



SELF STUDY REPORT

FOR

3rd CYCLE OF ACCREDITATION

**MANIPAL ACADEMY OF HIGHER EDUCATION
(DEEMED-TO-BE-UNIVERSITY U/S 3 OF THE UGC ACT)**

MANIPAL.EDU MADHAV NAGAR MANIPAL
576104
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Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

MANIPAL ACADEMY OF HIGHER EDUCATION

(Institution of Eminence Deemed to be University) Manipal, Karnataka, India



The Manipal Academy of Higher Education (formerly known as Manipal University) has its genesis in an enthralling story of a genius, the late Dr.T.M.A.Pai who had the vision of making society free from the three major ills: illiteracy, ill-health, and poverty. He had the conviction that illiteracy could be effectively tackled by starting educational institutions as private enterprises without entirely depending on the financial support of the government. Under the sponsorship of the Academy of General Education (founded by Dr. T.M.A. Pai in 1942), he started with public support and cooperation, a number of high schools and first-grade arts, science, and commerce colleges in the region. In 1953 he established Kasturba Medical College – India’s first-ever non-missionary self-financing private medical college. He set the ball rolling for setting up a university in Manipal, which culminated in the establishment of Manipal Academy of Higher Education (MAHE) in 1993 with the conferment of deemed to be university status by the Government of India under Section 3 of the UGC Act 1956.

From 1993 to date, MAHE has expanded to 37 constituent units on its campuses at Manipal, Mangalore, Bengaluru, Jamshedpur, Dubai and Melaka Malaysia, making it a prominent education provider in India and

abroad. 272 diverse programs under three faculties viz., Health Sciences, Sciences, Technology & Management, and Humanities, Liberal Arts and Social Sciences are offered at the graduate and post graduate levels through 29 streams in Medicine, Dental, Pharmaceutical Science, Nursing, Allied Health, Life Sciences, Regenerative Medicine, Virology, Public Health, Engineering, Architecture, Management, Hospitality, Information Science, Applied Science, Natural Science, Atomic & Molecular Physics, Commerce, Design, Geopolitics, European Studies, Humanities, Media and Communication, Library & Information Science, Philosophy, Integrative Medicine, Arts & Design, Philosophical Arts and Languages. Over hundred Centres have also been established to promote excellence in education and research.

In 2018, MAHE was among the first set of three private universities who have been conferred by the Ministry of Education with the special status of “**Institution of Eminence Deemed to be University**”.

Vision

Global leadership in human development, excellence in education and healthcare

Mission

- Be the most preferred choice of students, faculty and industry
- Be in the top 10 in every discipline of education health sciences, engineering and management.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- Globally recognized 272 programs across 27 disciplines
- Diversity of students: Students from more than 60 different countries on campus
- Internationally recognized programs in key areas: Medical program by Malaysia Medical council, USMLE, Dental program by Sri Lanka Dental council, Nursing program by Malaysian and Singapore Nursing councils
- State-of-the-art infrastructure to support curricular, co-curricular and extracurricular activities: Manipal Museum of Anatomy and Pathology, Culinary Art Museum, MARENA indoor sports facility, Dr TMA Pai convention centre, Simulation centre, Research Hub, Innovation centre, TIFAC core laboratory, NTRO lab, K K Hebbar Art Gallery, Amphitheatre, Gangubai Hanagal theatre, KEF R&D lab, Outdoor sports facilities and so on
- Provision of about 800 crores funding for research facility including software applications like PURE, SCIVAL etc. for research intelligence and visibility
- More than 100 Speciality research centres such as TIFAC-CORE, K-FIST, BTFS, Bio Dosimetry, Translational Research, Manipal Research and Diagnostic Centre, Centre for DNA repair and Genomic stability, Centre for Ayurvedic Biology, AIST Centre for Biomedical Sciences and so on
- More than 1200 Indian research grants amounting to more than 78.43 INR crores and about 200 plus

foreign research grants totalling to 77 crores INR in last 5 years.

- 100% Digitalization implemented in Examination and Evaluation process across all programs
- Tech, Bio and Business Incubator with support from NSTEDB , DST and Govt of Karnataka leading to incubation of 37 start -ups in last 5 years
- World-Class Libraries with books, reference books, e-Books providing learning material including e-resources.
- Faculty-student ratio of less than 1:10 with well-defined students support system: Teacher Guardian service, Directorate of Student Affairs, Student Support Centre system, counselling cells, Idea cafe, career counselling, health care facilities dedicated to students and digital Student Life Cycle Management system (SLCM)
- Merit cum Means Scholarships amounting to 38.41 crores for meritorious students
- Faculty development through Centre for Continuous Education and Interprofessional Development (CCEID) and SMILE Program
- Certified for ISO 9001:2015 QMS , ENMS 14001:2015, and EMS 50001:2018
- National and International Accreditations: NAAC, NABH ,NABL and NBA

Institutional Weakness

- A limited number of international faculty
- Research output is heavily dependent on a few research centres
- Paucity of faculty consultancy due to lack of proximity to industry
- Limited Alumni and Philanthropic contribution
- Locational disadvantages leading to constraints in securing adequate scholarship from Industry.
- Tuition fees remains the primary source of revenue to date

Institutional Opportunity

- Set up new Departments, Centres of Excellence, and Schools in emerging areas such as Systems Biology, Continuing Education, and Aerospace
- Offer Online Certification and Executive education programs
- Offer programs in blended mode to the extent permissible by the regulatory bodies
- Explore the number of twinning programs
- Avail Grants from national and international agencies for collaborative research
- Enhance Innovation, Technology transfer, and Commercialization
- Improve citations by publishing in high impact journals
- Collaborate with global universities of repute in niche areas of research
- Attract Corporate social responsibility mandated funds
- Creation of Fellowships / Endowments to attract research talent
- Offer sector skills training along with Govt. of India and Industry Associations
- Establish a Regional entrepreneurship hub on a Public-Private Partnership scheme
- Global branding of Manipal through strategic communication and social networking
- Reduce fossil fuel consumption using alternate sources of energy

Institutional Challenge

- Changing National and International regulations
- Indeterminate market influence on academic programs
- Decreasing International students in medical/dental programs due to regulatory changes
- High publication charges for open access journals
- Delay in release of sanctioned funds for approved research projects
- Establishment of high-end research facilities limited by the rising cost of Education
- The locational challenge for Industry placement
- Impact of offshore campuses of international universities in India
- Attracting international faculty from universities ranked in top 500 in World University Rankings
- Changing fee structures and the rising cost of Education
- Limited Access to funding from Central Government funding agencies

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

Curriculum design and development

- **Design of curricula** is based on inputs from stakeholders through **curriculum conclaves**
- **272 Program** options are relevant to the local needs and emerging national and global trends
- **69.8%** of the programs are revised in the last five years
- Training with **state-of-the-art equipment and technology**, hands on experience, participation in technical clubs, and **skill development** in emerging areas **enhance employability**
- **Advanced training** in virology, embryology, biotechnology and molecular biology imparts skills to ensure employability
- **Collaborations** with industry and partnership with reputed foreign universities
- Nurturing entrepreneurship among students either through overt competency in some of the programs or by various associations with professional bodies, industry and other universities and also through the **DST sponsored technology business incubator** and **Bio -incubator** supported by **Govt of Karnataka**

Academic flexibility

- **CBCS** implemented in **93.36%** of the programmes in which there is regulatory provision
- **77 new programmes** in emerging areas introduced in the last five years
- **1676 interdisciplinary courses** offered

Curriculum enrichment

- **Modules on attitudes, ethics and communication** are offered to medical students address **crosscutting issues**
- **Health determinants, waste management and sanitation** are part of the **nursing curriculum**
- **Environment and sustainability, right to health, emerging demographic** changes are part of the masters programs in **Public Health**
- **3424 value added courses** offered through the institutions and **MOOCs** benefitting **27313 students** in the last five years
- More than **1200 students** are involved in **community postings** each year
- **Dental health education programmes in schools** are organized by faculty of Dentistry

- More than **7500 research projects** carried out in the last 5 years, **3000 internships** and **field visits** per year by students

Feedback system

- **Feedback on curriculum** collected from **stakeholders** including students, faculty, professionals, alumni and employers
- **Inputs** discussed in the **Board of studies** and appropriate actions initiated to address the issues
- **Students** have representation in **Board of Studies** and **Academic Council**

Teaching-learning and Evaluation

- **86.16 %** of seats are filled against the seats reserved
- **Transparent, fair and regulator-complied admission processes** and attracts students from all states of India and from abroad.
- **65.25 %** of students from states outside Karnataka and **5.17%** from foreign countries have made MAHE their choice.
- Impressive **Student Demand Ratio** of **59:1**.
- **Student to Full Time Faculty ratio** of **9:1**
- Early intervention **strategy**, bridge program, remedial classes, improvement classes are provided to **slow learners**
- **Advanced learners** are given **opportunities** to participate in mini-research projects and research conferences
- Medical Humanities, Professional and Personal Development (PPD) programs are offered to medical students with **AETCOM competencies**
- More than **250 basic clinical skill training models**, more than **950 structured programmes** for training and assessment of students have been conducted using Clinical Skills Laboratory and Simulation Based Learning.
- **Advanced ICT tools** are made available to students in different departments: Department of Design has **Computer Aided Design (CAD)** with printers, MSLS has its own server with access to **bioinformatics databases**, all departments at MIT use licensed software like **Matlab, Aspen** and the **Avionics laboratory** has flight stimulator.
- **Mentor mentee ratio** of **13:1** is maintained across institutes
- **98.87%** of sanctioned posts for full time faculty are filled.
- Average **teaching experience** is **11.88 years**.
- **42.18%** faculty are eligible as PhD guides
- **100%** of faculty members have been **trained** for development and delivery of e-content/e-courses.
- **Average number of days for results declaration** has been **17.1 days** and the **average percentage of grievances** about evaluation stands at **3.15%** despite the disruptions caused by the pandemic. This reflects the robustness and fairness of the processes involved.
- MAHE follows **double valuation /multiple valuation** with appeal process for retotalling /reevaluation and access to answer script
- MAHE conducts **paperless exams** for all theory courses using **electronic writing pads (e-pad)** since 2015
- **Outcome Based Education Framework (OBE)** is implemented in all applicable programs and computation of attainment of learning outcomes have been initiated.
- **90.68%** pass percentage in University examinations is observed

Research, Innovations and Extension

- MAHE has well-defined **Research Promotion Policy** and it is disseminated through its **website**
- **Interdisciplinary collaborative research** is encouraged through enhanced quantum of **seed funding** averaging to **146.15 lakhs INR** per year
- **International Travel grants** secured from ICMR, SERB, and international agencies such as ISPOR, ISPE
- **Central Research facility**, Animal House, An Art Gallery, Clinical Trial Laboratory, Media Laboratory, Statistical databases support research at MAHE
- More than **600 faculty** members received **national/international fellowship**
- More than **832 JRF/SRF/Research Associates** and **post docs** are appointed
- More than **1200** Indian research grants amounting to more than **78.43 crores INR** obtained
- About **200 plus** foreign research grants totalling to **77 crores INR** received
- Dedicated Grants Office was set up to support and facilitate research funding proposals to the funding agencies
- **37** faculty and student led **start-ups** incubated
- **Innovation Centre**, spread across in 16000 sq ft provides maker space, co-working facility and conducts Hackathons to promote a culture of innovation
- More than **60 awareness programs** were organised on **IPR** during the last 5 years
- **300 plus** faculty received state/national and international awards
- **700 PhD** degree awarded during the last 5 years; **3000** Masters' degree awarded
- **70 plus** patent applications published; **115** applications filed; **5** technologies transferred/licensed/assigned
- More than **14** national and international patents granted
- **44** Copyright applications filed of which about 35 applications are registered
- **11000+** research/review articles in Scopus indexed journals published by MAHE
- **200 plus** faculty members published book/book chapters in reputed publishing houses
- **1000 plus** conference proceedings published
- **60+** IPR awareness programs conducted on campus
- Well-defined **consultancy policy** encourages and incentivizes faculty members
- A total of approx. **127.08 Cr INR** revenue generated through clinical trials and **consultancy** during the last five years
- About **2965 extension** and **outreach activities** carried out in the region in collaboration with NGO, government and industry participation
- **6400** collaborative activities are carried out for research, faculty/student exchange and industry internships
- **300+** active collaborations and MoUs made with universities and organizations globally and in India

Infrastructure and Learning Resources

Physical Facilities

- **State of- the-art physical facilities** with **577** classrooms with ICT/recording facilities, **402** well-equipped laboratories, **67** skills laboratories, and **15** fully automated libraries.
- **Main Campus** is spread across an area of **654.85** acres which houses the administrative, institutional, hostel buildings, sports and games facilities, and residential dwellings for staff. Teaching Hospitals

(3589 bed at Manipal and Mangalore, 982 at Jamshedpur), MARENA – indoor sports complex (with G-6+1 storied, 142000Sqft. area in Manipal and G+2 storied, 74250Sqft area in Mangalore), 36 outdoor sports facilities, food courts with capacity of more than 4000 seats, 34 Boy's hostels and 35 Girl's hostels accommodating 16727 inmates, 9 playgrounds for student activities form the overall infrastructural facilities.

- MAHE spends on average **35.19%** of its annual expenditure(excluding salary) on **infrastructure development and augmentation.**

Clinical, Equipment and Laboratory Learning Resources

- **Teaching hospitals** of MAHE attracts an annual average of **164446 inpatients** and **2084452 outpatients.** A total of **31 community health centres** in association with government bodies provide **additional learning options** in addition to the **regular health camps** conducted across the region by MAHE.

Library as a Learning Resource

- MAHE incurs an annual average expenditure of Rs. **1821.20** lakhs on purchase of books, journals and e-resources. The Health Sciences library at Manipal is of **1.5** lakh square feet, and can accommodate **1300** students at a time on five floors. Libraries have been automated using **Koha** library management software.
- MAHE libraries provide access to **17935 online journals** and **85211 e-books** along with **712 print journals** and **77351 bound volumes** of journals

IT Infrastructure

- MAHE has made concerted efforts to integrate the best of the ICT enabled facilities (>**1Gbps** bandwidth) to the teaching learning process. A robust and scalable **Student Life Cycle Management** system for managing student related processes has been enabled.

Maintenance of Campus Infrastructure

1. The DGS oversees all support services including ancillary, civil, electrical, HVAC, telecommunication, transportation, plumbing & water supply.
2. **ISO 9001, 14001** and **50001** standards are followed.
3. About **53.76%** of the annual expenditure(excluding salary) is utilized in maintaining the physical and academic support facilities.

Student Support and Progression

- About **50%** of the students are benefited by scholarships/freeships/fee-waivers
- **Several support mechanisms include** a variety of capability enhancement and skill development programs, bridge courses, programs for slow learners, student buddy programs, TG scheme, Student Support Center and personal counselling to ensure physical and mental wellbeing of the students are offered.
- The institute has constituted dedicated committees for redressal of grievances related to Ragging, Sexual harassment etc.

- An **International student cell** and **placement cells** strive to provide the best opportunities for the students and meet their aspirations. International Student associations like **IAESTE, AIESEC, IPSF** and **SPIE** operate on campus to promote holistic learning experience
- **62093 students** have benefited from various scholarships and fee waivers in the last five years.
- Over the last 5 years more than **16211 students** have been placed,
- **1044 students** qualified in state/ national/ international level competitive examinations.
- **1209** students progressed to higher education in the preceding academic year
- MAHE actively encourages student participation in various activities beyond academics and has **over 100 clubs** to keep the students engaged in technical, sports and cultural activities.
- MAHE conducts over **45 sports and cultural events** and has been hosting major events such as International Badminton Tournaments, Regional Cricket Tournaments
- **National level sports and cultural festivals** such as Utsav ,Revels and Techtatva are held annually with a footfall of more than **8000 students**.
- MAHE has an **active alumni cell** with presence on **Twitter, Facebook** and other social networks. A dedicated alumni portal has over **49,000 registered alumni**.
- Over **160 alumni** participated as teaching/consulting/visiting/adjunct faculty etc. and over **600** Guest lectures/ Oration/keynote address/workshops/Seminar were delivered in last 5 years
- **187 alumni meets** of multiple alumni departments/batches were held across MAHE.
- **208.67 lakhs INR** was received as **Financial contribution** by alumni
- A state-of- the- art **MIT KEF R&D** centre built at a cost of over **Rs.8 crore** and a one of a kind **museum of Culinary Arts** are some of the major **contribution of alumni** towards the institution.

