

| Department | Number of Publication |
| :---: | :---: |
| Electronics and Telecommunications | 2 |
| Chemical Engineering | 1 |
| View File |  |

3.3.5 - Bibliometrics of the publications during the last Academic year based on average citation index in Scopus/ Web of Science or PubMed/ Indian Citation Index
$\left.\begin{array}{|c|c|c|c|c|c|c||}\hline \begin{array}{c}\text { Title of the } \\ \text { Paper }\end{array} & \begin{array}{c}\text { Name of } \\ \text { Author }\end{array} & \text { Title of journal } & \begin{array}{c}\text { Year of } \\ \text { publication }\end{array} & \text { Citation Index } & \begin{array}{c}\text { Institutional } \\ \text { affiliation as } \\ \text { mentioned in }\end{array} & \begin{array}{c}\text { Number of } \\ \text { citations } \\ \text { excluding self } \\ \text { citation }\end{array} \\ \text { the publication }\end{array}\right]$
3.3.6 - h-Index of the Institutional Publications during the year. (based on Scopus/ Web of science)

| Title of the <br> Paper | Name of <br> Author | Title of journal | Year of <br> publication | h-index | Number of <br> citations <br> excluding self <br> citation | Institutional <br> affiliation as <br> mentioned in <br> the publication |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Characte <br> rization <br> of TiO2 | Prof. <br> Dayanand <br> Jadhav | SSRN- <br> Elsevier | 2019 | 1 | 1 | MGMCET |


| Metal <br> Oxides Nan oparticle Synthesize <br> d using Plant extracts and Fabric ation of 'Solar Cell' <br> using ITO glass, TiO2, <br> Ruthenium, Graphite and Potassium Iodide |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Green <br> synthesis <br> of SnO2 <br> using <br> green <br> papaya <br> leaves for nanoelectr <br> onics (LPG <br> sensing) a <br> pplication | Prof. <br> Dayanand Jadhav | Elsevier | 2020 | 1 | 6 | MGMCET |
| ew File |  |  |  |  |  |  |

3.3.7 - Faculty participation in Seminars/Conferences and Symposia during the year :

| Number of Faculty | International | National | State | Local |
| :---: | :---: | :---: | :---: | :---: |
| Attended/Semi <br> nars/Workshops | 3 | 33 | Nill | 91 |
| View File |  |  |  |  |

## 3.4-Extension Activities

3.4.1 - Number of extension and outreach programmes conducted in collaboration with industry, community and Non- Government Organisations through NSS/NCC/Red cross/Youth Red Cross (YRC) etc., during the year

| Title of the activities | Organising unit/agency/ <br> collaborating agency | Number of teachers <br> participated in such <br> activities | Number of students <br> participated in such <br> activities |
| :---: | :---: | :---: | :---: |
| NIL | NIL | Nill | Nill |
| No file uploaded. |  |  |  |

3.4.2 - Awards and recognition received for extension activities from Government and other recognized bodies during the year

| Name of the activity | Award/Recognition | Awarding Bodies | Number of students <br> Benefited |
| :---: | :---: | :---: | :---: |
| NIL | NIL | NIL | Nill |
| No file uploaded. |  |  |  |

3.4.3 - Students participating in extension activities with Government Organisations, Non-Government Organisations and programmes such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the year

| Name of the scheme | Organising unit/Agen cy/collaborating agency | Name of the activity | Number of teachers participated in such activites | Number of students participated in such activites |
| :---: | :---: | :---: | :---: | :---: |
| College <br> Social <br> Responsibility <br> (CSR) | General Club Activity MGM Hospital with Hari Om Charitable Trust | Medical Camp in School at Borgaon, Khurd Primary School, Karat, <br> Tal.Khalapur | 2 | 6 |
| ```Technical Club Activity``` | Environmental Pollution Control club | Debate on Stratergies for Air Pollution Control | 3 | 26 |
| ```Technical Club Activity``` | Environmental Pollution Control club | Presentation on Tertiary Water Tretment | 1 | 3 |
| ```Technical Club Activity``` | Environmental Pollution Control club | Lecture on Green Technology Sustainable Development | 3 | 7 |
|  | Environmental Pollution Control club | Quiz on Water Pollution | 1 | 13 |
| General Club Activity | College Social Responsibility Club Citizen's Unity Forum, Panvel | Tree <br> plantation program at Pale Budruk (Phanaswadi), Panvel | 12 | 192 |
| ```College \\ Social \\ Responsibility \\ (CSR)``` | General Club Activity MGM Hospital with Hari Om Charitable Trust | Medical Camp in School at Borgaon, Jijamata High School Borgaon, RJP Primary school, ,Karat, Tal.Khalapur | 1 | 3 |
| View File |  |  |  |  |

## 3.5-Collaborations

3.5.1 - Number of Collaborative activities for research, faculty exchange, student exchange during the year

| Nature of activity | Participant | Source of financial support | Duration |
| :---: | :---: | :---: | :---: |
| NIL | NIL | NIL | 0 |
| No file uploaded. |  |  |  |

3.5.2 - Linkages with institutions/industries for internship, on-the- job training, project work, sharing of research facilities etc. during the year

| Nature of linkage | Title of the <br> linkage | Name of the <br> partnering | Duration From | Duration To | Participant |
| :--- | :--- | :--- | :--- | :--- | :--- |


|  |  | institution/ <br> industry <br> /research lab <br> with contact <br> details |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Nill | Nill | View File | Nill | Nill | Nill |

View File
3.5.3 - MoUs signed with institutions of national, international importance, other universities, industries, corporate houses etc. during the year

| Organisation | Date of MoU signed | Purpose/Activities | Number of <br> students/teachers <br> participated under MoUs |
| :---: | :---: | :---: | :---: |
| Accurate Sales <br> Services (P) Ltd. <br> Pune | Nill | View File | Nill |

## CRITERION IV - INFRASTRUCTURE AND LEARNING RESOURCES

## 4.1 - Physical Facilities

4.1.1 - Budget allocation, excluding salary for infrastructure augmentation during the year

| Budget allocated for infrastructure augmentation | Budget utilized for infrastructure development |
| :---: | :---: |
| 584.5 | 495.8 |

4.1.2 - Details of augmentation in infrastructure facilities during the year

| Facilities | Existing or Newly Added |
| :---: | :---: |
| Classrooms with Wi-Fi OR LAN | Existing |
| Number of important equipments <br> purchased (Greater than 1-0 lakh) <br> during the current year | Newly Added |
| Value of the equipment purchased <br> during the year (rs. in lakhs) | Newly Added |
| Seminar Halls | Existing |
| Seminar halls with ICT facilities | Existing |
| Classrooms with LCD facilities | Existing |
| Laboratories | Existing |
| Class rooms | Existing |
| Campus Area | Existing |

## 4.2 - Library as a Learning Resource

4.2.1 - Library is automated \{Integrated Library Management System (ILMS)\}

| Name of the ILMS <br> software | Nature of automation (fully <br> or patially) | Version | Year of automation |
| :---: | :---: | :---: | :---: |
| KOHA Library <br> Management System | Partially | 3.12 .07 | 2017 |

### 4.2.2 - Library Services

Library

| Service Type |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Text <br> Books | 46415 | 22680588 | 487 | 203840 | 46902 | 22884428 |
| Reference <br> Books | 3015 | 2110500 | 10 | 12000 | 3025 | 2122500 |
| e-Books | 6072 | 2575092 | 2000 | Nill | 8072 | 2575092 |
| Journals | 76 | 292909 | Nill | Nill | 76 | 292909 |
| e- <br> Journals | 4239 | 1196618 | Nill | Nill | 4239 | 1196618 |