Governance, Leadership and Management

- The **Vision and Mission** are strategized in **15-year strategy plan** and incorporated in **five-year rolling implementation plan**, and monitored continuously through **MRM, IQAC Academic Council, and Board of Management**. The constituent units align their individual development plan with MAHE plan.
- Effective implementation of Strategic Plan reflects in improvement in **NIRF ranking from 18 to 7 by 2021**. MAHE was India's first private and Deemed to be University to breakthrough in to the Top 100 of the **QS BRICS** and Top 200 of the **QS Asia** Universities Rankings.
- MAHE has developed a very robust self-governance structure under the guidance of highly qualified and eminent academic leaders. **BOM** is empowered to function independently without any interference from MAHE Trust. MAHE has constituted all **statutory committees** as prescribed by the regulatory authorities both at University and at Institute levels.
- MAHE offers a wide range of **welfare measures to its employees** and recognizes that the well-being of teaching and non-teaching staff is important for the effective functioning of the institution. It also practices **various faculty empowerment strategies** to upgrade the professional competencies of its faculty members.
- MAHE has a well-defined **360-degree performance management policy** applicable to its faculty members. MAHE has upgraded its **Performance Management System (PMS)** from the paper format to **Online mode** through internally developed software.
- MAHE encourages **participatory management** by involving the stakeholders at all levels. This involves **Academic Administrative** and **Financial Decentralisation** thereby providing autonomy in decision - making.
- **67.04%** of teachers are provided with financial support to attend conferences /workshops and membership fees of professional bodies

- On an average, **369 programs** for professional /administrative development are organised for teaching and non-teaching staff. **About 87% of teachers** have attended FDPs .
- Funds amounting to **2849 lakhs INR** has been received from various government /non-government /philanthropists
- MAHE conducts **internal and external financial audits** as per statutory norms.
- Institution has a streamlined **Internal Quality Assurance Mechanism** driven by **IQAC** which organises training/workshops, compiles, analyses and reviews data for national and international rankings and accreditation and submits **AQAR** reports to NAAC

Institutional Values and Best Practices

- MAHE promotes **gender equity** by organising programmes on women's rights, and on gender discrimination.
- MAHE emphasizes on environment friendly practices and prioritises ecological concerns. The following are a few highlights:
 - **Green campus initiatives** such as use of Alternate sources of energy and energy conservation, best practices in disposal of degradable and non-degradable waste and variety of water conservation facilities
 - Recipient of **International Green Apple Award** ,District **Green Champion Certificate** ,3rd rank in India in **UI Green Metric Ranking**
- MAHE has made provision for **disabled friendly environment** for all its stakeholders.

Best Practices

- **SMILE -program** has developed 132 leaders of which 38 can immediately be considered for key leadership roles and 76 in next 2-3 years . About 2.1crores INR has been invested in the program. 21 participants are in key roles, including 11 Women Leaders
- **E-pad -Digitalisation of Examination and Evaluation** initiation across all institutions have led to introduction of question wise distributed evaluation. Instances of marks change/revaluation has drastically reduced alongwith manpower and paper consumption. Entire process has become transparent, error free and environmental friendly

Institutional Distinctiveness

- MAHE's thrust areas are **global leadership in human development, excellence in education and healthcare** which have led to **its IoE status**.
- **Constituent units** of MAHE have received **global recognition** by demonstrating **excellence in education** and producing **quality leaders** in the specified domain.
- MAHE's **healthcare outreach** has positively impacted maternal and child health of the region. Catering to a population of **50,000 in 14 villages**, the **7 RMCWs** set up by MAHE has helped to **lower Neonatal Mortality Rate, IMR, Under-5 mortality rate**
- The **Manipal Aarogya Suraksha scheme**, with a total membership of **1.05 lakh families** comprising 3.71 lakh lives covers total benefits of over **20.17 crore INR**.
- MAHE's **Manipal Institute of Virology** has been instrumental in confirming more than **150 viral outbreaks**.
- With **7322 publications in Healthsciences** , MAHE is known for its Innovation and Research and also as a pioneer in **Medical Humanities**

NAAC

2. PROFILE

2.1 BASIC INFORMATION

| Name and Address of the University | |
|------------------------------------|--|
| Name | MANIPAL ACADEMY OF HIGHER EDUCATION (DEEMED-TO-BE-UNIVERSITY U/S 3 OF THE UGC ACT) |
| Address | manipal.edu Madhav Nagar Manipal |
| City | Manipal Udupi |
| State | Karnataka |
| Pin | 576104 |
| Website | www.manipal.edu |

| Contacts for Communication | | | | | |
|----------------------------|----------------------------|-------------------------|------------|--------------|----------------------------|
| Designation | Name | Telephone with STD Code | Mobile | Fax | Email |
| Vice Chancellor | Lt. Gen. Dr. M D Venkatesh | 0820-2922615 | 7760393030 | 0820-2570062 | vicechancellor@manipal.edu |
| IQAC / CIQA coordinator | Sandeep S Shenoy | 0820-2922323 | 9880368390 | 0820-2670063 | iqac@manipal.edu |

| Nature of University | |
|-------------------------|--------------------|
| Nature of University | Deemed University |
| Institution Fund Source | No data available. |

| Type of University | |
|--------------------|---------|
| Type of University | Unitary |

| Establishment Details | |
|--|--------------------|
| Establishment Date of the University | 01-06-1993 |
| Status Prior to Establishment, If applicable | Affiliated College |
| Establishment Date | 30-06-1953 |

| Recognition Details | | |
|--|-------------|-------------------------------|
| Date of Recognition as a University by UGC or Any Other National Agency : | | |
| Under Section | Date | View Document |
| 2f of UGC | | |
| 12B of UGC | | |
| Section 3 | 01-06-1993 | View Document |

| University with Potential for Excellence | |
|--|----|
| Is the University Recognised as a University with Potential for Excellence (UPE) by the UGC? | No |

| Location, Area and Activity of Campus | | | | | | | |
|--|---|------------------|-----------------------------|---------------------------------|---|------------------------------|--|
| Campus Type | Address | Location* | Campus Area in Acres | Built up Area in sq.mts. | Programmes Offered | Date of Establishment | Date of Recognition by UGC/MHRD |
| Main campus | manipal.edu Madhav Nagar Manipal | Semi-urban | 654.85 | 768277.1 | UG/PG Diploma/ PG/Super Speciality/ Pre-Doctoral/ PhD/Post Doctoral | | |
| <i>Off Campus</i> | <i>New Khata No. 24 Ward No. 16, Kadani Road Baridih, Jamshed pur East Singhbhum District Jharkhand</i> | <i>Urban</i> | <i>28.5</i> | <i>43315</i> | <i>UG/PG</i> | <i>26-06-2019</i> | <i>13-05-2021</i> |

| | | | | | | | |
|-----------------|---|-------|--------|----------|----------------------|------------|------------|
| | 831017 | | | | | | |
| Off Campus | Kasturba Medical College Post Box No. 53 Light House Hill Road Hampantta Mangaluru 575001 | Urban | 108.47 | 143916 | UG/PG Diploma/PG/PhD | 18-01-1955 | 01-06-1993 |
| Offshore Campus | Mahe Dubai Campus Dubai International Academic City G04, Post Box No. 345 050 Dubai, Uae | Urban | 11.837 | 35251.33 | UG/PG/PhD | 01-08-2002 | 08-04-2002 |
| Offshore Campus | Melaka Manipal Medical College Jalan Batu Hampar Bukit Baru 75150 Melaka, Malaysia | Urban | 26.6 | 90818.94 | UG/Certificate | 15-05-2000 | 08-04-2002 |
| Off Campus | Mahe Bengaluru Off | Urban | 84.21 | 1319.22 | UG/PG/PhD | 30-07-2007 | 08-04-2002 |

| | | | | | | |
|---|--|--|--|--|--|--|
| <i>Campus Kenchahalli Village Yelahanka Hobli Bangalore - 560064 Interim Campus Smi N2 Campus C/o Silk Software Private Limited No. 40/a KHB Industrial Area Yelahanka Bangalore 560064</i> | | | | | | |
|---|--|--|--|--|--|--|

2.2 ACADEMIC INFORMATION

Furnish the Details of Colleges of University

| Type Of Colleges | Numbers |
|---|---------|
| Constituent Colleges | 37 |
| Affiliated Colleges | 0 |
| Colleges Under 2(f) | 0 |
| Colleges Under 2(f) and 12B | 0 |
| NAAC Accredited Colleges | 0 |
| Colleges with Potential for Excellence(UGC) | 0 |
| Autonomous Colleges | 0 |
| Colleges with Postgraduate Departments | 35 |
| Colleges with Research Departments | 37 |
| University Recognized Research Institutes/Centers | 0 |

| Is the University Offering any Programmes Recognised by any Statutory Regulatory Authority (SRA) | : Yes | | | | | | | | | | | | | | | | |
|---|---|----------|-------|--|-----|---|-----|--|-----|---|-----|--|-----|--|-----|--|--|
| <table border="1"> <thead> <tr> <th>SRA program</th> <th>Document</th> </tr> </thead> <tbody> <tr> <td>AICTE</td> <td>102606_6453_1_1627455628.pdf</td> </tr> <tr> <td>RCI</td> <td>102606_6453_19_1618290261.pdf</td> </tr> <tr> <td>MCI</td> <td>102606_6453_2_1627455457.pdf</td> </tr> <tr> <td>COA</td> <td>102606_6453_18_1627455563.pdf</td> </tr> <tr> <td>INC</td> <td>102606_6453_7_1627455588.pdf</td> </tr> <tr> <td>PCI</td> <td>102606_6453_6_1627455605.pdf</td> </tr> <tr> <td>DCI</td> <td>102606_6453_5_1628491474.pdf</td> </tr> </tbody> </table> | SRA program | Document | AICTE | 102606_6453_1_1627455628.pdf | RCI | 102606_6453_19_1618290261.pdf | MCI | 102606_6453_2_1627455457.pdf | COA | 102606_6453_18_1627455563.pdf | INC | 102606_6453_7_1627455588.pdf | PCI | 102606_6453_6_1627455605.pdf | DCI | 102606_6453_5_1628491474.pdf | |
| SRA program | Document | | | | | | | | | | | | | | | | |
| AICTE | 102606_6453_1_1627455628.pdf | | | | | | | | | | | | | | | | |
| RCI | 102606_6453_19_1618290261.pdf | | | | | | | | | | | | | | | | |
| MCI | 102606_6453_2_1627455457.pdf | | | | | | | | | | | | | | | | |
| COA | 102606_6453_18_1627455563.pdf | | | | | | | | | | | | | | | | |
| INC | 102606_6453_7_1627455588.pdf | | | | | | | | | | | | | | | | |
| PCI | 102606_6453_6_1627455605.pdf | | | | | | | | | | | | | | | | |
| DCI | 102606_6453_5_1628491474.pdf | | | | | | | | | | | | | | | | |

Details Of Teaching & Non-Teaching Staff Of University

| Teaching Faculty | | | | | | | | | | | | |
|-------------------------|------------------|--------|--------|-------|------------------------------------|--------|--------|-------|----------------------------|--------|--------|-------|
| | Professor | | | | Associate Professor | | | | Assistant Professor | | | |
| | Male | Female | Others | Total | Male | Female | Others | Total | Male | Female | Others | Total |
| Sanctioned | 572 | | | | 742 | | | | 1171 | | | |
| Recruited | 397 | 175 | 0 | 572 | 455 | 287 | 0 | 742 | 600 | 540 | 0 | 1140 |
| Yet to Recruit | 0 | | | | 0 | | | | 31 | | | |
| On Contract | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Teaching Faculty | | | | | | | | | | | | |
| | Lecturer | | | | Tutor / Clinical Instructor | | | | Senior Resident | | | |
| | Male | Female | Others | Total | Male | Female | Others | Total | Male | Female | Others | Total |
| Sanctioned | 54 | | | | 193 | | | | 129 | | | |
| Recruited | 11 | 35 | 0 | 46 | 68 | 125 | 0 | 193 | 68 | 61 | 0 | 129 |
| Yet to Recruit | 8 | | | | 0 | | | | 0 | | | |
| On Contract | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| Non-Teaching Staff | | | | |
|---------------------------|-------------|---------------|---------------|--------------|
| | Male | Female | Others | Total |
| Sanctioned | | | | 8260 |
| Recruited | 2855 | 5405 | 0 | 8260 |
| Yet to Recruit | | | | 0 |
| On Contract | 0 | 0 | 0 | 0 |

| Technical Staff | | | | |
|------------------------|-------------|---------------|---------------|--------------|
| | Male | Female | Others | Total |
| Sanctioned | | | | 849 |
| Recruited | 759 | 90 | 0 | 849 |
| Yet to Recruit | | | | 0 |
| On Contract | 0 | 0 | 0 | 0 |

Qualification Details of the Teaching Staff

| Permanent Teachers | | | | | | | | | | |
|-----------------------|-----------|--------|--------|-----------------------------|--------|--------|---------------------|--------|--------|-------|
| Highest Qualification | Professor | | | Associate Professor | | | Assistant Professor | | | Total |
| | Male | Female | Others | Male | Female | Others | Male | Female | Others | |
| D.sc/D.Litt/LLD | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ph.D. | 361 | 150 | 0 | 331 | 209 | 0 | 240 | 208 | 0 | 1499 |
| M.Phil. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PG | 36 | 25 | 0 | 121 | 78 | 0 | 333 | 323 | 0 | 916 |
| | | | | | | | | | | |
| Highest Qualification | Lecturer | | | Tutor / Clinical Instructor | | | Senior Resident | | | Total |
| | Male | Female | Others | Male | Female | Others | Male | Female | Others | |
| D.sc/D.Litt/LLD | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ph.D. | 0 | 1 | 0 | 6 | 14 | 0 | 60 | 55 | 0 | 136 |
| M.Phil. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PG | 6 | 26 | 0 | 13 | 26 | 0 | 8 | 6 | 0 | 85 |

| Temporary Teachers | | | | | | | | | | |
|------------------------------|------------------|--------|--------|------------------------------------|--------|--------|----------------------------|--------|--------|--------------|
| Highest Qualification | Professor | | | Associate Professor | | | Assistant Professor | | | Total |
| | Male | Female | Others | Male | Female | Others | Male | Female | Others | |
| D.sc/D.Litt/LLD | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ph.D. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| M.Phil. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | | |
| Highest Qualification | Lecturer | | | Tutor / Clinical Instructor | | | Senior Resident | | | Total |
| | Male | Female | Others | Male | Female | Others | Male | Female | Others | |
| D.sc/D.Litt/LLD | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ph.D. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| M.Phil. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| Part Time Teachers | | | | | | | | | | |
|------------------------------|------------------|--------|--------|------------------------------------|--------|--------|----------------------------|--------|--------|--------------|
| Highest Qualification | Professor | | | Associate Professor | | | Assistant Professor | | | Total |
| | Male | Female | Others | Male | Female | Others | Male | Female | Others | |
| D.sc/D.Litt/LLD | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ph.D. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| M.Phil. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Highest Qualification | Lecturer | | | Tutor / Clinical Instructor | | | Senior Resident | | | Total |
| | Male | Female | Others | Male | Female | Others | Male | Female | Others | |
| D.sc/D.Litt/LLD | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ph.D. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| M.Phil. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Distinguished Academicians Appointed As

| | Male | Female | Others | Total |
|--------------------|-------------|---------------|---------------|--------------|
| Emeritus Professor | 8 | 3 | 0 | 11 |
| Adjunct Professor | 419 | 116 | 0 | 535 |
| Visiting Professor | 183 | 114 | 0 | 297 |