4.2.3 - E-content developed by teachers such as: e-PG- Pathshala, CEC (under e-PG- Pathshala CEC (Under Graduate) SWAYAM other MOOCs platform NPTEL/NMEICT/any other Government initiatives \& institutional (Learning Management System (LMS) etc

| Name of the Teacher | Name of the Module | Platform on which module <br> is developed | Date of launching e- <br> content |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Prof. Prachi C. <br> Sonarkar | Applied <br> Hydraulics-II | MOOCS | $05 / 06 / 2019$ |  |  |
| Prof. Yogesh A. <br> Karpe | Environmental <br> Engineering | MOOCS | $05 / 06 / 2019$ |  |  |
| Prof. Raj <br> Rajeshwari | Design of <br> Hydraulic <br> Structures | MOOCS | $05 / 06 / 2019$ |  |  |
| Prof. Shanti <br> Chaturvedi | Power System-I | MOOCS |  |  |  |
|  |  |  |  |  |  |

## 4.3 - IT Infrastructure

### 4.3.1 - Technology Upgradation (overall)

| Type | Total Co <br> mputers | Computer <br> Lab | Internet | Browsing <br> centers | Computer <br> Centers | Office | Departme <br> nts | Available <br> Bandwidt <br> h (MBPS/ <br> GBPS) | Others |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Existin <br> g | 863 | 14 | 1 | 0 | 1 | 1 | 9 | 50 | 0 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 863 | 14 | 1 | 0 | 1 | 1 | 9 | 50 | 0 |

4.3.2 - Bandwidth available of internet connection in the Institution (Leased line)
$50 \mathrm{MBPS} / \mathrm{GBPS}$
4.3.3 - Facility for e-content

| Name of the e-content development facility | Provide the link of the videos and media centre and <br> recording facility |
| :---: | :---: |
| Lecture Recording Facility | $\underline{\text { https }: / / \text { youtu.be/oRUzHen8evM }}$ |
| Lecture Recording Facility | $\underline{\text { https://youtu.be/mEXs jvFK-wI }}$ |
| Lecture Recording Facility | $\underline{\text { https://youtu.be/o9W135zAEF0 }}$ |
| Lecture Recording Facility | $\underline{\text { https://youtu.be/HFjui5U1sds }}$ |

## 4.4 - Maintenance of Campus Infrastructure

4.4.1 - Expenditure incurred on maintenance of physical facilities and academic support facilities, excluding salary component, during the year

| Assigned Budget on <br> academic facilities | Expenditure incurred on <br> maintenance of academic <br> facilities | Assigned budget on <br> physical facilities | Expenditure incurredon <br> maintenance of physical <br> facilites |
| :---: | :---: | :---: | :---: |
| 335.47 | 316.92 | 389.5 | 381.73 |

4.4.2 - Procedures and policies for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc. (maximum 500 words) (information to be available in institutional Website, provide link)

Maintenance of existing facilities is ensured through site office having a skilled pool of people to cater to civil and electrical needs. Masonry work, plumbing and carpentry work are undertaken through the site office. Maintenance
and repair of the buildings of the institution is also carried out
periodically. Painting of laboratories, class rooms and other academic
infrastructure facilities is carried out on a regular basis. A generator is
also available on the campus to ensure uninterrupted power supply to the institution. In addition, an electrician is available on the college premises for electrical repair and maintenance. Repair and maintenance of tube-lights and fans in the institution is carried out on a regular basis. Maintenance of the playground and lawns on the campus is carried out by gardeners. Cleanliness of all the classrooms, tutorial rooms, seminar halls, laboratories, library and other facilities in the institution is maintained by a housekeeping agency. Cleaning of toilets is carried out regularly on daily basis by the housekeeping staff. Sanitary vending machine is available in the college premises. Cleaning
of overhead water tank of the college building is also carried out
periodically. Fumigation of the institution and the surrounding campus is
carried out frequently. There are laboratory assistants and laboratory attendants in all departments who take care of the maintenance and upkeep of the laboratories of each department. Faculty member, appointed as laboratory incharge for each laboratory in the departments, is responsible for the maintenance and repair of the equipment present in his/her respective
laboratory. Requests for maintenance and repair of equipment as well as procurement of new equipment and consumables are sent to the Stores section by the concerned laboratory in-charge through the Head of the Department. Annual Maintenance Contract (AMC) with suppliers of laboratory equipment is undertaken by the institution. The institution takes up calibration activities and other accuracy procedures for certain instruments and equipment. External agencies are invited for calibration of laboratory instruments and equipment depending on the need by the respective laboratory in-charges through the Head of the Department. Laboratory inspection committee of the institution is responsible to check that the laboratory facilities are well maintained and the committee also carries out stock verification of all laboratories. Scrap committee is responsible for disposal of non-working and non-repairable equipment,
furniture, fixtures and other scrap items. There is a computer maintenance section in the institution which looks after the maintenance and repair of all the computers, printers and internet facilities available in the college. UPS, voltage stabilizers and spike guards are also available in most of the
laboratories. Water filters (Aqua-guard) and coolers in the institution are maintained through annual maintenance contract. Pest control of laboratories, library and other academic infrastructure facilities is carried out on a
regular basis. Maintenance of lifts is carried out under annual maintenance contract. Regular maintenance of Xerox facilities, computers and printers, air conditioners and fire extinguishers is also carried out. Security of the institution is assigned to an external agency.

## CRITERION V - STUDENT SUPPORT AND PROGRESSION

## 5.1 - Student Support

### 5.1.1 - Scholarships and Financial Support

|  | Name/Title of the scheme | Number of students | Amount in Rupees |
| :---: | :---: | :---: | :---: |
| Financial Support <br> from institution | Employee ward | 2 | 50000 |
| Financial Support <br> from Other Sources |  | 1798 | 78936449 |
| a) National | Govt. Scholarship <br> Freeship | Nill | Nill |
| b) International | View File | Nill |  |

5.1.2 - Number of capability enhancement and development schemes such as Soft skill development, Remedial coaching, Language lab, Bridge courses, Yoga, Meditation, Personal Counselling and Mentoring etc.,

| Name of the capability enhancement scheme | Date of implemetation | Number of students enrolled | Agencies involved |
| :---: | :---: | :---: | :---: |
| Mentoring | 12/08/2019 | 2454 | All Faculties of MGM's College of Engineering Technology. Mumbai. |
| Self-Discovery and Goal Setting (Language lab) | 24/01/2020 | 230 | Faculty of MGM's College of Engineering Technology. Mumbai |
| Hybrid Machine Learning workshop | 27/07/2019 | 52 | Skill Inc. Mumbai (Under MGMCET IEEE) |
| Foreign Language Club German | 30/08/2019 | 11 | Career Crafters, Vashi, Navi Mumbai. Mr. Nihar Kale |
| ```International Yoga Day Celebration``` | 17/06/2019 | 57 | Mr. Parag Javdekar, Chief Yoga Consultant Therapist, Align Yoga |
| View File |  |  |  |

5.1.3 - Students benefited by guidance for competitive examinations and career counselling offered by the institution during the year

| Year | Name of the <br> scheme | Number of <br> benefited <br> students for <br> competitive <br> examination | Number of <br> benefited <br> students by <br> career <br> counseling <br> activities | Number of <br> students who <br> have passedin <br> the comp. exam | Number of <br> studentsp placed |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2019 | GRE/TOEFL <br> Preparation | 47 | Nill | Nill | Nill |
| 2019 | Higher <br> study at | Nill | 69 | Nill | Nill |


|  | Germany |  |  | 5 | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Nill | Hybrid <br> Machine <br> Learning <br> workshop |  | 52 | Nill | 52 |

## View File

5.1.4 - Institutional mechanism for transparency, timely redressal of student grievances, Prevention of sexual harassment and ragging cases during the year

| Total grievances received | Number of grievances redressed | Avg. number of days for grievance <br> redressal |
| :---: | :---: | :---: |
| 1 | 1 | 1 |

5.2 - Student Progression
5.2.1 - Details of campus placement during the year

| On campus |  |  | Off campus |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Nameof <br> organizations <br> visited | Number of <br> students <br> participated | Number of <br> stduents placed | Nameof <br> organizations <br> visited | Number of <br> students <br> participated | Number of <br> stduents placed |
| Details <br> attached in <br> excel sheet | 1014 | 44 | Details <br> attached in <br> excel sheet | 230 | 8 |
| View File |  |  |  |  |  |

5.2.2 - Student progression to higher education in percentage during the year

| Year | Number of students enrolling into higher education | Programme graduated from | Depratment graduated from | Name of institution joined | Name of programme admitted to |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2019 | 1 | $\begin{gathered} \text { M.G.M's } \\ \text { College of } \\ \text { Engineering } \\ \text { and } \\ \text { Technology, } \\ \text { Navi Mumbai } \end{gathered}$ | Biomedical Engineering | School of Engineering and Applied Sciences, University of Buffalo | MSc in Biomedical engineering |
| 2019 | 1 | M.G.M's College of <br> Engineering and <br> Technology, <br> Navi Mumbai | Biomedical Engineering | John <br> Hopkins University | M.S.E. <br> Program in Biomedical Engineering |
| View File |  |  |  |  |  |

5.2.3 - Students qualifying in state/ national/ international level examinations during the year (eg:NET/SET/SLET/GATE/GMAT/CAT/GRE/TOFEL/Civil Services/State Government Services)

| Items | Number of students selected/ qualifying |
| :---: | :---: |
| GATE | 9 |
| CAT | 1 |
| GRE | 5 |
| TOFEL | 5 |



## 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)

| Year | Name of the <br> award/medal | National/ <br> Internaional | Number of <br> awards for <br> Sports | Number of <br> awards for <br> Cultural | Student ID <br> number | Name of the <br> student |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2019 | 5th MGM <br> Olympics <br> 2019 <br> (Basket <br> Ball, <br> Kabaddi <br> Girls, <br> Kabaddi <br> Boys, <br> Relay, | National | 5 | Nill | MGMCET <br> Sports <br> Team | MGMCET <br> Basket <br> Ball Team <br> ,MGMCET |
| Discus |  |  |  |  |  |  |
| Throw) |  |  |  |  |  |  |

5.3.2 - Activity of Student Council \& representation of students on academic \& administrative bodies/committees of the institution (maximum 500 words)

As per the rules and regulations of Maharashtra public university act 2016 and guidelines provided by the affiliated university, the student council is formed. The sole purpose of making students representation to various committees is that, the students should get all round exposure apart from academics. When the students work on various committees by taking some authority and responsibility it makes them more sensitive, committed towards the task assigned, learn the multi-tasking, time management, leadership skills, ability to work in team, develop the winning attitude and become socially aware
of various cultures. Students of our institute has represented in various academic committees like technical paper presentation, quiz competition, model and project making. Head of institution is in charge of the student council.

Student's council is formed by selecting general secretary and ladies representative by the different members of student council. General secretary heads the team of students 'council. Ladies representative represents all the girls and their issues are raised and resolved through her. Students are selected as Sports secretary, joints sports secretary. They have their own team of students for conduction of sports, representing various departments. Various
sports event are conducted with the help from faculties. All games are conducted in the campus and equally girls are also motivated for representation in all the sports events. Cultural secretary and joint cultural secretary are appointed along with student members in the conduction team. They are fully empowered to conduct the cultural activities on stage maintaining discipline of the dais. A detailed programme is chalked out, discussed with concern faculty convener and then the programme is executed on the stage. Few Events undertaken by students Council are: 1. Total internal sports/cultural competition organized by student council through the year 2. Participation in InterUniversity Youth Festival. 1. Road Safety Campaign 2. General and Technical Quiz 3. Poster Competition 4. Technical Fest

## 5.4-Alumni Engagement

5.4.1 - Whether the institution has registered Alumni Association?

## Yes

Name: M.G.M.C.E.T. Alumni Association Registration Number: F-13676 Members of Alumni Association: Mr. Prahlad P. Narwade - Chairman Mrs. Swati Mahamuni Vice Chairman Mr. Sachin Chauhan - Secretary Mr. Vilas Jadhav- Joint Secretary Mrs. Prajakta Angre -Treasure Mrs. Madhuri Patil - Vice Treasure Mrs. Preeti Athawale - Member Mrs. Hema Sable - Member Mrs. Vidya Barde- Member Mrs. Deepashri Sonawale - Member Mr. Nishant Patil - Member Mrs. Dipti Patil Member Mrs. Jyoti Warrier - Member The Alumni Association contributes significantly to development of institution. The Alumni Association of the institution functions through its administrative body, which holds periodic meetings, elects office bearers and regularly updates the database of alumni and carries out activities to meet its objectives. Alumni Association Responsibilities: Alumni are often invited for expert talks on their area of interest and expertise. Some of the distinguished alumni are invited as a chief guest for cultural and technical activities. The institute actively promotes multiple interactions with the alumni. Our students and institute are benefited in various fields such as students placement, training, expert lecture, career guidance session, industrial visits. Apart from these, responsibilities are given/ executed as follows. ? To promote interaction between the MGMCET institute and its Global Alumni, and promote the interest of the present and future students. ? To encourage the formation of MGMCET Alumni Chapters at national international level. ? To help and guide students and alumni of the Institute for anti-drug, anti-ragging and any other anti-social activities. ? Some alumni also guided the students who participated in Hackathon (organized by AICTE), Avishkar (Organized by University of Mumbai) and others technical events. ? Alumni Col. Paramveer Singh serving Indian Army visited our campus and delivered lecture on "Career opportunity in Army". ? Alumni Akshay Naik working at Siemens India delivered the lectures on "Latest Trends in Imaging Techniques". Institute is proud of our distinguished alumni serving in different capacities at government and private sectors across the globe namely 1. Col. Paramveer Singh - Indian Army 2. Mr. Pardeep Pol, section engineer, Indian Railway. 3. Mr. Deepak Kumawat, project manager,CIDCO. 4. Mr. Jiten Bhardwaj, Marketing India Head,TCS 5. Mr. Akshay Tandel, Data analytics, Face book, San Francisco Bay Area, USA 6. Mr. Ravi Israni , Zonal manager , IT div. IBM 7. Dr. Devendra Shah , Vice Principal , Thakur college of Engineering , Mumbai 8. Mr. B. K. Kushbah , Deputy Project Manager, MRCL 9. Mr. Parveen Devikar, Director Sales, Rak Free Zone, UAE 10. Dr. Anant Madabhusi, Professor, Case Western Reserve University, Cleveland, Ohio USA 11. Mr. Sudhir C. Mundra, ITL, Mumbai 12. Dr. Surya Sharma , Embedded Systems, Wearable Sensors Palo Alto, California , USA 13. Mr. Neelesh Shinde, Chief Technical officer Jupiter hospital. 14. Mr. Rajesh Mhatre -Brillio Technologies LTD, PUNE Director product Management 15. Mr. Rupesh Shinde, Vice President, JP Morgan India Services Pvt. Ltd. Mumbai. 16. Mr. Sagar Waghmode- IPS Delhi 17. Mr. Varad

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Salke- IES Goa 18. Mr.Anil Ranveer - Additional Director CPCB Delhi.
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5.4.2 - No. of enrolled Alumni:

1063
5.4.3 - Alumni contribution during the year (in Rupees) :

0
5.4.4 - Meetings/activities organized by Alumni Association :

Three meetings where organized by the alumni association in order to have more industry-institute interaction The outcome of activities is as follows: 1. Mr.