Chairs Instituted by the University

| Sl.No | Name of the Department | Name of the Chair | Name of the Sponsor Organisation/Agency |
|-------|--|--|---|
| 1 | Manipal Academy of Higher Education | Interprofessional education and practice | Manipal Academy of Higher Education |
| 2 | Prasanna School of Public Health Manipal | Qualitative Research | Manipal Academy of Higher Education |
| 3 | Manipal School of Life Sciences Manipal | Public Health Genomics | Manipal Academy of Higher Education |
| 4 | Manipal Institute of Technology Manipal | Health Informatics | Manipal Academy of Higher Education |
| 5 | Prasanna School of Public Health Manipal | Health Demography | Manipal Academy of Higher Education |
| 6 | Manipal Academy of Higher Education | Regulatory Services | Manipal Academy of Higher Education |
| 7 | Manipal Academy of Higher Education | Research Policies in Biomedical Sciences and Public Health | Manipal Academy of Higher Education |
| 8 | Manipal College of Health Professions Manipal | Exercise Sciences and Health Promotion | Manipal Academy of Higher Education |
| 9 | Kasturba Medical College Manipal | Mendelian Genetics | Manipal Academy of Higher Education |
| 10 | Kasturba Medical College Mangalore | Hospital Infections | Manipal Academy of Higher Education |
| 11 | Manipal College of Nursing Manipal | Participatory Action Research | Manipal Academy of Higher Education |
| 12 | Manipal Institute of Regenerative Medicine Bengaluru | Islet Engineering and Banking | Manipal Academy of Higher Education |
| 13 | Manipal Institute of Technology Manipal | Earth Sciences | Manipal Academy of Higher Education |
| 14 | Manipal Institute of Virology Manipal | Translational Virology | Manipal Academy of Higher Education |
| 15 | Kasturba Medical College Manipal | Human Fertility and Clinical Embryology | Manipal Academy of Higher Education |
| 16 | Manipal College of Pharmaceutical Sciences | Novel Drug Delivery System | Manipal Academy of Higher Education |

| | Manipal | | |
|----|---|--|-------------------------------------|
| 17 | Prasanna School of Public Health Manipal | Systemic Reviews and Evidence based Public Health | Manipal Academy of Higher Education |
| 18 | Kasturba Medical College Manipal | Enteric Bacterial Pathogens | Manipal Academy of Higher Education |
| 19 | Kasturba Medical College Manipal | Inflammatory Bowel Diseases | Manipal Academy of Higher Education |
| 20 | Manipal Institute of Technology Manipal | Data Analytics and Cloud computing | Manipal Academy of Higher Education |
| 21 | Manipal School of Life Sciences Manipal | Translational Genome Science | Manipal Academy of Higher Education |
| 22 | Manipal College of Pharmaceutical Sciences Manipal | Cognition | Manipal Academy of Higher Education |
| 23 | Department of Commerce | Social Entrepreneurship | Manipal Academy of Higher Education |
| 24 | Manipal School of Architecture and Planning Manipal | Architectural Conservation | Manipal Academy of Higher Education |
| 25 | Department of Atomic and Molecular Physics Manipal | Biophotonics | Manipal Academy of Higher Education |
| 26 | Manipal Academy of Higher Education | Medical Education | Manipal Academy of Higher Education |
| 27 | Kasturba Medical College Mangalore | Geriatrics and Gerontology | Manipal Academy of Higher Education |
| 28 | Kasturba Medical College Manipal | Bioethics | Manipal Academy of Higher Education |
| 29 | Kasturba Medical College Manipal | Prediabetes | Manipal Academy of Higher Education |
| 30 | Kasturba Medical College Manipal | Laboratory Quality Management | Manipal Academy of Higher Education |
| 31 | Kasturba Medical College Manipal | Translational Epidemiology and Implementation Research | Manipal Academy of Higher Education |
| | | | |

| | | | |
|----|---|---|-------------------------------------|
| 32 | Manipal Institute of Technology Manipal | Clean Energy | Manipal Academy of Higher Education |
| 33 | Manipal School of Life Sciences Manipal | Pharmacogenics | Manipal Academy of Higher Education |
| 34 | Manipal School of Architecture and Planning Manipal | Sustainable Built Environment | Manipal Academy of Higher Education |
| 35 | Manipal Institute of Technology Manipal | Tribology | Manipal Academy of Higher Education |
| 36 | Kasturba Medical College Manipal | Tuberculosis a step towards elimination | Manipal Academy of Higher Education |
| 37 | Kasturba Medical College Manipal | Antimicrobial Stewardship | Manipal Academy of Higher Education |
| 38 | Kasturba Medical College Manipal | Emerging Tropical Bacterial Diseases | Manipal Academy of Higher Education |
| 39 | Kasturba Medical College Manipal | Congenital Hand differences | Manipal Academy of Higher Education |
| 40 | Kasturba Medical College Mangalore | HIV and Opportunistic infections | Manipal Academy of Higher Education |
| 41 | Manipal College of Pharmaceutical Sciences Manipal | Drug Discovery | Manipal Academy of Higher Education |
| 42 | Manipal College of Pharmaceutical Sciences Manipal | Translational Oncology | Manipal Academy of Higher Education |
| 43 | Department of Atomic and Molecular Physics | Applied Nano Sciences | Manipal Academy of Higher Education |
| 44 | Manipal Center for Natural Sciences Manipal | Mathematics | Manipal Academy of Higher Education |
| 45 | Manipal Center of Humanities Manipal | Dharma | Manipal Academy of Higher Education |
| 46 | Manipal Center for Humanities Manipal | Indian Literature | Manipal Academy of Higher Education |
| 47 | Manipal Institute of Technology Manipal | Medical Devices | Manipal Academy of Higher Education |

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

| Programme | | From the State Where University is Located | From Other States of India | NRI Students | Foreign Students | Total |
|--|--------|---|-------------------------------|--------------|---------------------|-------|
| UG | Male | 2702 | 8451 | 167 | 242 | 11562 |
| | Female | 2600 | 5147 | 98 | 386 | 8231 |
| | Others | 0 | 0 | 0 | 0 | 0 |
| PG | Male | 1046 | 1177 | 4 | 113 | 2340 |
| | Female | 1338 | 1689 | 7 | 43 | 3077 |
| | Others | 0 | 0 | 0 | 0 | 0 |
| PG Diploma recognised by statutory authority including university | Male | 6 | 18 | 0 | 1 | 25 |
| | Female | 5 | 24 | 0 | 0 | 29 |
| | Others | 0 | 0 | 0 | 0 | 0 |
| Doctoral (Ph.D) | Male | 158 | 141 | 0 | 1 | 300 |
| | Female | 191 | 195 | 4 | 0 | 390 |
| | Others | 0 | 0 | 0 | 0 | 0 |
| Diploma | Male | 15 | 2 | 0 | 0 | 17 |
| | Female | 31 | 5 | 0 | 0 | 36 |
| | Others | 0 | 0 | 0 | 0 | 0 |
| Certificate / Awareness | Male | 4 | 5 | 0 | 0 | 9 |
| | Female | 8 | 8 | 0 | 0 | 16 |
| | Others | 0 | 0 | 0 | 0 | 0 |
| Post Master's (DM,Ayurveda Vachaspathi,M. Ch) | Male | 7 | 38 | 0 | 1 | 46 |
| | Female | 4 | 11 | 0 | 0 | 15 |
| | Others | 0 | 0 | 0 | 0 | 0 |
| Pre Doctoral (M.Phil) | Male | 1 | 5 | 0 | 0 | 6 |
| | Female | 4 | 40 | 0 | 0 | 44 |
| | Others | 0 | 0 | 0 | 0 | 0 |

| | |
|---|-----|
| Does the University offer any Integrated Programmes? | Yes |
| Total Number of Integrated Programme | 5 |

| Integrated Programme | From the State where university is located | From other States of India | NRI students | Foreign Students | Total |
|-----------------------------|---|-----------------------------------|---------------------|-------------------------|--------------|
| Male | 9 | 33 | 1 | 0 | 43 |
| Female | 5 | 17 | 0 | 0 | 22 |
| Others | 0 | 0 | 0 | 0 | 0 |

Details of UGC Human Resource Development Centre, If applicable

| | |
|--|-----|
| Year of Establishment | Nil |
| Number of UGC Orientation Programmes | 0 |
| Number of UGC Refresher Course | 0 |
| Number of University's own Programmes | 0 |
| Total Number of Programmes Conducted (last five years) | 0 |

Accreditation Details

| Cycle Info | Accreditation | Grade | CGPA | Upload Peer Team Report |
|-------------------|----------------------|--------------|-------------|--|
| Cycle 1 | Accreditation | B+ | 75 | 2002.05.26-30 NAAC Report MAHE.pdf |
| Cycle 2 | Accreditation | A | 3.3 | 2016.07.15 NAAC Peer Team Report.pdf |

General Facilities

Campus Type: New Khata No. 24 Ward No. 16, Kadani Road Baridih, Jamshedpur East

Singhbhum District Jharkhand 831017

| Facility | Status |
|--|---------------|
| • Auditorium/seminar complex with infrastructural facilities | Yes |
| • Sports facilities | |
| * Outdoor | Yes |
| * Indoor | Yes |
| • Residential facilities for faculty and non-teaching staff | Yes |
| • Cafeteria | Yes |
| • Health Centre | |
| * First aid facility | Yes |
| * Outpatient facility | Yes |
| * Inpatient facility | Yes |
| * Ambulance facility | Yes |
| * Emergency care facility | Yes |
| • Health centre staff | |
| * Qualified Doctor (Full time) | 7 |
| * Qualified Doctor (Part time) | 0 |
| * Qualified Nurse (Full time) | 5 |
| * Qualified Nurse (Part time) | 0 |
| • Facilities like banking, post office, book shops, etc. | Yes |
| • Transport facilities to cater to the needs of the students and staff | Yes |
| • Facilities for persons with disabilities | Yes |
| • Animal house | No |
| • Power house | Yes |
| • Fire safety measures | Yes |
| • Waste management facility, particularly bio-hazardous waste | Yes |
| • Potable water and water treatment | Yes |
| • Renewable / Alternative sources of energy | Yes |
| • Any other facility | NA |

| Campus Type: manipal.edu Madhav Nagar Manipal | |
|--|---------------|
| Facility | Status |
| • Auditorium/seminar complex with infrastructural facilities | Yes |
| • Sports facilities | |
| * Outdoor | Yes |
| * Indoor | Yes |
| • Residential facilities for faculty and non-teaching staff | Yes |
| • Cafeteria | Yes |
| • Health Centre | |
| * First aid facility | Yes |
| * Outpatient facility | Yes |
| * Inpatient facility | Yes |
| * Ambulance facility | Yes |
| * Emergency care facility | Yes |
| • Health centre staff | |
| * Qualified Doctor (Full time) | 609 |
| * Qualified Doctor (Part time) | 0 |
| * Qualified Nurse (Full time) | 2296 |
| * Qualified Nurse (Part time) | 0 |
| • Facilities like banking, post office, book shops, etc. | Yes |
| • Transport facilities to cater to the needs of the students and staff | Yes |
| • Facilities for persons with disabilities | Yes |
| • Animal house | Yes |
| • Power house | Yes |
| • Fire safety measures | Yes |
| • Waste management facility, particularly bio-hazardous waste | Yes |
| • Potable water and water treatment | Yes |
| • Renewable / Alternative sources of energy | Yes |

| | |
|----------------------|----|
| • Any other facility | NA |
|----------------------|----|

Campus Type: Kasturba Medical College Post Box No. 53 Light House Hill Road Hampankatta Mangaluru 575001

| Facility | Status |
|--|--------|
| • Auditorium/seminar complex with infrastructural facilities | Yes |
| • Sports facilities | |
| * Outdoor | Yes |
| * Indoor | Yes |
| • Residential facilities for faculty and non-teaching staff | Yes |
| • Cafeteria | Yes |
| • Health Centre | |
| * First aid facility | Yes |
| * Outpatient facility | Yes |
| * Inpatient facility | Yes |
| * Ambulance facility | Yes |
| * Emergency care facility | Yes |
| • Health centre staff | |
| * Qualified Doctor (Full time) | 420 |
| * Qualified Doctor (Part time) | 0 |
| * Qualified Nurse (Full time) | 513 |
| * Qualified Nurse (Part time) | 0 |
| • Facilities like banking, post office, book shops, etc. | Yes |
| • Transport facilities to cater to the needs of the students and staff | Yes |
| • Facilities for persons with disabilities | Yes |
| • Animal house | Yes |
| • Power house | Yes |
| • Fire safety measures | Yes |
| • Waste management facility, particularly bio-hazardous waste | Yes |
| • Potable water and water treatment | Yes |

| | |
|---|-----|
| • Renewable / Alternative sources of energy | Yes |
| • Any other facility | NA |

| Campus Type: Melaka Manipal Medical College Jalan Batu Hampar Bukit Baru 75150 Melaka, Malaysia | |
|--|---------------|
| Facility | Status |
| • Auditorium/seminar complex with infrastructural facilities | Yes |
| • Sports facilities | |
| * Outdoor | Yes |
| * Indoor | Yes |
| • Residential facilities for faculty and non-teaching staff | Yes |
| • Cafeteria | Yes |
| • Health Centre | |
| * First aid facility | Yes |
| * Outpatient facility | Yes |
| * Inpatient facility | No |
| * Ambulance facility | Yes |
| * Emergency care facility | Yes |
| • Health centre staff | |
| * Qualified Doctor (Full time) | 1 |
| * Qualified Doctor (Part time) | 0 |
| * Qualified Nurse (Full time) | 1 |
| * Qualified Nurse (Part time) | 0 |
| • Facilities like banking, post office, book shops, etc. | Yes |
| • Transport facilities to cater to the needs of the students and staff | Yes |
| • Facilities for persons with disabilities | Yes |
| • Animal house | No |
| • Power house | Yes |
| • Fire safety measures | Yes |
| • Waste management facility, particularly bio-hazardous waste | Yes |

| | |
|---|-----|
| • Potable water and water treatment | Yes |
| • Renewable / Alternative sources of energy | Yes |
| • Any other facility | NA |

Campus Type: Mahe Dubai Campus Dubai International Academic City G04, Post Box No. 345 050 Dubai, Uae

| Facility | Status |
|--|--------|
| • Auditorium/seminar complex with infrastructural facilities | Yes |
| • Sports facilities | |
| * Outdoor | Yes |
| * Indoor | Yes |
| • Residential facilities for faculty and non-teaching staff | No |
| • Cafeteria | Yes |
| • Health Centre | |
| * First aid facility | Yes |
| * Outpatient facility | No |
| * Inpatient facility | No |
| * Ambulance facility | No |
| * Emergency care facility | No |
| • Health centre staff | |
| * Qualified Doctor (Full time) | 0 |
| * Qualified Doctor (Part time) | 0 |
| * Qualified Nurse (Full time) | 1 |
| * Qualified Nurse (Part time) | 0 |
| • Facilities like banking, post office, book shops, etc. | Yes |
| • Transport facilities to cater to the needs of the students and staff | Yes |
| • Facilities for persons with disabilities | Yes |
| • Animal house | No |
| • Power house | Yes |
| • Fire safety measures | Yes |

| | |
|---|-----|
| • Waste management facility, particularly bio-hazardous waste | Yes |
| • Potable water and water treatment | Yes |
| • Renewable / Alternative sources of energy | Yes |
| • Any other facility | NA |

Campus Type: Mahe Bengaluru Off Campus Kenchanahalli Village Yelahanka Hobli Bengaluru - 560064 Interim Campus Smi N2 Campus C/o Slk Software Private Limited No. 40/a Khb Industrial Area Yelahanka Bangaluru 560064

| Facility | Status |
|--|--------|
| • Auditorium/seminar complex with infrastructural facilities | Yes |
| • Sports facilities | |
| * Outdoor | Yes |
| * Indoor | Yes |
| • Residential facilities for faculty and non-teaching staff | Yes |
| • Cafeteria | Yes |
| • Health Centre | |
| * First aid facility | Yes |
| * Outpatient facility | Yes |
| * Inpatient facility | Yes |
| * Ambulance facility | Yes |
| * Emergency care facility | Yes |
| • Health centre staff | |
| * Qualified Doctor (Full time) | 1 |
| * Qualified Doctor (Part time) | 0 |
| * Qualified Nurse (Full time) | 1 |
| * Qualified Nurse (Part time) | 0 |
| • Facilities like banking, post office, book shops, etc. | Yes |
| • Transport facilities to cater to the needs of the students and staff | Yes |
| • Facilities for persons with disabilities | Yes |
| • Animal house | No |

| | |
|---|-----|
| • Power house | Yes |
| • Fire safety measures | Yes |
| • Waste management facility, particularly bio-hazardous waste | Yes |
| • Potable water and water treatment | Yes |
| • Renewable / Alternative sources of energy | Yes |
| • Any other facility | NA |

| Hostel Details | | |
|----------------------------|---------------|---------------|
| Hostel Type | No Of Hostels | No Of Inmates |
| * Boys' hostel | 34 | 7839 |
| * Girls's hostel | 35 | 6582 |
| * Overseas students hostel | 7 | 1140 |
| * Hostel for interns | 2 | 194 |
| * PG Hostel | 2 | 972 |

| Health Professional Education Unit / Cell / Department | | |
|--|---------------------------|--------------------|
| Year of Establishment: 01-04-1985 | | |
| Education Programs Conducted | Number Programs Conducted | Duration in Months |
| * Induction | 224 | 8 |
| * Orientation | 232 | 10 |
| * Refresher | 465 | 15 |
| * Post Graduate | 237 | 8 |

Extended Profile

1 Program

1.1

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

Response: 272

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

2 Students

2.1

Number of students year-wise during the last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 26065 | 25327 | 24228 | 23013 | 21891 |

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

2.2

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

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 6931 | 6171 | 5846 | 5654 | 5382 |

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

3 Teachers

3.1

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

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 2822 | 2532 | 2502 | 2435 | 2354 |

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

3.2

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

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 2861 | 2552 | 2519 | 2463 | 2394 |

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

4 Institution

4.1

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

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 94337 | 102580 | 106699 | 94066 | 94357 |

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

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curriculum Design and Development

1.1.1 Curricula developed and implemented have relevance to the local, national, regional and global health care needs which are visible in Programme Outcomes (POs), and Course Outcomes (COs) offered by the University, as per the norms of the Regulatory Bodies.

Response:

As an Institution of Eminence, MAHE offers more than 270 programs in the diverse domains of health sciences, technology, management, art, design, humanities and social sciences, which aim at grooming a future generation of competent professionals. The program and course outcomes are defined keeping in mind the healthcare requirements of the country and the world. The curriculum development and review process occurs through the curriculum conclaves conducted on a regular basis involving various stakeholders including students, faculty, experts from academia and industry, alumni and employers. The curricula of many programs were developed with major inputs from industries like Philips, IBM and Ernst and Young. The curriculum is aligned with the expectations of the regulators and addresses the constantly evolving local, national, regional and global healthcare needs. MAHE, having within its fold three medical colleges which have implemented the CBME curriculum as per NMC guidelines, has made a direct contribution to healthcare needs at all levels for nearly 70 years. These colleges have trained thousands of doctors who are spread across the world and continue to serve the health care needs of the society.

MAHE's two dental colleges are consistently ranked at the top in the country, which is a testimony to the program objectives, their delivery, their innovations and their strict adherence to regulatory norms. As one of India's premier nursing institutions, MCON has been continually producing nursing graduates of top caliber who form an important cog in the wheel of healthcare, not just locally but globally as well.

The numerous allied health programs offered by MCHP, help in training graduates right from physiotherapy to renal replacement and dialysis therapy, thereby filling the gap in requirement of such personnel in healthcare setups. The MSc. program in Clinical Virology creates professionals trained to work efficiently with equal ease both in a laboratory and in a public health and industry setting.

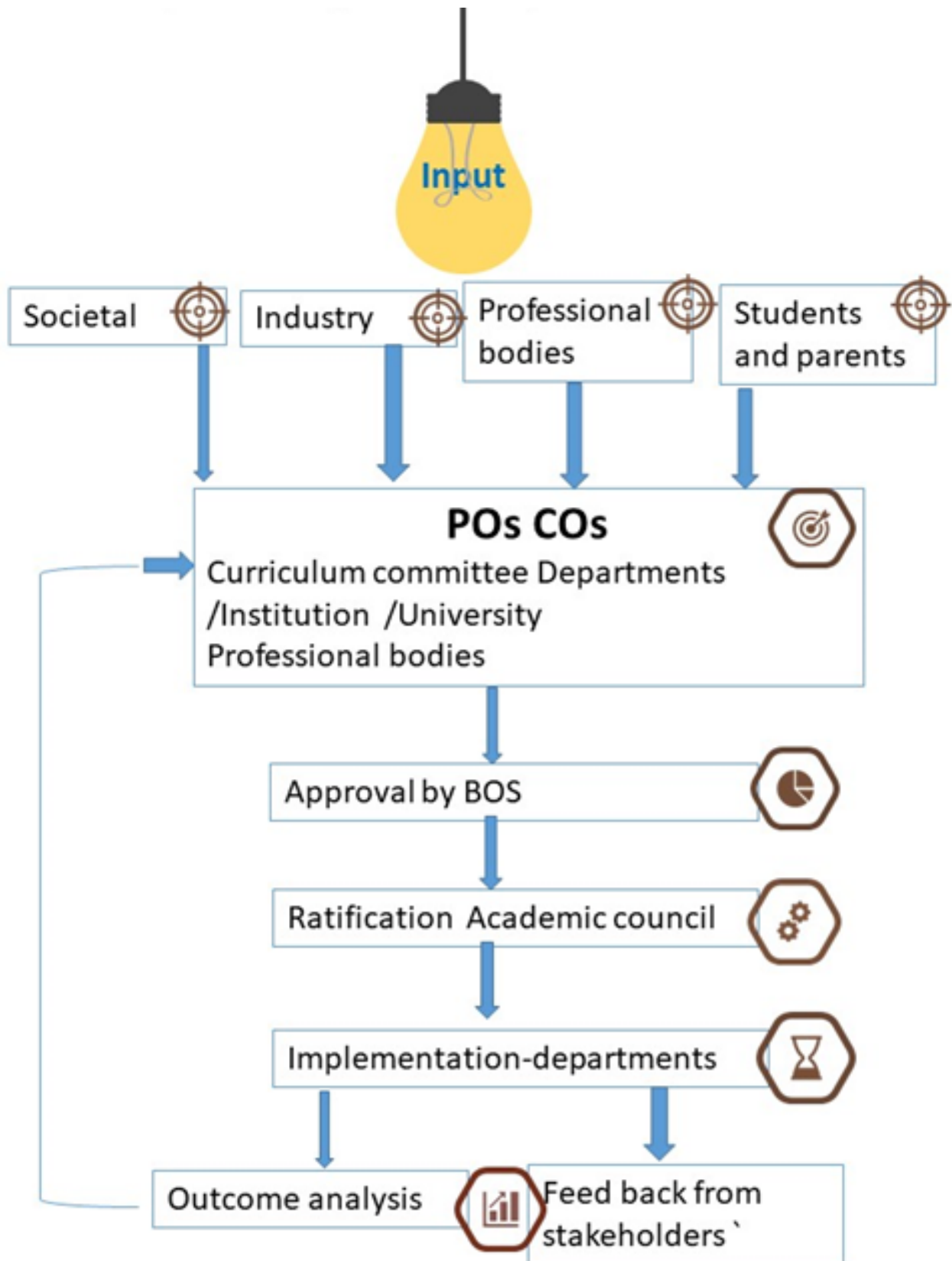
MAHE has catered to the healthcare needs of the society through an interdisciplinary approach, creating unique healthcare solutions. Pharmacy graduates have contributed immensely to the Pharma industry and research. The Biomedical Engineering program works closely with the clinical disciplines of the medical colleges of MAHE.

The MSc. Dietetics and Nutrition program enhances knowledge and skills in nutrition, diet therapy and research. The program enables students to get hands on training in hospital, clinical and community nutrition in close association with dietitians and clinicians.

The MSc. Geology program trains students in analysing the impact of environmental pollutants. The programs at MSLS help in developing a crucial human resource – graduates trained in advanced skills in areas including molecular biology and genome engineering, capable of addressing healthcare concerns at both local and global levels, armed with multidisciplinary knowledge and research experience. PSPH,

across its various programs, offers its students tremendous field exposure, training in public health research, knowledge on academic writing and publishing, and builds their capacities to respond to public health issues across the spectrum.

NAAC



| File Description | Document |
|--|-------------------------------|
| Link for Outcome analysis of POs, COs | View Document |
| Link for Curricula implemented by the University | View Document |
| Link for Additional Information | View Document |

1.1.2 Percentage of Programmes where syllabus revision was carried out during the last five years

Response: 69.85

1.1.2.1 How many programs were revised out of total number of programs offered during the last five years

Response: 190

| File Description | Document |
|---|-------------------------------|
| Syllabus prior and post revision of the courses | View Document |
| Minutes of relevant Academic Council/BOS meetings | View Document |
| Institutional data in prescribed format | View Document |
| Details of the revised Curricula/Syllabi of the programmes during the last five years | View Document |
| Any additional information | View Document |

1.1.3 Provide a description of courses having focus on competency/ employability/ entrepreneurship/ skill-development offered either by the University or in collaboration with partner Institutions/Industries during the last five years

Response:

The fundamentals of MAHE as a university rest on inculcating in its graduates the competencies delineated in the courses they choose, imparting skills that make them employable, and inspiring entrepreneurial inclinations that would make them potential employers. MAHE has also been a frontrunner in collaborating with a plethora of partner institutions, foreign universities and industry leaders in order to place its graduates leagues ahead of others.

MBBS programs at MAHE produce doctors who work in both government and private sectors, both in India and abroad. A significant attempt is made in the competency-based undergraduate curriculum of MBBS to provide the orientation and the skills necessary for life-long learning to enable holistic care of the patient. Our dental colleges house state-of-the-art equipment and technology to train the undergraduate and postgraduate students in competencies laid out by the DCI thereby making the graduates employable in India and abroad and promoting entrepreneurial skills so that they are well equipped to establish their own practices.

Adequate exposure to sophisticated equipment in the laboratories and hands on experience through various technical clubs ensure development of technical competencies in the engineering programs at MIT. The Metaphysics and Epistemology modules at the Department of Philosophy impart unique competencies to students by means of a comparative perspective towards the world and its cognition. The MSc Clinical Virology program is carefully crafted to addresses the dearth of trained virologists in the country. The BSc Animation course at MIC aims at skills training to meet the high demand in Animation, Film, Television, VFX, Advertising and Gaming Industries. MSLS offers niche programs and its PGD program is recognized by the Life Sciences Sector Skill Development Council (LSSSDC) which is aimed at improving employability.

MAHE lays great emphasis on imparting entrepreneurial skills to its students, either by overt competency in some of the programs or by various associations with professional bodies, industry and other universities. The MBA programs at MIM have students studying entrepreneurship in the second year of their specialization. A unique endeavour of MAHE is the DST sponsored business technology incubator [MUTBI] that nurtures interested students to become entrepreneurs, and has already established scores of start-ups. The Manipal-Government of Karnataka Bioincubator, an initiative by MAHE and Government of Karnataka, facilitates entrepreneurship among researchers, faculty and students by providing an incubation platform to propel innovative ideas towards product commercialization.

Most institutions under MAHE pride themselves on unique academia-industry collaborations targeted to benefit the students. The two-year post-graduate program by the Department of Data Sciences collaborates with the pharmaceutical industry to train its graduates in design, management, and analysis of clinical trials data.

MAHE's strength lies in breaking the traditional silos and bringing together wider disciplines to produce graduates who gain unique competencies. Our industry-academia alignment, regular interface and continuing-education programs all aim at enhancing employability by the way of creating a graduate who is competent, skilled, employable, and capable of creating employment for others.

| File Description | Document |
|---|-------------------------------|
| Link for MOUs with Institutions / Industries for offering these courses | View Document |
| Link for courses having focus on competency/ employability/ entrepreneurship/ skill-development | View Document |

1.2 Academic Flexibility

1.2.1 Percentage of Programmes in which Choice-Based Credit System (CBCS)/Elective Course System has been implemented, wherever provision was made by the Regulatory Bodies (Data for the preceding academic year).

Response: 93.36

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

Response: 197

1.2.1.2 Total number of Programmes where there is regulatory provision for CBCS / elective course system

Response: 211

| File Description | Document |
|---|-------------------------------|
| University letter mandating implementation of CBCS by the institution | View Document |
| Structure of the program clearly indicating courses, credits/Electives as approved by the competent board | View Document |
| Minutes of relevant Academic Council/BoS meetings Clearing indicating the adoption of CBCS System and/or | View Document |
| Institutional data in prescribed format | View Document |
| Document for Structure of Programs mentioning the Credit Allocation and Elective options | View Document |
| Link for additional information | View Document |

1.2.2 Percentage of new degree programmes, fellowships and diplomas introduced by the university across all Faculties during the last five years (certificate programmes are not to be included)

Response: 28.31

1.2.2.1 Number of new Degree Programmes, Fellowships and Diplomas introduced by the University during the last five years

Response: 77

| File Description | Document |
|---|-------------------------------|
| Minutes of relevant Academic Council/BoS meetings Clearing approving the introduction of new Degree Programmes, Fellowships and Diplomas claimed in the SSR | View Document |
| List of the new Programmes introduced during the last five years | View Document |
| Institutional data in prescribed format | View Document |

1.2.3 Percentage of interdisciplinary courses under the programmes offered by the University during

the last five years

Response: 36.74

1.2.3.1 Number of interdisciplinary courses offered by institution during the last five years

Response: 1676

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

Response: 4562

| File Description | Document |
|---|-------------------------------|
| Minutes of relevant Academic Council/BoS meetings Clearly approving the interdisciplinary Courses with specifications of departments involved | View Document |
| List of Interdisciplinary courses under the programmes offered by the University during the last 5 years | View Document |
| Institutional data in prescribed format | View Document |
| Link for Additional Information | View Document |

1.3 Curriculum Enrichment

1.3.1 Institution integrates crosscutting issues relevant to Gender, Environment and Sustainability, Human Values, Health Determinants, Right to Health Issues, Emerging demographic changes and Professional Ethics in the curricula

Response:

A university education is not merely to gain knowledge in the domain one gets admitted to, but to grow holistically as an individual who contributes meaningfully to society at large. Cross-cutting issues of gender, environment sustainability, professional ethics, human values, health determinants, right to health issues and emerging demographic changes are given due importance in programs at MAHE.

Our medical schools align their tenets of implementing cross-cutting issues in medical education with those required by the statutory body. This is achieved through a dedicated one month exclusive “Foundation Course”, as part of the Attitude, Ethics and Communication (AETCOM) module, at the beginning of the MBBS program, to orient and sensitize the student to the various identified areas.

The ethics component of AETCOM provides students with the understanding that clinical competence, communication skills and sound ethical principles are the foundation of professionalism. It also provides understanding of the consequences of unethical and unprofessional behaviour, values of honesty, integrity and respect in all interactions. Professional attributes such as accountability, altruism, pursuit of excellence, empathy, compassion and humanism are addressed. It is aimed to inculcate respect and sensitivity towards gender, race, culture, regional and language diversities.

MMMC integrates crosscutting issues relevant to Human Values, Health Determinants and Professional Ethics in the curriculum through Personal and Professional development module. At MIV, emerging demographic changes and Professional Ethics are integrated through course modules such as emerging viral diseases and public health response, research methods and ethics; geographic information system, and medical entomology.

In MCON, Community Health Nursing, a course in an undergraduate program, addresses the risk factors of diseases under ‘agent, host, and environment’ and discusses ways to reduce risk factors by environmental sanitation and waste management. Health determinants like housing, clean drinking water, food and nutrients, sanitation, access to health care and transportation are covered in detail in the curriculum.

Module on environmental engineering at MIT offers knowledge to the students on how human activities significantly hamper the functioning of the Earth’s environment as a whole. In, DOP, the philosophical debates and discourses offer rationally persuasive insights, thus enabling learners to understand the multi-perspectivity of truths by listening, examining and contemplating.