Devendra Devikar delivered lecture on Classroom to Corporate world. 2. Mr.
Anirudh Sawant, delivered a lecture on Recent trends in communication
Technologies 3. Ms. Rashmi Mehta gave expert Lecture on Career Opportunities in Health Industry 4. Mr. Anurag Sachan delivered expert Lecture on Present scenario of BME industry in various field 5. Ms. Prajakta Chaudhari Angre,
Donated Book of "Introduction to Chemical Engineering Thermodynamics" 6. Mr.
Shrikant Patole, Director Elder Berry Diagnostics, gave a industrial project on development of software for sperm analyzer for Bio medical students 7.
Opportunity was made available through Bio Medical Engineering alumni Ms.
Shrikala HoD Biosense Design for Manufacturing for the industrial project on
"optical assembly module for body fluid measurements" and "sensor assembly module for semi-automated urine strip measurement" 8. Ms. Mita Ruparel Director Aum Meditech contributed for the project "Development of wearable Orthotic hand module" which forms a part of hand Orthotic system under development for Bio medical students.

## CRITERION VI - GOVERNANCE, LEADERSHIP AND MANAGEMENT

## 6.1 - Institutional Vision and Leadership

6.1.1 - Mention two practices of decentralization and participative management during the last year (maximum 500 words)

Institute has a mechanism for delegating the authority and providing operational autonomy to all the functionaries leading towards a decentralized governance system. Effective decentralization provides a better practice for success and reinforces the productivity of the college. Through participative management, the committees handle and ensure their activities completely and
constructively. Committees are formed for the various curricular, cocurricular, and extracurricular activities and are carried out during the academic year. These committees deliberate a new initiate and come up with schemes for the all-around development of students. The departments are encouraged to prepare action plans and execute the activities in HODs and Directors meetings. The college promotes participative management by encouraging faculty, staff, and students to involve at various levels of learning procedures. The governing body has been formed to decide policies and take major decisions. Director is the head of a joint venture of academic and administrative affairs. Director conducts periodic meetings with HODs and evolves policies through deliberations for accomplishment of the mission and vision. All policy changes and academic activities are planned through a process of dialogue with stakeholders at various levels. Director, Principal, and Dean Academic takes care of the planning, conduction, assessment, and corrective measures for smooth and effective implementation of academic matters. Each department has got one academic coordinator to execute the departmental activity in coordination with HODs and Deans. Each class is having a faculty in charge to monitor the academic activities and other issues of the students. Faculty mentors help students with academic and other issues.
Institute level academic calendar for various participative activities is
developed and discussed with HODs and Deans before its implementation. Head of the Departments along with faculty members, execute the plan for its successful implementation as well as documentation. Departments are actively engaged in organizing various student-centric programs so that the creative capacities of students are positively utilized to their full potential for bringing out the best among them. As a part of the professional and personal commitment, the heads of the departments actively engage themselves in the parent-teacher meets to find out the strength and weakness of the students which can be worked out for the betterment of departments. Various teams and team leaders are formed based on the aptitude of different students for activities such as technical, placement, sports, and cultural. The meetings are conducted on regular basis with Director, Principal and Dean Academic along with the HODs of departments for the implementation of academic activities at institute level HODs conduct Faculty meeting regarding implementation of the academic calendar. The faculty and class in charge carry out the implementation of guidelines meticulously.

HODs responsibility includes governance at the Departmental level towards smooth and strict adherence to academics, extension, and maintenance of the classroom and laboratory facilities. A well-organized Placement Cell provides employment opportunities training to students to lead the organization. The placement cell provides the information, advice, and counseling to the students for their career objectives and prepares them for job opportunities.
6.1.2 - Does the institution have a Management Information System (MIS)?

## Yes

## 6.2 - Strategy Development and Deployment

6.2.1 - Quality improvement strategies adopted by the institution for each of the following (with in 100 words each):

| Strategy Type | Details |
| :---: | :---: |
| Admission of Students | To attract meritorious students and provide them quality education with optimized fees is our strategy. MGMCET is approved by AICTE, New Delhi, and recognized by the Govt of Maharashtra. Institute maintains a transparent and well-administered admission process, complying with all statutory norms of the concerned regulatory/governing agencies including DTE Maharashtra and affiliating University. The admission process is as per the sanctioned intake capacity and it is completely controlled and implemented by the Directorate of Technical Education (DTE) Maharashtra through Centralized <br> Admission Process (CAP). The <br> eligibility is to qualify the entrance test conducted by CET cell Maharashtra and Direct Second year admissions also conducted by CET cell and all the university rules are followed while admitting the students. The admission process is transparent and carried out online. There is a special provision for the wards of Defence Personnel. <br> Also, Government has special provisions for TFWS/EWS, North East, and JK students. This leads to a good cultural |

exchange and grows the sense of unity amongst students. The use of social media is aptly done to project our achievements.

Industry Interaction / Collaboration
To bridge the gap between the industry and academia and provide for industry-ready manpower is our
strategy. Our training placement cell continuously strives for networking with industries for placements and internships. The Institute has signed MOU with many reputed companies. These MOUS are signed for mutual benefits, mainly for value-added courses, Certification courses, internships, etc. The guest lectures from industry experts are arranged to improve industry interaction/collaboration. It also comprises industry internships for the students during vacation. The institute takes feedback of students from various recruiters to upgrade the quality of the students. The Training and Placement cell provides placement opportunities for pass out students also by arranging on-campus and offcampus drives. Problem definitions floated by industry are allocated to students for their major projects. Industry professionals are invited for assessment for project work and mini projects. The technical center of excellence created by MGM is an ambitious project supporting students.

## Human Resource Management

To provide sufficient qualified and competent teaching faculties and supporting staff and provisions for continuous up-gradation is the strategy adopted. We have well-experienced faculty for conducting UG, PG, and Research programs. Most of the faculty has upgraded their qualification while in service. For the recruitment process, vacant positions are filled by adhoc appointments made by the management so that smooth functioning of the Institution is not hampered. The Head of the department provides the requirement of human resources according to the load prescribed by the University to the Director. The Director forwards the requirement and takes approval from the Management. There are adequate welfare measures for all. A transparent mechanism exists and as such all are aware of their duties and responsibilities. MGMCET offers

Conferences to upgrade their capabilities in new areas of Industry. MGMCET also offers advantages like Study Leave, Vacation, Medical Leave, Maternity Leave, P.F ,Gratuity, Group Insurance Schemes etc.

[^0]To provide state of art learning resources, ICT tools, and modern instrumentation is our strategy.