At MIT, elective courses for various B.Tech and M.Tech programs touch on the important crosscutting issues like environment and sustainability, Human values, Cross-cultural sensitivity, Right to Health and Professional Ethics. At DOL, one of the six thematic clusters of study, heritage and sustainability (others being literature, cultural diplomacy, intercultural communication, research and projects), merits special focus on cross-cutting issues within the program. MA in Geopolitics and International Relations covers various aspects of sustainability in sectors such as energy and transportation, and also analyses India’s positions and policies on environmental issues, including disasters and climate change. It also covers other issues such as food and water security. The subject environmental science is offered in many institutions for the students to get a worldview on environmental issues. MA in European Studies offers courses on feminist and cultural perspectives in research.

| File Description | Document |
|--|-------------------------------|
| Link for list of courses that integrate crosscutting issues mentioned above | View Document |
| Link for description of the courses which address Gender, Environment and Sustainability, Human Values, Health Determinants, Right to Health Issues, Emerging demographic changes and Professional Ethics in the Curricula | View Document |

1.3.2 Number of value-added courses offered during the last five years that impart transferable and life skills.

Response: 3424

1.3.2.1 Number of value-added courses are added within the last five years

Response: 3424

| File Description | Document |
|--|-------------------------------|
| Institutional data in prescribed format | View Document |
| Brochure or Course content or syllabus relating to Value added courses to be uploaded in the SSR | View Document |

1.3.3 Percentage of students successfully completed the value-added courses during the last five years

Response: 25.79

1.3.3.1 Number of students who successfully completed the value-added courses imparting transferable and life skills offered year-wise during the last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 15075 | 10286 | 4256 | 782 | 686 |

| File Description | Document |
|---|-------------------------------|
| The institution should provide list of the students as per the requirement in the template failing which the claim will not be considered | View Document |
| Institutional data in prescribed format | View Document |

1.3.4 Students undertaking field visits / research projects / Industry internships/ visits/Community postings as a part of curriculum enrichment

Response:

MAHE lays immense focus on experiential learning and thus majority of the programs have students learning by field visits, working on research projects, doing internships in industry, and working closely with the community. All these beyond the classroom learning activities help groom an all rounded graduate at MAHE.

The health science programs at MAHE lead the way when it comes to engaging with the community and serving people. Six Rural Maternity and Child Welfare (RMCW) homes in Udupi are managed by the Department of Community Medicine, KMC Manipal, where students are posted for six weeks in a semester (III& VII) where they interact with the people and try to understand their health issues and the socioeconomic factors that contribute to it. MBBS students of KMC Mangalore in 3rd semester are posted for community diagnosis in the Department of Community Medicine for a period of one month. During this posting they visit Kateel village which is situated 21 kilometres away.

A field visit to the Primary Health Centre is organized every year for the BDS students during their clinical posting at the Department of Public Health Dentistry of MCOADS, Mangalore. Every year the faculty and

postgraduates of the department of Pedodontics and Preventive dentistry at both our dental schools, MCODES Manipal and MCODES Mangalore, organize school dental health education programmes.

Nursing students make field visits as part of their community health nursing curriculum. The college has adopted three nearby villages where the students make regular visits accompanied by faculty and collect data about health indicators, give health education, conduct morbidity clinics and provide family care.

Engaging in research projects as a comprehensive way of learning is the mainstay in many of MAHE's programs. The postgraduate students in MD/MS/Super speciality programmes of KMC Manipal and KMC Mangaluru, as well as most other PG programs in MAHE have to mandatorily submit a dissertation/ thesis work as a partial fulfilment of their course. The final semester in MSc. Clinical Virology is dedicated to research projects wherein there is a provision to complete their project work at a foreign institute under the mobility grant.

The undergraduate and postgraduate engineering students are required to undergo internships in the industry to get acquainted with the industry ecosystem while being a student.

At MIC, students undertake summer industry internships in print and broadcast media companies, advertising, PR, production houses, animation and designing companies. The students of the Communications programs work on a research project as a part of the curriculum.

The Industry-Academia link is well established at MAHE and many institutions have incorporated that into their curricula, paving the way for a structural feature. At MSLS, students of Post-Graduate Diploma (Cellular and Molecular Diagnostics) undertake industry internships in the second semester. MPH and MSW students of PSPH have observational field visits every week on a designated day during all three semesters. The students identify governmental and non-governmental organisations and get hands on training internships.

| File Description | Document |
|--|-------------------------------|
| Link for list of Programmes and number of students undertaking field visits / research projects / internships/Industry visits/Community postings | View Document |

1.4 Feedback System

1.4.1 Mechanism is in place to obtain structured feedback on curricula/syllabi from various stakeholders. Structured feedback received from:

1. Students
2. Teachers
3. Employers
4. Alumni
5. Professionals

Response: A. All of the above

| File Description | Document |
|--|-------------------------------|
| Stakeholder feedback report as stated in the minutes of the Governing Council/Syndicate/ Board of Management | View Document |
| Sample filled in Structured Feedback forms designed by the institution for each category as claimed in SSR | View Document |
| Institutional data in prescribed format | View Document |
| Link for feedback report from stakeholders | View Document |

1.4.2 Feedback process of the Institution may be classified as:

Response: A. Feedback collected, analysed and action taken on feedback and relevant documents are made available on the institutional website

| File Description | Document |
|---|-------------------------------|
| Institutional data in prescribed format | View Document |
| Action taken report of the University on feedback as stated in the minutes of the Governing Council/ Syndicate/ Board of Management | View Document |
| URL for stakeholder feedback report | View Document |

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Due consideration is given to equity and inclusiveness by providing reservation of seats to all categories. Average percentage of seats filled against seats reserved for various categories as per applicable reservation policy during the last five years

Response: 86.16

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

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 8578 | 7104 | 7260 | 7096 | 6688 |

2.1.1.2 Number of seats earmarked for reserved categories as per GOI or State Govt. norms year-wise during the last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 10488 | 8386 | 8189 | 8063 | 7630 |

| File Description | Document |
|---|-------------------------------|
| Institutional data in prescribed format | View Document |
| Initial reservation of seats for admission | View Document |
| Final admission list published by the HEI | View Document |
| Copy of letter issued by state govt. or and Central Government (which-ever applicable) Indicating the reserved categories to be considered as per the GO rule (translated in English) | View Document |
| Any additional information | View Document |
| Annual Report/ BOM report/ Admission report duly certified by the Head of the Institution. | View Document |

2.1.2 Student Demand Ratio applicable to programmes where state / central common entrance tests are not conducted

Response: 59:1

2.1.2.1 Number of eligible applications received year-wise during the last five years for programmes where State / Central Common Entrance Tests are not conducted

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 80332 | 74216 | 77859 | 78485 | 139927 |

2.1.2.2 Number of seats available year-wise/eligible applications received during the last five years where State / Central Common Entrance Tests are not conducted

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 9183 | 7282 | 7122 | 7001 | 7630 |

| File Description | Document |
|--|-------------------------------|
| The details certified by the Controller of Examination or Registrar evaluation clearly mentioning the programs that are not covered under CET and the number of applications received for the same | View Document |
| Institutional data in prescribed format | View Document |
| Extract of No. of application received in each program | View Document |
| Document relating to Sanction of intake | View Document |

2.1.3 Student enrollment pattern and student profile demonstrate - national/international spread of enrolled students from other states and countries

Response: 70:1

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

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 18003 | 17275 | 16916 | 16500 | 16049 |

2.1.3.2 Total number of students enrolled in that year

| | | | | |
|---------|---------|---------|---------|---------|
| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
| 26065 | 25327 | 24228 | 23013 | 21891 |

| File Description | Document |
|--|-------------------------------|
| Previous degree/ Matriculation / HSC certificate from other state or country | View Document |
| List of students from other states and countries | View Document |
| Institutional data in prescribed format | View Document |
| E-copies of admission letters are issued to the students enrolled from other States / Countries. | View Document |
| Copy of the domicile certificate as part of the from other states and countries and/or Previous degree/Matriculation / HSC certificate from other state or country | View Document |
| Any additional information | View Document |

2.2 Catering to Student Diversity

2.2.1 The Institution assesses the learning levels of the students after admission and organises special programmes for advanced learners and slow performers The Institution:

- 1. Adopts measurable criteria to identify low performers.**
- 2. Adopts measurable criteria to identify advanced learners**
- 3. Organizes special programmes for low performers and advanced learners**
- 4. Follows protocols to measure students' achievement**

Response: A. All of the above

| File Description | Document |
|---|-------------------------------|
| Proforma created to identify slow learners/advanced learners | View Document |
| Methodology and Criteria for the assessment of Learning levels Details of special programmes | View Document |
| Institutional data in prescribed format | View Document |
| Details of outcome measures | View Document |
| Consolidated report submitted to Dean academics /Dean student's welfare on special programs for advanced learners and slow learners | View Document |
| Any additional information | View Document |

2.2.2 Student - Full- time teacher ratio (data of preceding academic year)

Response: 9:1

| File Description | Document |
|---|-------------------------------|
| List of students enrolled in the preceding academic year | View Document |
| List of full time teachers in the preceding academic year in the University (with Designation and Highest Qualification obtained) | View Document |
| Institutional data in prescribed format | View Document |

2.3 Teaching- Learning Process

2.3.1 Student-centric methods, are used for enhancing learning experiences by:

- **Experiential learning**
- **Integrated/Inter-disciplinary learning**
- **Participatory learning**
- **Problem-solving methodologies**
- **Self-directed learning**
- **Patient-centric and Evidence-based learning**
- **The Humanities**
- **Project-based learning**
- **Role play**

Response:

Student Centric Methods are used for Enhancing Learning experiences



MAHE places a strong focus on student-centric methods for enhancing learning in adherence to pedagogical frameworks laid by the regulatory bodies. The pedagogical principles adopted by institutions at MAHE such as the recently introduced AETCOM models for medical schools, and in innovative approaches like hands-on training of students of dentistry in Cone Beam Computed Tomography (CBCT) for 3D images, or bedside learning for Pharm.D. students of MCOPS, encompass student-centric methods to facilitate learning. In all the endeavours that our constituent institutions undertake, the participation of our millennial learners occupy the central stage.

All institutions of MAHE lay stress on experiential learning. The student projects at MIT focus on designing formula cars, solar cars, all-terrain vehicles and mini-satellites. Students of MCON has scenario-based learning, students at WGSMA run a restaurant and undertake entrepreneurial ventures, students of the department of media at MIT host Chalchitra – an international film festival, and students at MIC bring out quality weekly newspaper. The university campus is abuzz with multitude of such student focused activities. The avenues for experiential learning, both formally as part of the curriculum, and informally in a vibrant university atmosphere at Manipal are immense.

Problem Based Learning (PBL), Case Based Learning (CBL), Self-Directed Learning (SDL) learning modules, and small group teaching are the mainstay in almost all our constituent institutions. Over the many years that these tools have been used, they have been tailor-made based on emerging evidence. Some of the initiatives that make MAHE stand out among the rest include medical humanities, professional and personal development (PPD) undertaken by medical schools like KMC Manipal and MMMC.

Student research has been given great importance in various institutions of MAHE. Be it a long-standing Mentored Student Program (MSP) at MMMC, Manipal BioMachines by the Biomedical Engineering Department at MIT, Faculty Assisted Study and Training Program (FAST) at WGSMA or Urban Design stakeholder consultations by MSAP, most of our institutions have student research weaved into their curriculum. Over the years these activities have resulted in ushering undergraduates into the world of research, into fruition of research undertaken culminating in publications, and thereby making learning activities student centric.

As an offshoot of the emphasis laid on student centric learning, with the numerous projects that students undertake and with the myriad student clubs that exist in our institutions, a large number of students have been presenting their work as posters in national and international conferences; a sizeable number of students are undertaking project work in laboratories and institutions of national repute; a number of students have secured grants from national science funding agencies; many of them visit foreign countries for short term projects; plenty of them win awards and laurels. These outcomes clearly exhibit the impact of mentoring and support provided to students at MAHE using learner centric approach.

| File Description | Document |
|--|-------------------------------|
| Link for list of student-centric methods used for enhancing learning experiences | View Document |
| Link for additional information | View Document |

2.3.2 Has provision for the use of Clinical Skills Laboratory and Simulation Based Learning The Institution:

- 1. Has Basic Clinical Skills Training Models and Trainers for clinical skills in the relevant disciplines.**
- 2. Has advanced patient simulators for simulation-based training**
- 3. Has structured programs for training and assessment of students in Clinical Skills Lab / Simulation centre**
- 4. Conducts training programs for the faculty in the use of clinical skills lab and simulation methods of teaching-learning**

Response: A. All of the above

| File Description | Document |
|---|-------------------------------|
| Report on training programmes in Clinical skills lab/simulator Centre | View Document |
| Proof of patient simulators for simulation-based training | View Document |
| Proof of Establishment of Clinical Skills Laboratories | View Document |
| List of clinical skills training modals | View Document |
| Institutional data in prescribed format | View Document |
| Geo-tagged photographs of clinical skills lab facilities, clinical skills modals, patients simulators | View Document |
| Details of training programs conducted and details of participants | View Document |
| Any additional information | View Document |
| Link for additional information | View Document |

2.3.3 Teachers use ICT-enabled tools for effective teaching and learning process, including online e-resources

Response:

MAHE has been instrumental in adopting the use of ICT-enabled tools and electronic resources in teaching-learning activities. One transformational ICT changes that MAHE has made is the complete shift of all examinations into an electronic mode by use of E-pad, and as a positive fallout it has removed the use of a massive amount of paper. As a university policy, all faculty members are given laptops, which are then replaced every 6 years. All our classrooms are equipped with LCD projectors, some of them have smart boards and interactive white boards.

Faculty members use audio-visual tools to impart knowledge. While PowerPoint presentations have made their way for decades now, the university in its teacher training programs, which are mandated for all newly joining faculty members, ensures that extensive sessions on good practices and optimal use of ICT tools are conducted. High quality audio and video devices are provided to faculty members and also in our classroom facilities. MAHE understands the need for easily accessible high quality internet, and thus all our campuses are Wi-Fi enabled, providing seamless internet for all ICT activities.

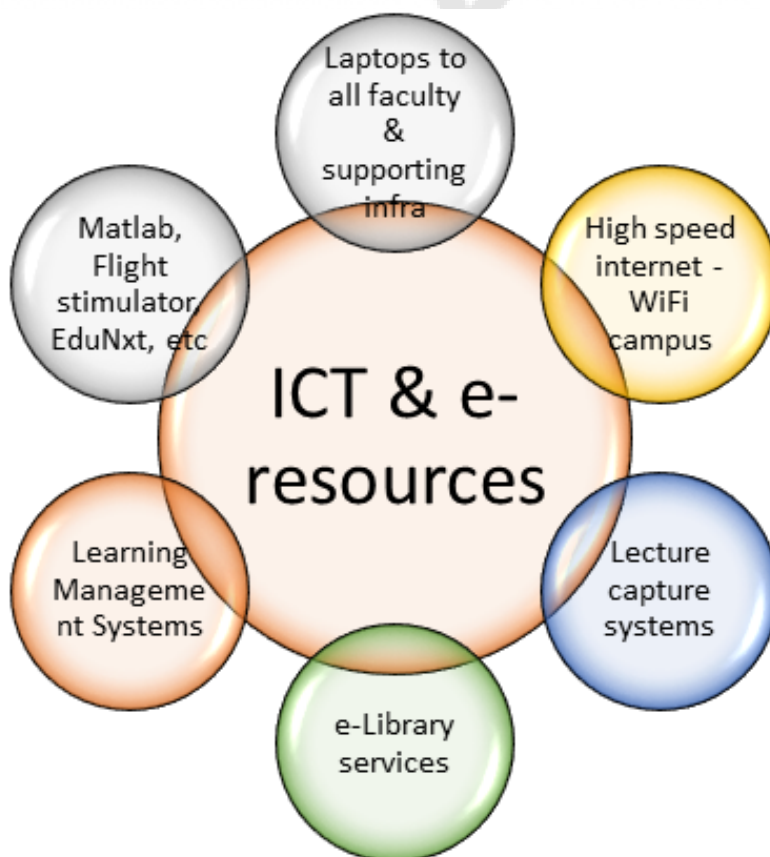
With a clear understanding that students learn at different paces, MAHE has made an effort to capture the teaching activities in the classroom, and incorporated in its pool of ICT tools a lecture capture management system – Impartus Lecture Capture. With the installment of high definition cameras in classrooms, thousands of hours of learning material have been made accessible to our students, to support asynchronous learning, and help them revisit the lectures at their own pace, place and convenience. When the Covid-19 pandemic disrupted regular classroom activities, MAHE seamlessly switched to MS Teams,

where all regular classes and assessments are being conducted currently. This e-platform is also being used for day-to-day meetings and non-academic activities.

MAHE prides itself on its library resources. Our health sciences and technical libraries house thousands of resources; even individual institutions have library facilities with large numbers of journal subscriptions, both physical and electronic. The Department of Library Science regularly conducts workshops to create awareness among faculty members regarding the availability of these e-resources. Students have digital access to thousands of books and journals through our central library facilities.

Learning Management Systems (LMS) are used by the institutions of MAHE. MIM and the Department of Computer Applications, MIT use Moodle, and KMC Mangalore uses EduNxt. Wherever required, advanced ICT tools are available for teaching-learning activities. The Department of Design has Computer Aided Design (CAD) with printers, MSLS has its own server with access to bioinformatics databases, all departments at MIT use licensed software like Matlab, Aspen and the Avionics laboratory has a flight stimulator.

MAHE has been at the top in the use of ICT tools and has a vast array of e-resources, which has been the mainstay in teaching-learning activities for many decades now and its usage is constantly updated to meet the changing requirement.



| File Description | Document |
|---|-------------------------------|
| Link of the details of ICT-enabled tools used for teaching and learning | View Document |
| Link for list of teachers using ICT-tools | View Document |
| Link for additional information | View Document |

2.3.4 Student :Mentor Ratio (preceding academic year)

Response: 13:1

2.3.4.1 Total number of mentors in the preceding academic year

Response: 1967

| File Description | Document |
|---|-------------------------------|
| Records of mentors-mentee meetings. | View Document |
| Log Book of mentors | View Document |
| Institutional data in prescribed format | View Document |
| Details of fulltime teachers/other recognized mentors | View Document |
| Copy of circular pertaining to the details of mentor and their allotted mentees | View Document |
| Approved Mentor list as announced by the HEI | View Document |
| Link for additional information | View Document |

2.4 Teacher Profile and Quality

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

Response: 98.87

| File Description | Document |
|--|-------------------------------|
| Year-wise list of fulltime teachers and sanctioned posts for the last 5 years (Certified by the Head of the Institution) | View Document |
| Institutional data in prescribed format | View Document |
| Faculty position sanction letters by the competent authority | View Document |
| Appointment letters of faculty during last five years | View Document |
| Link for additional information | View Document |

2.4.2 Average percentage of fulltime teachers with Ph.D./D.Sc./D.Lit./ DM/M Ch/DNB in super specialities /other PG degrees (like MD/ MS/ MDS etc.) in Health Sciences for recognition as Ph.D guides as per the eligibility criteria stipulated by the Regulatory Councils / Universities during the last five years

Response: 42.18

2.4.2.1 Number of fulltime teachers with Ph.D/D.Sc./D.Lit./DM/M Ch/DNB in super specialities / other PG degrees (like MD/ MS/ MDS etc.,) in Health Sciences for recognition as Ph.D guides as per the eligibility criteria stipulated by the Regulatory Councils. Last five years data to be entered.

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 1231 | 1092 | 1047 | 991 | 979 |

| File Description | Document |
|--|-------------------------------|
| List of fulltime teachers with Ph.D/D.Sc./D.Lit./DM/M Ch/DNB in super specialities / other PG degrees (like MD/ MS/ MDS etc.,) in Health Sciences for recognition as Ph.D guides as per the eligibility criteria stipulated by the Regulatory Councils and the | View Document |
| Institutional data in prescribed format | View Document |
| Copies of Guide-ship letters or authorization of research guide provide by the competent authority | View Document |
| Link for additional information | View Document |

2.4.3 Average teaching experience of fulltime teachers in number of years (preceding academic year)

Response: 11.88

2.4.3.1 Total teaching experience of fulltime teachers in number of years (cumulative experience)

Response: 33534

| File Description | Document |
|--|-------------------------------|
| List of full-time teachers for the preceding academic year with their designation, department and number of years of teaching experience | View Document |
| Institutional data in prescribed format | View Document |
| Experience certificate of full time teacher | View Document |

2.4.4 Average percentage of teachers trained for development and delivery of e-contents / e-courses / video lectures / demonstrations during the last 5 years.

Response: 100

2.4.4.1 Number of teachers trained for development and delivery of e-contents / e-courses / video lectures / demonstrations during the last 5 years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 2822 | 2532 | 2502 | 2435 | 2354 |

| File Description | Document |
|---|-------------------------------|
| Reports of the e-training programmes | View Document |
| List of teachers trained for development and delivery of e-contents / e-courses / video lectures / demonstrations during the last 5 years | View Document |
| List of e-contents / e courses / video lectures / demonstrations developed | View Document |
| Institutional data in prescribed format | View Document |
| Certificate of completion of training for development of and delivery of e-contents / e-courses / video lectures / demonstrations | View Document |
| Web-link to the contents delivered by the faculty hosted in the HEI's website | View Document |
| Link for additional information | View Document |

2.4.5 Average percentage of fulltime teachers who received awards and recognitions for excellence in teaching, student mentoring, scholarships, professional achievements and academic leadership at State, National, International levels from Government / Government-recognized agencies / registered professional associations / academics during the last five years

Response: 7.45

2.4.5.1 Number of fulltime teachers who received awards and recognitions for excellence in teaching and student mentoring, scholarships, professional achievements and academic leadership at State, National, International levels from Government / Government-recognized agencies / registered professional associations / *academies* during the last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 118 | 231 | 265 | 186 | 135 |

| File Description | Document |
|--|-------------------------------|
| Institutional data in prescribed format | View Document |
| Certified e-copies of award letters (scanned or soft copy) | View Document |
| Link for additional information | View Document |

2.5 Evaluation Process and Reforms

2.5.1 Average number of days from the date of last semester-end/ year- end examination to the date of declaration of results during the last five years

Response: 17

2.5.1.1 Number of days from the date of last semester-end/ year- end examination to the date of declaration of results year-wise in that year and during the last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 18 | 17 | 17 | 16 | 17 |

| File Description | Document |
|---|-------------------------------|
| Reports from Controller of Exam (COE) office/ Annual reports mentioning the relevant details. | View Document |
| List of programmes and dates of last semester-end/year-end examinations and the dates of declaration of results | View Document |
| Institutional data in prescribed format | View Document |

2.5.2 Average percentage of student complaints/grievances about evaluation against total number of students appeared in the examinations during the last five years

Response: 3.15

2.5.2.1 Number of student complaints/grievances received about evaluation year-wise during the last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 422 | 744 | 868 | 700 | 564 |

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

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 23464 | 21698 | 20534 | 20334 | 19739 |

| File Description | Document |
|---|-------------------------------|
| Reports of Examination Sections | View Document |
| Minutes of the grievance cell / relevant body | View Document |
| List of complaints / grievances year-wise during the last 5 years | View Document |
| Institutional data in prescribed format | View Document |
| Certificate from Registrar / Controller of examination / Data on student grievances from the office of the Registrar (Evaluation) | View Document |
| Any additional information | View Document |

2.5.3 Evaluation-related Grievance Redressal mechanism followed by the Institution: ... The University adopts the following mechanism for the redressal of evaluation-related grievances. Options(Opt one which is applicable to you):

1. Double valuation/Multiple valuation with appeal process for retotalling/revaluation and access to answer script
2. Double Valuation/Multiple valuation with appeal process for revaluation only
3. Double Valuation/Multiple valuation with appeal process for retotalling only
4. Single valuation and appeal process for revaluation
5. Grievance Redressal mechanism does not exist

Response: A. Double valuation/Multiple valuation with appeal process for retotalling/revaluation and access to answer script

| File Description | Document |
|--|-------------------------------|
| Report of the Controller of Examination/ registrar evaluation regarding the Grievance Redressal mechanism followed by the Institution | View Document |
| Institutional data in prescribed format | View Document |
| Link for additional information | View Document |
| Provide links to the examination procedure and re-evaluation procedure developed by the institution and duly hosted in the institution's website | View Document |

2.5.4 Reforms in the process and procedure in the conduct of evaluation/examination; including Continuous Internal Assessment to improve the examination system.

Response:

With more than 270 academic programs on offer, Manipal Academy of Higher Education (MAHE) has its courses governed by numerous regulatory bodies such as MCI, DCI, PCI, INC, COA, AICTE and UGC. While adhering strictly to the prescribed examination and evaluation norms, examination reforms at MAHE have become a continuous process. MAHE has pioneered many innovative practices such as on-screen marking (OSM), e-pad examination, digital verification of certificates and nationwide online entrance tests.

MAHE was one of the first universities in the country to introduce OSM in 2014, where evaluators marked using scanned copies of the answer scripts. In a phenomenal move, MAHE introduced paperless exams in 2015, and since then all theory exams are conducted using electronic writing pads (e-pad). This facilitates simultaneous evaluation of each answer script by a group of evaluators, and in addition makes it easier to evaluate all scripts question-wise, bringing in uniformity.

E-pads also facilitate capturing difficulty levels of questions, biometric authentication of candidates, encryption of question papers, decryption just prior to start of exam, strict adherence of exam duration, digital tabulation of marks, and does away with distribution and collection of papers.

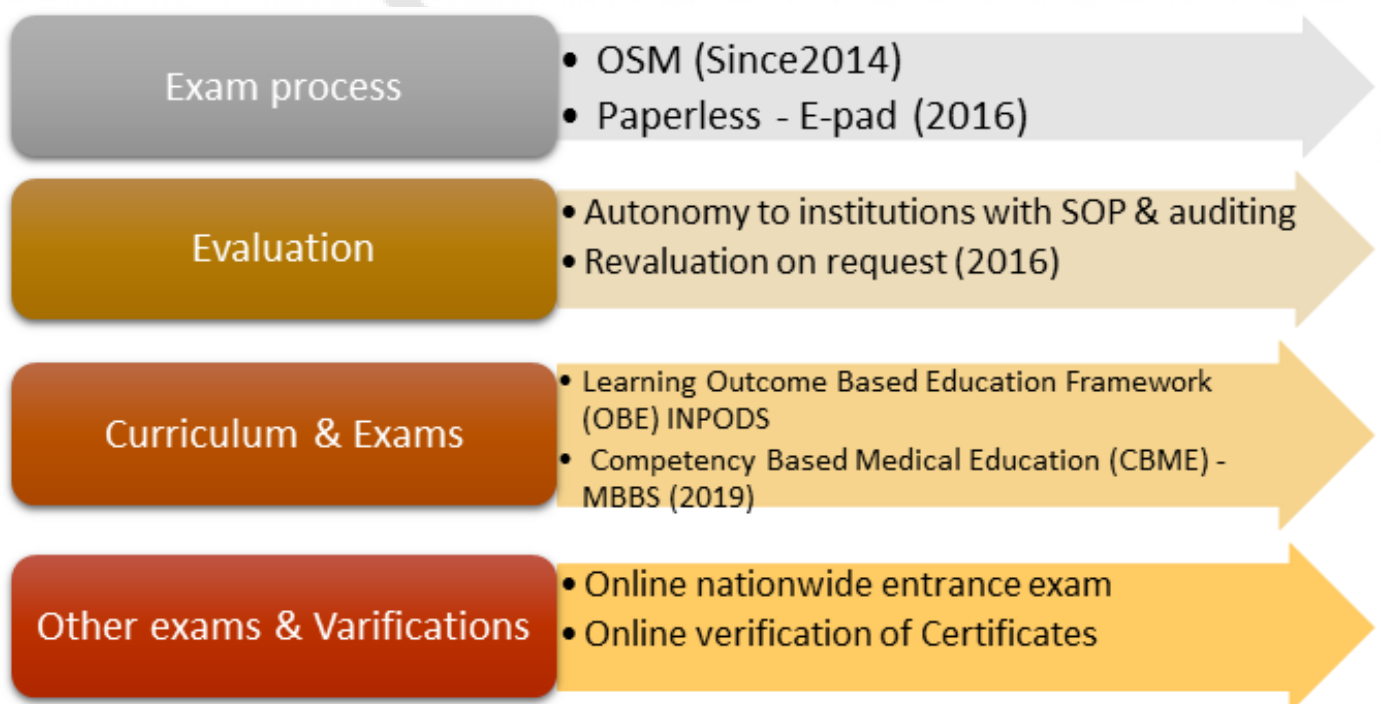
MAHE has initiated providing autonomy in assessment to some of the constituent units/institutions for the conduct of examinations as per an approved standard operating procedure. This decentralisation improves accountability, sense of ownership and operational efficiency to a great extent. The Office of the Registrar-Evaluation audits the process periodically. Periodic external audits of the examination process are also carried out.

Full academic transparency for the learner and academic data is made available to all stakeholders with the help of a custom made Microsoft Dynamics based Enterprise Resource Planning(ERP) called 'Student Life Cycle Management System(SLCM)' with finance gateway integrated. SLCM also allows students to apply for the "paper seeing" and revaluation by making the necessary payment online. As per the UGC guidelines, MAHE has introduced "revaluation on request" since 2016.

During the last five years, most of the institutions of MAHE have reformed their curriculum from the conventional system to the choice based credit system (CBCS), and converted their academic cycles from annual to semester. From the 2019 batch onwards, competency based medical education (CBME) is being implemented for the MBBS program. Learning Outcome Based Education Framework (OBE) is implemented in all applicable programs, and computation of attainment of PEO, PLO and CLO is being initiated. Internal assessment marks to final examination marks ratio followed in a majority of courses stands at about 50:50.

Online platforms are also being used for conducting MAHE entrance examinations nationwide. Student registration, fee payment, slot selection, writing the examination, analysing the scores and preparing the rank list are managed through this transparent and fully automated system.

MAHE permits online verification of Certificates and Transcripts by both internal and external stakeholders. The latest addition to this process is the initiation of uploading the students' marks cards and degree certificates to the National Academic Depository.



| File Description | Document |
|---|-------------------------------|
| Link for details of examination reforms implemented during the last 5 years | View Document |
| Link for additional information | View Document |

2.5.5 Status of automation of the Examination division, using Examination Management System (EMS) along with an approved online Examination Manual

1. Complete automation of entire division & implementation of the Examination Management System (EMS)
2. Student registration, hall ticket issue & result processing
3. Student registration and result processing
4. Result processing
5. Manual methodology

Response: Any one of the above

| File Description | Document |
|--|-------------------------------|
| The present status of automation., Invoice of the software, & screenshots of software | View Document |
| Snap shot of the EMS used by the institution | View Document |
| Institutional data in prescribed format | View Document |
| Copies of the purchase order of the software/AMC of the software | View Document |
| Annual report of examination including present status of automation as approved by BOM / Syndicate / Governing Council | View Document |
| Link for additional information | View Document |

2.6 Student Performance and Learning Outcomes

2.6.1 The institution has stated learning outcomes /graduate attributes as per the provision of Regulatory bodies which are integrated into the assessment process and widely publicized through the website and other documents

Response:

Adherence to regulatory body guidelines vis-à-vis learning outcomes and graduate attributes is given utmost importance at MAHE. The adherence is reinforced by assessment methods which are well aligned with these outcomes. The learning outcomes in the form of Program Education Objectives (PEO), Program Outcomes (PO) and Course Outcomes (CO) of all institutions are well delineated and posted on the

university website for all stakeholders to be aware of. There is elaborate mapping of COs to POs. The graduate attributes or qualification descriptors are listed and described for clarity.

MCON, the college of nursing at MAHE has oriented its curriculum and assessment in lieu with guidelines of the Indian Nursing Council (INC), the national statutory body that regulates the nursing curriculum in order to have a uniform standard of nursing education in the country. MCOPS states in great detail 16 course outcomes for their B.Pharm. course, and that is emulated as per context by all other institutions.