Library, ICT, and physical
infrastructure are very much needed for quality teaching and learning.
Strategic measures are undertaken by the college for maintaining these facilities. MGMCET has a digital archive for study material like Syllabus, Notes, Video Lectures,
Assignments and Question banks, etc. Learning Management System (LMS), Google Classroom, MOOCs, etc. The library has books for competitive examinations and these books are issued for reading purposes to the students preparing for various competitive and other examinations. Library houses various references and textbooks,
National and International journals,
and various Online resources like eJournals Subscriptions, e-books, magazines, etc. Library provides a facility to check plagiarism for projects, thesis, research papers, and synopsis using soft tools. Students
have open access to e-books and NPTEL videos for extra learning. Students have access to the Library of IIT Bombay as our institute is having membership which helps students to enhance their knowledge on recent developments in research activities. The laboratories are upgraded and instruments are purchased in keeping with the requirements of the learners. The institute provides adequate ICT facilities, 50 Mbps leased Line Connectivity with Wi-Fi, LAN, and smart boards for effective teaching and learning. We have our Management Information System in place, supporting
general administration and student support, Smart class-rooms, latest audio-visual aids, internet support with upgradation of Laboratory equipments and furniture leads to state of art infrastructure. Well-equipped Gymkhana and Auditorium with modern facilities are provided. Library KOHA OPAC management software is used. Digital resources are provided with easy access. The Institute has an authorized learning center for the $V$ Labs in collaboration with COEP Pune.

Encouraging the RD activity in every department and improving the quality of education is our strategy. Institute is having Research and Development cell which monitors the research activities carried by the students and faculty. The institute supports and promotes faculties and students and provides financial support to attend various activities like seminars, workshops, guest lectures, orientation programs, STTP FDP, etc. The Institute also encourages the faculty for pursuing higher education and grants, study
leaves, duty leaves whenever
applicable. MGMCET is having recognized research center by the University of
Mumbai in the Department of Biomedical
Engineering. Every year faculty members are sponsored for completing their research while in service Faculty members are also encouraged to organize and attend workshops leading to a good number of research, papers in highimpact international and national level journals as well as conferences.
Advanced equipment and soft computing tools are provided for supporting research work.
to conduct the Internal assessment,
Practical and Oral exams, and end
semester exams. Examinations are
scheduled as per the prescribed
University time table and are planned
well in advance to ensure smooth
conduct of exams. Faculties of the
college are involved in the process of
paper setting, evaluation of answer
sheets and moderation of university
paper and invigilation of papers.
Moderation is carried out by teachers from other colleges. Faculties are
given the freedom to design innovative assignments and continuous evaluation measures for ensuring outcome-based
learning. The evaluation policy with a
detailed scheme for university examinations is made available to students and faculty. The institute conducts two periodic tests for 20 marks each and average marks of both the tests are considered as internal
marks also term work is given on basis of subject scheme and performance during practical and tutorial sessions for this continuous assessment is done so the submission of assignments and journals, quiz, unit test, etc. is part of continuous assessment. The rubrics designed for assessment are reviewed in department meetings and are informed to students as well. Central assessment program at the Institution level enables declaration of results in stipulated time. For unbiased and uniform assessment, all answer sheets are masked by the cell. After the assessment, answer books are made available to the students for their grievances if any. Expected answers are also discussed by the faculty. The question papers are based on COs, PSOs, and POs for assessing them Result Analysis is done after the result display. A formal student satisfaction survey is conducted twice a semester and the outcome is communicated to the faculty and appropriate actions are taken.

[^1]For teaching-learning, our strategy
is to continuously enhance the effectiveness of teaching-learning.
This process is monitored continuously throughout the year for efficient delivery of the curriculum. For the quality improvement in teaching and
learning and effective implementation
in the institute, at the start of each semester, ILQMC (Institute Level
Quality Management Cell) prepares an Academic Calendar on the lines of the University of Mumbai. All the faculty members prepares teaching plan for their respective subject and makes use of ICT tools and a host of online resources available through MOOCs and NPTEL platforms to reduce the Industry-

Academia gap. Faculty uses ICT tools effectively. This pandemic has helped to come up with innovative ideas and tools for teaching and learning.
Faculties have attended several FDPs, webinars, and hands-on sessions for effective use of ICT tools and
innovative approaches to teaching-
learning, etc. All faculty members maintains their course file for their allotted subject. Lectures and
tutorials are conducted as per the workload allotted. Guest lectures are arranged by experts from academics and industry. Teachers give regular
assignments, tutorials, and mini-
projects to students. To increase the effectiveness, ICT enabled classrooms are provided The entire campus is Wi-Fi enabled which promotes the habit of self-learning among the students. 100 percent coverage of syllabus is achieved. Library, laboratories and safety devices are up-graded . Extra lectures are arranged for a slow learners. For outcome-based teaching-
learning, the course outcomes and program outcomes are focused right from planning to examination for the course with continuous monitoring. Mentoring system is in place having better connect with the students for identifying their capabilities and strengthens their skills and assisting them to accomplish their long-term goals.

Provide the state of art curriculum to the students and addressing the need for employability is our strategy. The Institute is affiliated with University of Mumbai and follows the syllabus and curriculum prescribed by the University. At the beginning of each Academic year, the University of Mumbai gives an Academic calendar with the guideline about the date of commencement of each semester, End of Semester Examination, Oral/Practical Examination, and vacation slot, etc. Accordingly, in the meeting of the Director and respective HOD the Institute Academic Calendar is prepared and then distributed to the departments Teachers are encouraged to impart the knowledge as per curriculum by using innovative ideas and different teaching methods such as quizzes, discussions, workshops, seminars, industrial visits,
apart from the traditional chalkboard and advanced teaching methods along with ICT tools. In supplement to the prescribed curriculum, students are
exposed to the latest developments and trends in the respective fields by arranging guest lectures expert
lectures by experts from industry, and industrial/field visits are organized. Periodical feedback is obtained from the students on aspects of the teaching-
learning process Students are taken on
industrial visits for getting updated
with the industry. Students are also
taught yoga, mental health awareness, and a healthy diet. Apart from
University prescribed curriculum, the Institute organizes various value addition programs for the students based on technology developments and current practices in Industry. Our focus is on outcome-based education and
the concept is implemented at every stage.
6.2.2 - Implementation of e-governance in areas of operations:
$\left.\begin{array}{|c|c|}\hline \text { E-governace area } & \text { Details } \\ \hline \text { Planning and Development } & \begin{array}{c}\text { E-governance Activity- The college } \\ \text { website is regularly updated with all }\end{array} \\ \text { the information required for admission, } \\ \text { scheduling timetable, exam dates and } \\ \text { travelling concession. The academic } \\ \text { calendar is available for each }\end{array}\right\}$

|  | majority of transactions are now carried out through an e-banking online process to ensure speed, better security and monitoring. |
| :---: | :---: |
| Student Admission and Support | E-governance Activity- The admission process is done as per the norms of AICTE, Government of Maharashtra rules and regulations. The admission is carried out through CAP rounds. <br> Scholarship and free ships are given to students who are eligible as per the government rules. For overall <br> personality development, the institute supports the students throughout their course by grooming them with aptitude / spoken English classes. A different extension activity is also carried out under DLLE to develop the sense of responsibility among students towards society. The financially weak students are allowed to pay fees in <br> installments. Students fees are partly waived off for some meritorious students whose parents are not able offer their wards technical education. Unique Identity Number is given to each student admitted and documents are maintained through MS Office. |
| Examination | E-governance Activity- The <br> examination is conducted as per the norms and scheme received from Mumbai university The College has a separate Examination department with the necessary tools for examination purposes. As per the requirement of Examination department all the necessary accessories are provided by the college also the examination cell has separate room and Internet Facility for the online procedure of Paper Downloading, Students are provided with the facility to select department level and institute level subject electives as per their choice. Online Internal tests and Semester exams are being conducted now with the help of Google forms. Results are prepared with the help of Viva software Result analysis is carried out after the display of the result |