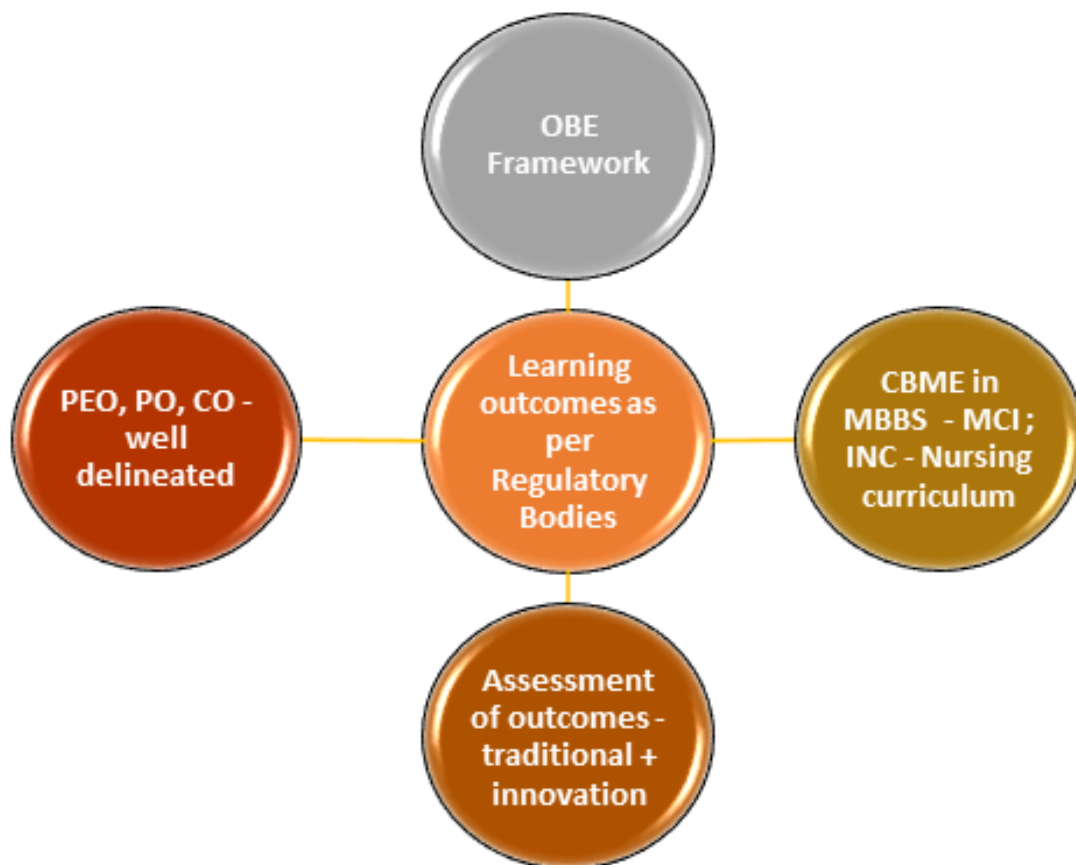
MAHE not only adheres to the prescribed guidelines, but also quickly adopts any change brought about by regulatory bodies, and adapts to the system. When the Medical Council of India brought about curriculum changes, our medical schools designed the Outcome Based Education (OBE) modules and assessment system for programme objectives (PO) and course outcomes (CO), and also saw to the implementation of Attitude, Ethics and Communication (AETCOM) competencies that have been recently introduced.

The process for designing program curriculums is meticulous, scientific, holistic and cooperative. Curriculum design is carried out after taking inputs from faculty, industry, alumni, and students. The department faculty council and administrative bodies like the Department Curriculum Committee, Board of Studies and Academic Council then, in a consultative fashion, fine-tune any change in curriculum.

The various Centers of Excellences under MAHE follow best practices in designing learning outcomes for the programs they administer and delineate graduate attributes. All assessment modalities are in line with those recommended by regulatory authorities. All MAHE institutions follow both summative and formative assessment to test for cognitive, psychomotor and affective domains in learning outcomes. The assessment designs are again made known to all stakeholders by publishing it in website, informing students and parents during orientation and during other sessions that deal with examinations.

Assessment methods include weekly quizzes, class tests, sessional examinations, end semester examinations, assignments and presentations. In addition to these, a number of novel assessment methods are employed by a few institutions. For instance, the Department of Design has a review and feedback from industry experts for their portfolio development subject, MMMC factors in undergraduate research, and so on.

A lot of detailing has gone into constructing an Outcome Based Education Framework for all institutions under MAHE. From a broader view of what qualities a graduate of the institution should possess to attributing competencies, and to hundreds of learning objectives of scores of subjects, the institutions have laid a clear path for our major stakeholders – our students.



| File Description | Document |
|---|-------------------------------|
| Link for relevant documents pertaining to learning outcomes and graduate attributes | View Document |
| Link for methods of the assessment of learning outcomes and graduate attributes | View Document |

2.6.2 Incremental performance in Pass percentage of final year students during last five years

Response: 90.68

2.6.2.1 Number of final year students of all the programmes, who qualified in the university examinations in each of the last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 6931 | 6171 | 5846 | 5654 | 5382 |

2.6.2.2 Number of final year students of all the programmes, who appeared for the examinations in each of the last five years

| | | | | |
|---------|---------|---------|---------|---------|
| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
| 7170 | 6870 | 6519 | 6311 | 5796 |

| File Description | Document |
|--|-------------------------------|
| Trend analysis in graphic form (Refer annexure 02 of SOP) | View Document |
| List of Programmes and the number of students appeared and the number of students passed in the final year examination each year for the last five years | View Document |
| Institutional data in prescribed format | View Document |
| Annual reports of examination results as placed before BOM/ Syndicate/ Governing Council for the last five years | View Document |

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Response: 3.05

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

Criterion 3 - Research, Innovations and Extension

3.1 Promotion of Research and Facilities

3.1.1 The institution has a well defined Research promotion policy and the same is uploaded on the institutional website

Response:

Research and Innovation contributes to advancement of knowledge and facilitates addressing societal challenges. The knowledge emanating from educational institutions in the form of research is widely disseminated in various forms including scientific publications, presentations at conferences, protection through intellectual property and developing products. Manipal Academy of Higher Education (MAHE) has been at the forefront of imparting quality education in the country. Apart from being an educational institution, MAHE has laid great emphasis on research advancement in recent years. In order to support and promote research and development activities of MAHE among its stakeholders such as faculty members, research scholars and students, MAHE has a well-established research promotion policy. The policy provides comprehensive information and holistic approach to promote research among its constituent units. MAHE has added about 60000 sq ft of research, innovation and incubation facilities in the last five years. Significantly, MAHE spent about 150 crores INR per year on research related activities thereby enabling faculty members to immerse in basic and applied research.

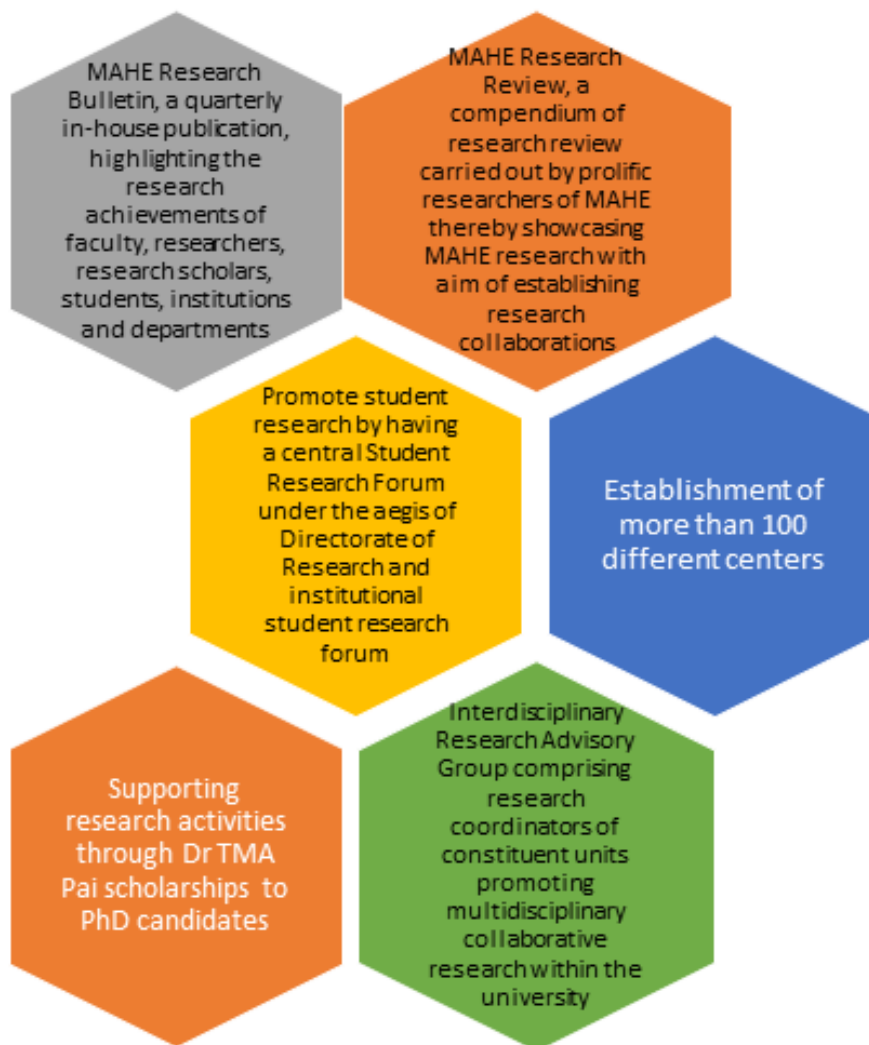
In order to strengthen research at MAHE, Directorate of Research was established with following Vision, Mission and Objectives.



In order to fulfil the objectives listed above, MAHE, through its Directorate of Research, has taken proactive steps resulting in improved performance of research, which is evident from the significant

improvement in the number of research publications in Scopus indexed journals and research grants received from national and international funding agencies. MAHE also encourages research publications through a research incentive scheme, which is unique and encourages researchers to publish their research in high quality journals with good impact factors.

Additionally, MAHE offers, seed funding to carry out research in the form of seed money and intramural funding, which has substantially increased in the past few years. Apart from seed funding, MAHE disseminates research activities of the university through the following means:



Going a step further, Manipal Academy of Higher Education became the first university in the country to sign an open access agreement with SpringerNature for an amount close to 3 cr INR , wherein the cost of Article Processing Charges (APC) would be absorbed by MAHE thus, facilitating researchers to publish in open access journals.

MAHE's Intellectual Property Policy that covers protecting research and innovation, facilitates filing intellectual property in the form of patents, designs, copyrights, and trademarks by absorbing the filing and prosecuting cost is aimed at encouraging a culture of research among the members. Intellectual Property Policy, which falls under the overall ambit of Research Promotion Policy, has substantially improved intellectual property filing in recent years.



| File Description | Document |
|---|-------------------------------|
| Minutes of the meetings of Governing Council/ Syndicate/Board of Management related to research promotion policy adoption | View Document |
| Document on Research promotion policy | View Document |
| Link for additional information | View Document |

3.1.2 The institution provides seed money to its teachers for research (average per year)

Response: 188.42

3.1.2.1 The amount of seed money provided by institution to its faculty year-wise during the last five years(INR in Lakhs)

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 30.78 | 320.40 | 193.46 | 236.13 | 161.34 |

| File Description | Document |
|---|-------------------------------|
| Minutes of meetings of the relevant bodies of the University | View Document |
| List of teachers receiving seed money and details of seed money received | View Document |
| Institutional data in prescribed format | View Document |
| Budget and expenditure statements signed by the Finance Officer indicating seed money provided and utilized (Refer annexure number -01) | View Document |
| Any additional information | View Document |
| Link for additional information | View Document |

3.1.3 Average Percentage of teachers awarded national/ international fellowship / Financial support for advanced studies/collaborative research participation in Indian and Overseas Institutions during the last five years

Response: 39.14

3.1.3.1 Number of teachers awarded national/ international fellowship / Financial support for advanced studies/collaborative research and conference participation in Indian and Overseas Institutions year-wise during the last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 386 | 1039 | 1161 | 1160 | 1105 |

| File Description | Document |
|---|-------------------------------|
| List of teachers and their national/international fellowship details | View Document |
| Certified e-copies of the award / recognition letters of the teachers | View Document |
| Link for additional information | View Document |

3.1.4 Number of JRFs, SRFs, Post Doctoral Fellows, Research Associates, other research fellows in the university enrolled during the last five years

Response: 832

3.1.4.1 The Number of JRFs, SRFs, Post Doctoral Fellows, Research Associates and other research fellows

in the university enrolled year-wise during the last five years

| | | | | |
|---------|---------|---------|---------|---------|
| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
| 141 | 202 | 152 | 159 | 178 |

| File Description | Document |
|---|-------------------------------|
| Registration and guide / mentor allocation by the institution | View Document |
| List of research fellows and their fellowship details | View Document |
| Institutional data in prescribed format | View Document |
| E copies of fellowship award letters | View Document |
| Any additional information | View Document |
| Link for additional information | View Document |

3.1.5 University has the following facilities

1. Central Research Laboratory / Central Research Facility
2. Animal House/ Medicinal Plant Garden / Museum
3. Media laboratory/Business Lab/e-resource Studios
4. Research/Statistical Databases/Health Informatics
5. Clinical Trial Centre

Response: All of the above

| File Description | Document |
|--|-------------------------------|
| List of facilities available in the university and their year of establishment | View Document |
| Institutional data in prescribed format | View Document |
| Videos and geo-tagged photographs | View Document |
| Link for additional information | View Document |

3.1.6 Percentage of departments with recognition by ICMR-CAR, DST-FIST, DBT, MCI, DCI, PCI, AICTE, AYUSH, NACO, WHO, NIH etc. and other similar recognitions by national and international agencies, (excluding mandatory recognitions by Regulatory Councils for UG /PG programmes)

Response: 60.12

3.1.6.1 The Number of departments with recognition by ICMR-CAR, DST-FIST, DBT, MCI, DCI, PCI, AICTE, AYUSH, NACO, WHO, NIH etc. and other similar recognitions by national and international agencies

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 26 | 23 | 19 | 18 | 15 |

3.1.6.2 Number of departments offering academic programmes year - wise during last five years.

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 37 | 35 | 32 | 32 | 32 |

| File Description | Document |
|--|-------------------------------|
| Institutional data in prescribed format | View Document |
| e-version of departmental recognition award letters | View Document |
| Details of the departments offering academic programmes certified by the head of the Institution /University | View Document |
| Link for additional information | View Document |

3.2 Resource Mobilization for Research

3.2.1 Total Grants for research projects / clinical trials sponsored by non-government sources such as industry, corporate houses, international bodies, endowments, professional associations, endowment-Chairs etc., in the Institution during the last five years

Response: 2866

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

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 180 | 669 | 850 | 590 | 577 |

| File Description | Document |
|---|-------------------------------|
| Institutional data in prescribed format | View Document |
| e-copies of the grant award letters for research projects sponsored by non-government organizations | View Document |
| e-copies of grants awarded for clinical trials | View Document |

3.2.2 Grants for research projects/clinical research project sponsored by the government funding agencies during the last five years

Response: 12801

3.2.2.1 Grants for research projects/clinical trials sponsored by government sources year-wise during the last five years (INR in Lakhs)

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 1731 | 1690 | 1909 | 2837 | 4634 |

| File Description | Document |
|--|-------------------------------|
| Institutional data in prescribed format | View Document |
| E-copies of the grant award letters for research projects sponsored by government agencies | View Document |
| Link for additional information | View Document |

3.2.3 Ratio of research projects/clinical trials per teacher funded by government/industries and non-government agencies during the last five years.