## 6.3 - Faculty Empowerment Strategies

6.3.1 - Teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the year

| Year | Name of Teacher | Name of conference/ <br> workshop attended <br> for which financial | Name of the <br> professional body for <br> which membership | Amount of support |
| :---: | :---: | :---: | :---: | :---: |


|  |  | support provided | fee is provided | Nill |
| :---: | :---: | :---: | :---: | :---: |
| 2019 | Nill | View File | Nill | Niew File |
| Vile |  |  |  |  |

6.3.2 - Number of professional development / administrative training programmes organized by the College for teaching and non teaching staff during the year

| Year | Title of the <br> professional <br> development <br> programme <br> organised for <br> teaching staff | Title of the <br> administrative <br> training <br> programme <br> organised for <br> non-teaching <br> staff | From date | To Date | Number of <br> participants <br> (Teaching <br> staff) | Number of <br> participants <br> (non-teaching <br> staff) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2019 | Nill | View <br> File | Nill | Nill | Nill | Nill |
| View File |  |  |  |  |  |  |

6.3.3 - No. of teachers attending professional development programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes during the year

| Title of the <br> professional <br> development <br> programme | Number of teachers <br> who attended | From Date | To date | Duration |
| :---: | :---: | :---: | :---: | :---: |
| View File | Nill | Nill | Nill | Nill |
| View File |  |  |  |  |

6.3.4 - Faculty and Staff recruitment (no. for permanent recruitment):

| Teaching |  | Non-teaching |  |
| :---: | :---: | :---: | :---: |
| Permanent | Full Time | Permanent | Full Time |
| 38 | 90 | 50 | 12 |

### 6.3.5 - Welfare schemes for

| Teaching | Non-teaching | Students |
| :---: | :---: | :---: |
| 1. Freeship: This is | 1. Free ship in fees is | 1. Free ship: This is |
| given in the form of fees | given to the Wards of | given in the form of fees |
| to the Wards of employees | employees of the | to the Wards of employees |
| of the Institution. Given | Institution. Given to the | of the Institution. Given |
| to the needy and | needy and deserving | to the needy and |
| deserving students 2. | students 2. Medical | deserving students 2. |
| Medical Expenses: In case | Expenses: In case of | Medical Expenses: In an |
| of medical emergency | medical emergency | emergency (critical |
| interest- free advance or | interest-free advance or | situation) medical |
| entire medical bill | entire medical bill | expenses for all the |
| amount of the hospital | amount of the hospital | students in the hospitals |
| will be paid against | will be paid against | run by MGM Trust in and |
| salary. Moreover 50 | salary. Moreover, 50 | around Navi Mumbai are |
| percent concession on the | percent concession on the | given. 3. Education: Fee |
| entire medical bill | entire medical bill | concession is given for |
| amount is given for all | amount is given for all | needy and deserving |
| the employees in the | the employees in the | students for education 4. |
| hospitals run by MGM | hospitals run by MGM | Flexibility in the form |
| Trust in and around Navi | Trust in and around Navi | of installments for Fee |
| Mumbai. 3. Education: | Mumbai. 3. Education: | Payment is sanctioned to |
| Free education is | Free education facility | needy students |

provided to the wards of Regular Employees and deceased staff. 4.
Employment: It is given
to the first relatives of deceased staff. 5.
Advance against salary: Interest free advance paid against salary to all employees during their personal crises. 6. Provident Fund Is implemented as per rules of Govt. and given to all the staff If applicable
7. Gratuity: Gratuity is provided to the staff as per the norms 8. Leave Encashment: Leave encashment paid at the time of retirement. 9.Sponsorship: Sponsorship for attending the seminar, conferences, project competitions, sports activities is given to all employees 10. Group insurance: Provision of group insurance for the safety of Teaching staff is also available
is provided to the wards of Regular Employees and deceased staff. 4.
Employment given to the first relatives of deceased staff. 5.
Advance against salary: Interest free advance paid against salary to all employees during their personal crises. 6. Provident Fund: Is implemented as per rules of Govt. and given to all the staff If applicable 7. Gratuity: Gratuity is provided to the staff as per the norms. 8. Leave Encashment: Leave encashment paid at the time of retirement. 9. Sponsorship: Sponsorship for attending the seminar, conferences, project competition, sports activities is given to all employees 10. Group insurance Provision of group insurance for the safety of non teaching staff is also available.
5.Sponsorship: We provide TA/DA for attending the seminar, conferences, project competitions, sports other activities

## 6.4 - Financial Management and Resource Mobilization

6.4.1 - Institution conducts internal and external financial audits regularly (with in 100 words each)

Institutional Internal Audit- Yes The institutes accountants are audited regularly- while the internal auditing is on annual basis. During the internal audit, the internal accounting team may give few suggestions related to some of the finance and stock-related records, allowing the institute to address and rectify the same before an external audit. External Audit- Yes The institution gets a statutory financial audit conducted by a Chartered Accountant firm as per provisions of the Bombay Public Trust Act, 1950 regularly. The statutory auditors visit the institution on regular basis and check all the records of the Institution rigorously and scrutinize procedures and policies followed by the institution. If there are any deficiencies or lacunae pointed out by the auditors or if they require any additional information or explanation, concerned authorities of the institution discuss the requirement with the auditors and comply with it, and compliances are submitted.
6.4.2 - Funds / Grants received from management, non-government bodies, individuals, philanthropies during the year(not covered in Criterion III)

| Name of the non government <br> funding agencies /individuals | Funds/ Grnats received in Rs. | Purpose |  |  |
| :---: | :---: | :---: | :---: | :---: |
| View File | Nill | Nill |  |  |
| View File |  |  |  |  |

6.4.3 - Total corpus fund generated

## 6.5 - Internal Quality Assurance System

6.5.1 - Whether Academic and Administrative Audit (AAA) has been done?

| Audit Type | External |  | Internal |  |
| :---: | :---: | :---: | :---: | :---: |
| Academic | Yes/No | Agency | Yes/No | Authority |
| Yes | External <br> authorities <br> (Principal, <br> HODs from <br> reputed <br> college) | Yes | IQAC Members |  |
| Administrative | Yes | External <br> authorities <br> (Principal, <br> HODs from <br> reputed <br> (ollege) | Yes | IQAC Members |

6.5.2 - Activities and support from the Parent - Teacher Association (at least three)

- Parents meeting is arranged department wise for mutual benefits - To improve the performance of the students - To improve attendance and discipline. • Parents are invited to the convocation ceremony. • Periodic meetings are arranged with the parents of defaulter students regarding their weak performance • Defaulter students are guided in the meeting by respective staff experts to improve their subject performance, attendance, and discipline. •
Extra lectures for weak students are organized whenever needed. • Parents can also offer feedback and suggestions. - They are also encouraged to participate in various co-curricular activities such as culture, etc.
6.5.3 - Development programmes for support staff (at least three)
- Supporting staff is given the training to learn basic computer and MS-CIT • They are motivated to participate in the different courses by giving expert
lectures. • The skill development workshop and seminar are arranged to improve their communication and language skills. - The general health check-up and awareness camp are also arranged on the campus for all teaching and nonteaching staff members.
6.5.4 - Post Accreditation initiative(s) (mention at least three)
- Initiated Development of Innovation and Incubation Center. - Library renovation and reform. - Training and placement activities are to be further enhanced by arranging various need-based training courses. - To invite talk on guidance for competitive examinations and career counseling by experts through
training and placement cell. - Motivating/facilitating the faculty for
intensive application of I.C.T. - Information and Communication Technology (ICT) thrust in teaching-learning is to be Enhanced. - To organize one National and one International Conferences every year. - Development of Alumni center and the related activities. - Plan and work towards NBA Accreditation for all concerned departments of the Institute.
6.5.5 - Internal Quality Assurance System Details

| a) Submission of Data for AISHE portal | Yes |
| :---: | :---: |
| b)Participation in NIRF | Yes |


| c)ISO certification | Yes |
| :---: | :---: |
| d)NBA or any other quality audit | No |

6.5.6 - Number of Quality Initiatives undertaken during the year

| Year | Name of quality <br> initiative by IQAC | Date of <br> conducting IQAC | Duration From | Duration To | Number of <br> participants |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2019 | View File | Nill | Nill | Nill | Nill |

View File

## CRITERION VII - INSTITUTIONAL VALUES AND BEST PRACTICES

## 7.1 - Institutional Values and Social Responsibilities

7.1.1 - Gender Equity (Number of gender equity promotion programmes organized by the institution during the year)

| Title of the <br> programme | Period from | Period To | Number of Participants |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Female | Male |  |
| Women's Day <br> Celebration | $04 / 03 / 2020$ | $04 / 03 / 2020$ | 65 | 71 |
| Workshop on <br> "Mind Health" | $04 / 03 / 2020$ | $04 / 03 / 2020$ | 59 | 63 |

7.1.2 - Environmental Consciousness and Sustainability/Alternate Energy initiatives such as:

Percentage of power requirement of the University met by the renewable energy sources

- We have the solar panels of 147.2 KW power which is about 85 of the total power requirement of the Institute. - Use of LED bulbs (70-80 of total
illumination ) and Energy Saving Ceiling Fans ( around 60 of total number of fans)
7.1.3 - Differently abled (Divyangjan) friendliness

| Item facilities | Yes/No | Number of beneficiaries |
| :---: | :---: | :---: |
| Physical facilities | Yes | 3 |
| Provision for lift | Yes | 3 |
| Ramp/Rails | Yes | 3 |
| Braille <br> Software/facilities | Yes | Nill |
| Rest Rooms | Yes | Nill |
| Scribes for examination <br> Special skill <br> differently abled <br> students | Yes | Nill |
| Any other similar <br> facility | No | Nill |

7.1.4 - Inclusion and Situatedness

| Year | Number of <br> initiatives to <br> address <br> locational | Number of <br> initiatives <br> taken to <br> engage with | Date | Duration | Name of <br> initiative | Issues <br> addressed |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of <br> participating <br> students <br> and staff |  |  |  |  |  |  |


|  |  |  |  |  | days cele bration and singing and dance competiti ons , (Man GalaM -2020 ) | s. To develop a sense of belonging and to connect history. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2020 | Nill | 1 | $\begin{gathered} 12 / 03 / 2 \\ 020 \end{gathered}$ | 1 | $\begin{gathered} \text { Shiv } \\ \text { Jayanti C } \\ \text { elebratio } \\ \mathrm{n} \end{gathered}$ | To <br> inculcate the virtues of Chhatr apati Shivaji Maharaj in <br> today's g eneration <br> like grea tness, chivalry and kindness | 1143 |
| No file uploaded. |  |  |  |  |  |  |  |

7.1.5 - Human Values and Professional Ethics Code of conduct (handbooks) for various stakeholders

| Title | Date of publication | Follow up(max 100 words) |
| :---: | :---: | :---: |
| Code of Conduct | $28 / 06 / 2019$ | http://www.mgmmumbai.ac <br> in/mgmeet/about-us/code- <br> conduct |

7.1.6 - Activities conducted for promotion of universal Values and Ethics

| Activity | Duration From | Duration To | Number of participants |
| :---: | :---: | :---: | :---: |
| Price: Find Your Value | 17/07/2019 | 17/07/2019 | 54 |
| The Power of Habits | 24/07/2019 | 24/07/2019 | 11 |
| The Habits of Successful People | 31/07/2019 | 31/07/2019 | 6 |
| Independence Day Celebration | 15/08/2019 | 15/08/2019 | 651 |
| Gandhi Jayanti Celebration | 02/10/2019 | 02/10/2019 | 117 |
| Republic Day Celebration | 26/01/2020 | 26/01/2020 | 736 |
| No file uploaded. |  |  |  |

7.1.7 - Initiatives taken by the institution to make the campus eco-friendly (at least five)

1. Rain water harvesting 2. Utilization of renewable energy sources like solar energy 3. Organic fertilizer production from biomass like canteen waste and fallen tree leaves from entire campus 4. Make use of paper cups and plates 5.

## 7.2 - Best Practices

7.2.1 - Describe at least two institutional best practices

1. Academic Audit and Inspection: Academic success is important because it is strongly linked to the positive outcomes we value. Academically successful
aspirants with high levels of education are having more employment opportunities and also can provide sustainable entrepreneurship. Academic achievement is important for the successful development of young people in society. Academic success is important because working people will need higher levels of education to tackle the technologically demanding occupations of the future. Students do well in institute are better able to make the transition into adulthood and to achieve occupational and economic success. Academic excellence can achieved by focussing keenly on academic performance of students. Hence, academic audit, a peer review process involving self-study and then an audit visit by an expert from outside is adapted by the institution. The process emphasizes on self-improvement rather than mere compliance with predetermined standards. The purpose of an academic audit is to encourage Institute to evaluate the quality of 'Teaching-Learning processes". To ensure academic accountability of every stakeholder, i.e. students, teachers, Institute and University. The Institute should have appropriate strategic and operational planning related to student performance, achievements and teaching quality. The Institute must provide teaching and learning facilities as per the needs. It is mainly about the quality of teaching and learning methods followed by the teachers for the course which they teach. After the successful completion of theory and laboratory session, faculty members prepare record of their course. An academic experts for the Academic Audit of the
Institute/Department from National Institutes, such as IIT, NIT or other Institutes and an industry experts are 1. Noting areas for improvement, 2. Evaluating department's approach to educational quality practices, 3. Highlighting examples of exemplary practice(s). It helps the faculties for smooth conduction of teaching learning process. Faculties improve their teaching skills by adhering to the guidelines given by institute as well as suggestions given by the academic experts. Laboratory reports can be enriched based on the academic audit. Knowledge delivery to students becomes well planned and students' activities get streamlined. Faculties can seek out good practices and adopt the best to their own conditions. 2. Project Based Learning for Advanced Learners: Engineering education should be re-thought significantly such that students get high levels of multicultural acumen, ethical development, a team orientation and project based learning experiences. Project

Based Learning (PBL) prepares students for academic, personal, and career success, and readies students to rise to the challenges in real life. It helps to develop students' deep content knowledge as well as critical thinking, creativity, and communication skills in the context of doing an authentic, meaningful project. PBL motivates students for participation in various national and international level competitions and ultimately make students Industry-Ready. PBL implementation changes student-teacher interactions, demands a shift from teacher-directed to student-directed inquiry, and requires non-traditional modes of assessment. Thus PBL is becoming widely used in
learning. Hence, it is very important to follow appropriate instructional strategies and design principles for effectively implementing PBL course. While adhering to the curriculum of the University of Mumbai, implementing Project Based Learning across all the students is a challenge as students get busy with the curriculum aspects. Therefore this activity has been restricted to Advance Learners (AL) and also some of the exceptional students having aptitude for PBL
who do not qualify under AL. The advanced learners are identified based on their track record of academics, grasping ability, programming / design skills
and their aptitude for working projects. Students make groups of 3-4 students either from the same discipline or across disciplines depending on the nature of the project. Topics of these projects are such that students get an opportunity to work on complex engineering problems guided by domain experts, alumni, industry experts and faculty. Having chosen the topic, students are trained for literature survey utilizing Library, Internet, NPTEL and other video lectures etc. Based on this, the students prepare a report and present to the faculty within a fortnight defining the scope of work for their chosen project. Wherever possible students also take guidance from Alumni, Industry Experts, Institutes like IIT, ICT and BARC, etc. This exposure to Project Based Learning proved useful for the students to participate in different competitions like SAE Aero Design Challenge, 'SUPRA SAEINDIA Student Formula', 'Smart India Hackathon', 'Avishkar Research Convention', India International Science Festival (IISF) SENSITIZING YOUTH TO FLAGSHIP PROGRAMS OF GOVERNMENT and various paper and poster presentation competitions, etc. They also take part in inter-college level Technical Festivals and win prizes. The students made our Institute proud by their success and prizes won by them.

Upload details of two best practices successfully implemented by the institution as per NAAC format in your institution website, provide the link
http://www.mgmmumbai.ac.in/mgmcet/sites/default/files/inlinefiles/Best\ Practices\ to\ be\ uploaded\ on\ website\ 7.2.pdf

## 7.3 - Institutional Distinctiveness

7.3.1 - Provide the details of the performance of the institution in one area distinctive to its vision, priority and thrust in not more than 500 words

Industry Ready Activities: MGMCET focuses essentially on making the students
'Industry-Ready'. To bridge the gap between Industry and Academia, Institute has devised the activities which make the students Industry-ready. Departmental and Institute Slots: Each Department including First Year plan various activities during Institute/Departmental slots. These are well defined in the Departmental Activity Calendar announced before commencement of the semester and also explained during Orientation Programme. First Year - Exposure: The students are groomed right from the first year. They also get an opportunity to interact with Industry Resource Persons who also address regarding Industry requirements. Students interested in Project Based Learning are encouraged to join the project groups of the second year students. Workshops on Industry relevant topics are organized. Orientation Program: Orientation programs are organized for $F E$ class as well as higher classes (SE to BE students) by all the Departments. College Alumni or Industry Experts are called for the program as a chief guest. Resource persons guide students regarding thrust areas pursued in
industry and skills they look for. HoD and Faculty also present on various other aspects. Resource Persons from Industry: During departmental slots Industry-Ready activities are carried out. MGMCET takes lead in inviting
industry professionals for interaction with the students. Special training programs for the students utilizing services of such resource persons have been
organized such as Internet of Things (IOT), Big Data Analytics, Mobile App
Development, Cyber and Mobile Security, Smart Technology in Structural
Engineering, Ethics in Industry and Evolution of Design, Digital Marketing,
Spoken Tutorials on Python, courses by Microsoft IT Academy. General and
Technical Clubs: College caters to the interests of the students through
various club activities which deal with Innovation and Creativity,
Entrepreneurship, Environment, Renewable Energy, Foreign Language, Yoga,
Karate, Human Values, College Social Responsibility, etc. Internship: College also provides internal internship facility to the students under supervision of senior faculty in addition to Internship in the Industry. This is one of the unique initiatives taken by the Institute where students are allowed to work as
intern in the laboratories on specific tasks under the supervision of Faculty. Project Based Learning: Through PBL, our students worked on several projects relevant to the industry. This learning methodology inculcated the skills to work on Projects. This skill development helps the students to participate in

National/State Level competitions and activities. And also come up with innovative solutions for real life problems. Experts from National Institutes and Foreign Universities: MGMCET emphasizes on preparing the students "IndustryReady" through organized efforts of inviting eminent academician from IITs and other well-known National Institutes and Foreign Universities as well as Research Organizations. The interaction of these experts with students not only boosts their confidence but also get the exposure to the state-of-the-art $R$ and D activities. National Conferences: Institute has been consciously organizing National Conferences on relevant and important themes. Several National Conferences have been organized during (2013-14) to (2019-20). Institute has organized a National Conference on "Industry 4.0" in collaboration with IEEE and CSI during June $11-12,2019$.

Provide the weblink of the institution
http://www.mgmmumbai.ac.in/mgmcet/sites/default/files/inlinefiles/Distinctiveness\ web\ link\ 7.3.pdf

## 8.Future Plans of Actions for Next Academic Year

Curricular Aspects: - Leading the technological progress across multiple and interdisciplinary fields of interest and coming out with innovative and practical implementable solutions. - More training in various software platforms is to be provided. The mechanism is to be established to seek the feedback from employers. - To create online learning modules for the benefit of student community - To strengthen the concept of outcome-based education and implement it right from conduction in class rooms / labs to the exams and result analysis. • Initiatives/reforms in TLP: Interdisciplinary lectures by all departments at least one per term and learning outcome guideline, each faculty to measure learning outcome for each module. - Development of Engineering Exploration Lab for Interdisciplinary work. - To encourage more faculty members to participate in seminar / conferences or to undergo industrial training. - To enhance research work, increase international publications by the faculty and students and motivate them for patent filling. - To provide opportunities for engineers to meet and to discuss current research on a broad range of subjects, organize international conference by the departments. - Further strengthening of all laboratories • Encouraging for organizing at least one webinar, workshops, conferences (National / International) as well as FDP by each department per year - Motivate faculty to work on research projects funded by various government bodies • Enhancing the consultancy projects by each department - Our institute will be further strengthening our IT infrastructure by adding cameras and the licenses of online teaching learning or meeting platforms like Zoom, GoToMeeting, Google meet etc - Campus will be kept ready to accommodate students for hands-on experience as and when time permits. Training and Placement Aspects: - To enhance placement by at least 100 to 150 students in a multinational companies of high reputation • To enhance industrial visits, and project sponsorships • Industry Institute interaction will be strengthening by arranging Guest Lectures by Industry persons and Internship of students and also enhance industry interaction with more MOU's. - More online internships will be made available to the interested students through MGM placement cell - To increase involvement of alumni in the institutional development Higher Education Aspects: - Will be proposing In-house training programs for GATE by all the departments • Put efforts to guide aspiring students to be ready to crack competitive exams for getting recruited in State and Central Govt. Social Aspects: - Improving upon gender equity activities: Gender equity awareness programs/seminars will be organized for female students and faculties Administrative aspects - To apply for
permanent affiliation, with University of Mumbai - After permanent affiliation with University of Mumbai, focusing on making the Institute eligible for receiving UGC grants under section UGC $2(f)$ and $12(b)$. • Plan and work towards NBA Accreditation for all concerned departments of the Institute - To enhance the budget for skill development - To enhance use of renewable energy sources.


[^0]:    Library, ICT and Physical
    Infrastructure / Instrumentation

[^1]:    Teaching and Learning