Response: 1:1

3.2.3.1 Number of research projects/clinical trials funded by government/industries and non-government agencies year-wise during the last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 311 | 322 | 279 | 300 | 205 |

| File Description | Document |
|--|-------------------------------|
| Supporting document/s from Funding Agencies | View Document |
| Institutional data in prescribed format | View Document |
| Copy of the letter indicating the sanction of research project funded by govt./non-govt agency and industry including details of name of teacher and amount in INR | View Document |
| Any other relevant information | View Document |
| Link for the funding agency website | View Document |

3.3 Innovation Ecosystem

3.3.1 Institution has created an ecosystem for innovations and entrepreneurship with an Incubation centre, entrepreneurship cell

Response:

MAHE strongly believes in supporting innovations for its stakeholders viz faculty, research scholars, staff and students. In its endeavor to create a holistic approach to address the need for nurturing ideas that could contribute to the betterment of society, an enabling ecosystem is established. The innovation and entrepreneurship ecosystem provides a one stop solution to innovators and entrepreneurs with an advantage of all facilities being available in a single campus. Manipal Academy of Higher Education has spent approximately one crore INR towards Innovation related activities in the last five years.



The entrepreneurship cells of constituent institutions organize events to instil the culture of entrepreneurship among faculty and students. The entrepreneurship cells work closely with the Incubators and Innovation Center for providing required guidance on innovations and start up formation.

This motivates many students and faculty to create their own start-ups. These start-ups are incubated at the state -of- the- art incubation facilities. The Manipal Universal Technology Business Incubator (MUTBI) is one of the 54 incubation centers, established in 2010 by National Science & Technology Entrepreneurship Development Board (NSTEDB), Department of Science & Technology (DST), Government of India.

Some of the start-ups incubated at MUTBI have pioneered products such as practice-based learning model for secondary schools, 3D Printers, paper pens and pencils. Low- cost Product prototypes have been developed for water generator, telescope, dental implants and a software for cloud enabled environment monitoring system for health.

The incubator facilitates the entrepreneurial support by providing required infrastructure in the form of office space, personal computers and internet connectivity as well as common infrastructure like conference rooms and teleconferencing facilities. In addition to this, the start-ups can also avail other services like the network of mentors and experts. The incubator also organises events and meetings with industry leaders, to facilitate networking of companies, to help showcase their technologies.

Some notable start-ups aided by the incubators include:

Fracktal Works Pvt. Ltd. (www.fracktal.in) (Founders: Varada Vijay Raghav and Rohit Asil)

Fracktal works offers following services:

Product & service offerings in rapid prototyping

Developers of a high resolution, affordable FDM type 3D printer series

Biomedical instrumentation developing EEG headsets for applications in the field of brain wave mapping & analysis.

Optiqur Oral Healthcare (Dr Kumar Siddharth and Dr Divya Mishra)

Manufacturers of Dental product.

Firexit Software Pvt. Ltd. (Vatsal Ambastha and Priti Ambastha)

Video game development for web and mobile platforms.

Porting and publishing services for multi-platform games.

Manipal - Government of Karnataka Bioincubator, is an initiative by Manipal Academy of Higher Education (MAHE) and the Government of Karnataka, under Manipal University Technology Business Incubation Society to facilitate Innovation and Incubation in the Bio-Medical Domain. This Incubation platform developed in 2019, aims to upscale innovations specializing in technology, propelling innovative ideas towards product commercialization. Thrust areas of Manipal-GOK Bioincubator include:

1. Biopharma
2. Biomedical Devices
3. Dental Innovation
4. Biotech
5. Diagnosis and Medical Healthcare

| File Description | Document |
|---|-------------------------------|
| Link for additional information | View Document |
| Geo-tag the facilities and innovations made | View Document |

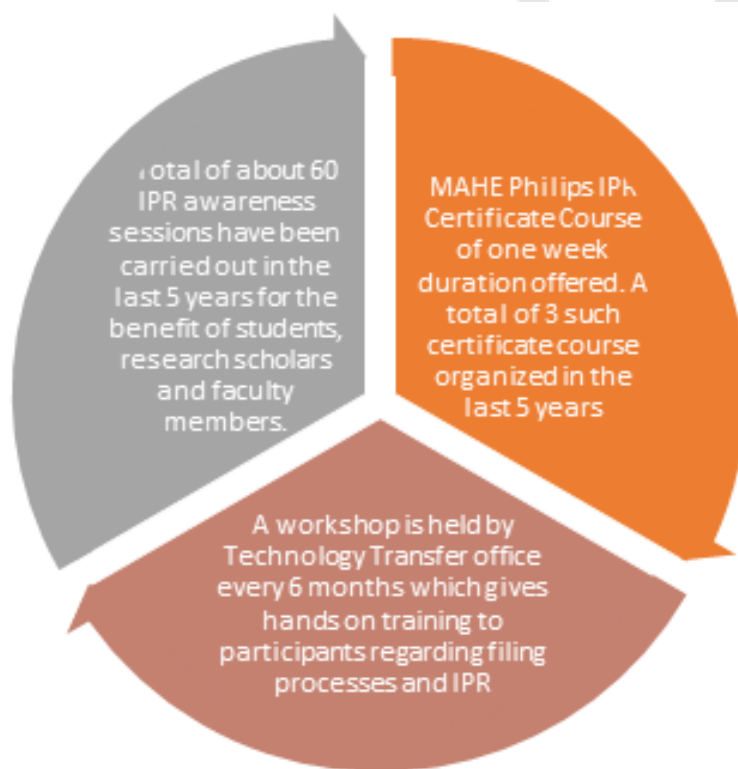
3.3.2 Workshops/seminars conducted on Intellectual Property Rights (IPR) Research methodology,

Good clinical Practice, Laboratory, Pharmacy and Collection practices, Research Grant writing and Industry-Academia Collaborations during the last five years

Response:

Workshops and seminars are being organized to increase awareness among the faculty, research scholars and postgraduate students of MAHE.

Intellectual Property Rights refers to the legal rights granted with the aim to protect the creations of the intellect. Intellectual property rights protect patents, copyright ,and trademarks, which enable people to earn recognition or financial benefit from what they invent or create. Workshops are held by university experts for creating awareness about processes followed . Special sessions by experts from different agencies are held to brief the researchers about IPR. MAHE has spent approximately 65 lakhs INR towards generation of IPR and its related activities in the last five years.



Research methodology is how a researcher systematically designs a study to ensure valid and reliable results that address the research aims and objectives. The newly appointed faculty are briefed about research methodology in the orientation program at the outset. They are also imparted with the knowledge of research ethics so that the research is carried ethically from the point of conception of an idea to publishing a paper. Experts from different indexing agencies also hold webinars and sessions for the faculty regarding nuances in research publication ethics.



Good clinical practice governs how clinical research trials of human subjects must be conducted. The training regarding protecting rights, welfare, and safety of study participants, assuring quality and validity of study data and results is given to all the researchers involved in clinical trials. The researchers are made aware of the standard operating procedures (SOPs) in conducting clinical research. Workshop and training sessions are held on good laboratory practices, good pharmacy and collection practices. Ethics committee members are also trained at regular intervals so that they are updated with the latest guidelines.

For a research university getting external grants is vital. The university facilitates and encourages the researchers to apply for national and international grants. The training regarding grants writing is being provided. Senior faculty acts as mentors and train the junior faculty in grant writing. External experts are also training our researchers about the nuances of grant writing skills. Grants office keeps the researchers updated with grant calls regularly. Researchers have an access to Mendeley portal to know about different grant calls across different disciplines.

Collaboration with industry is critical for academia to create scientific knowledge and obtain industrial data. In turn, collaboration with universities is crucial for organizations in joint, scientific-based research projects in order to develop solutions for production-sourced problems. The researchers from MAHE are collaborating with various industry partners and this is being facilitated by liaison officers of MAHE. The post graduate students are sent for training to different industries to get training and expertise. Many faculty researchers are pursuing joint collaborative research with industrial partners. The university provides support to the researchers who collaborate with industry.

| File Description | Document |
|--|-------------------------------|
| Any additional information | View Document |
| Link of the reports of the events | View Document |
| Link for list of workshops/seminars on the above during the last 5 years | View Document |
| Link for additional information | View Document |

3.3.3 Total number of awards / recognitions received for innovation / discoveries by the institution/teachers/research scholars/students during the last five years

Response: 557

3.3.3.1 Number of awards/recognitions received by the Institution/teachers/research scholars/students year-wise during the last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 63 | 142 | 177 | 90 | 85 |

| File Description | Document |
|--|-------------------------------|
| List of teachers who have received awards and recognition for innovation and discoveries | View Document |
| List of teachers and details of the national/international fellowships awarded | View Document |
| Institutional data in prescribed format | View Document |
| E-Copies of award letters (scanned or soft copy) for innovations with details of the awardee the and awarding agency | View Document |
| Link for additional information | View Document |

3.3.4 Number of start-ups incubated on campus during the last five years

Response: 37

3.3.4.1 Total number of start-ups incubated on campus year-wise during the last five years (a startup to be counted only once)

| | | | | |
|---------|---------|---------|---------|---------|
| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
| 19 | 9 | 0 | 5 | 4 |

| File Description | Document |
|---|-------------------------------|
| Registration letter | View Document |
| Institutional data in prescribed format | View Document |
| Contact details of the promoters | View Document |
| Certified e- sanction order for the start-ups on campus | View Document |
| Any additional information | View Document |
| Link for additional information | View Document |

3.4 Research Publications and Awards

3.4.1 The Institution has a stated Code of Ethics for research, the implementation of which is ensured by the following:

- 1. Research methodology with course on research ethics**
- 2. Ethics committee**
- 3. Plagiarism check**
- 4. Committee on Publication guidelines**

Response: All of the above

| File Description | Document |
|---|-------------------------------|
| Minutes of meetings of the relevant committees with reference to the code of ethics | View Document |
| Institutional data in prescribed format | View Document |
| Institutional code of Ethics document | View Document |
| Institutional code of ethics document | View Document |
| Details of committee on publication guidelines | View Document |
| Course content of research ethics and details of members of ethical committee | View Document |
| Copy of software procurement for plagiarism check | View Document |
| Any additional information | View Document |
| Link for additional information | View Document |

3.4.2 The Institution provides incentives for teachers who receive state, national or international recognitions/awards.. Option 1. Career Advancement
2. Salary increment
3. Recognition by Institutional website notification
4. Commendation certificate with cash award

Response: A. All of the above

| File Description | Document |
|---|-------------------------------|
| Snapshots of recognition of notification in the HEI's website | View Document |
| Policy on salary increment for the awardees | View Document |
| Policy on Career advancement for the awardees | View Document |
| List of the awardees and list of awarding agencies and year with contact details for the last 5 years | View Document |
| Institutional data in prescribed format | View Document |
| Copy of commendation certificate and receipt of cash award | View Document |
| Link for additional information | View Document |
| Incentive details (link to the appropriate details on the Institutional website) | View Document |

3.4.3 Total number of Patents/ Copyrights published/awarded/technology-transferred during the last five years..

Response: 143

3.4.3.1 Number of Patents/ Copyrights published/awarded/ technology-transferred year-wise during the last five years..

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 40 | 40 | 39 | 11 | 13 |

| File Description | Document |
|--|-------------------------------|
| Technology transfer document | View Document |
| List of patents/Copyrights and the year they were published/awarded | View Document |
| Institutional data in prescribed format | View Document |
| Certified E- copies of the letters of award/ publications (consolidated statements by the head of the institution) | View Document |
| Any additional information | View Document |
| Link for additional information | View Document |

3.4.4 Average number of Ph.D/ DM/ M Ch/ PG Degree in the respective disciplines received per recognized PG teacher of the Institution during the last five years.

Response: 1.59

3.4.4.1 Number of Ph.D.s /DM/M Ch/PG degree in the respective disciplines awarded per recognized PG teacher of the Institution year-wise during the last five years.

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 655 | 830 | 823 | 834 | 700 |

3.4.4.2 Number of PG teachers recognized as guides by the Regulatory Bodies / Universities during the last five years

| | | | | |
|---------|---------|---------|---------|---------|
| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
| 534 | 496 | 469 | 462 | 453 |

| File Description | Document |
|--|-------------------------------|
| Recognition letters by the University as eligible teachers to guide Ph D / DM / M Ch students | View Document |
| List of PhD / DM / M Ch candidates with details like name of the guide, title of the thesis, year of award, award letter etc | View Document |
| Institutional data in prescribed format | View Document |
| Link for research page in the institutional website | View Document |
| Link for additional information | View Document |

3.4.5 Average Number of research papers per teacher in the approved list of Journals in Scopus / Web of Science/ PubMed during the last five calendar years

Response: 8.5

| File Description | Document |
|---|-------------------------------|
| Names of the indexing databases | View Document |
| Institutional Data in prescribed format | View Document |

3.4.6 Average Number of research papers per teacher in the approved list of Journals notified in UGC-CARE list during the last five calendar years

Response: 0

| File Description | Document |
|---|-------------------------------|
| Names of the indexing databases | View Document |
| Institutional data in prescribed format | View Document |

3.4.7 Total Number of books/ chapters in edited volumes and papers in National/International conference-proceedings published per teacher and indexed in Scopus/Web of Science/ PubMed UGC-CARE list during the last five calendar years

Response: 0.08

| File Description | Document |
|---|-------------------------------|
| List of names of publishers : National/ International | View Document |
| Institutional data in prescribed format | View Document |

3.4.8 Bibliometrics of the publications during the last five calendar years based on average Citation Index in Scopus/ Web of Science

Response: 5.86

| File Description | Document |
|---|-------------------------------|
| List of the publications during the last five years | View Document |
| Institutional data in prescribed format | View Document |

3.4.9 Provide Scopus/ Web of Science – h-index of the Institution for the last 5 calendar years.

Response: 69.5

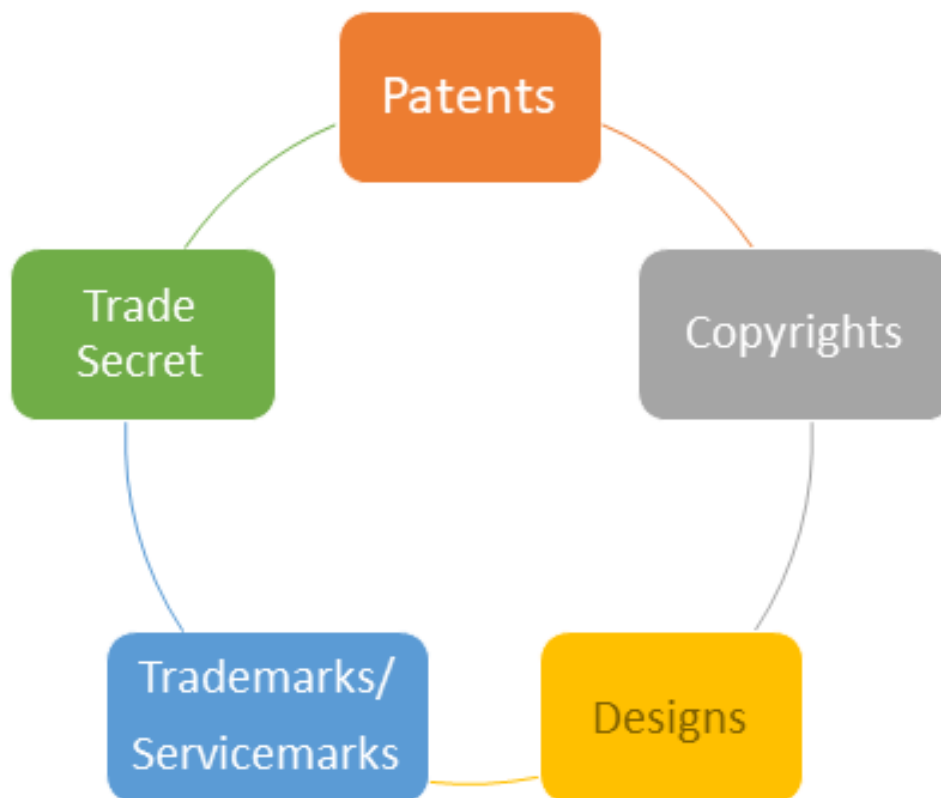
| File Description | Document |
|--|-------------------------------|
| Institutional data in prescribed format | View Document |
| Bibliometrics of publications based on Scopus/ Web of Science - h-index of the Institution | View Document |

3.5 Consultancy

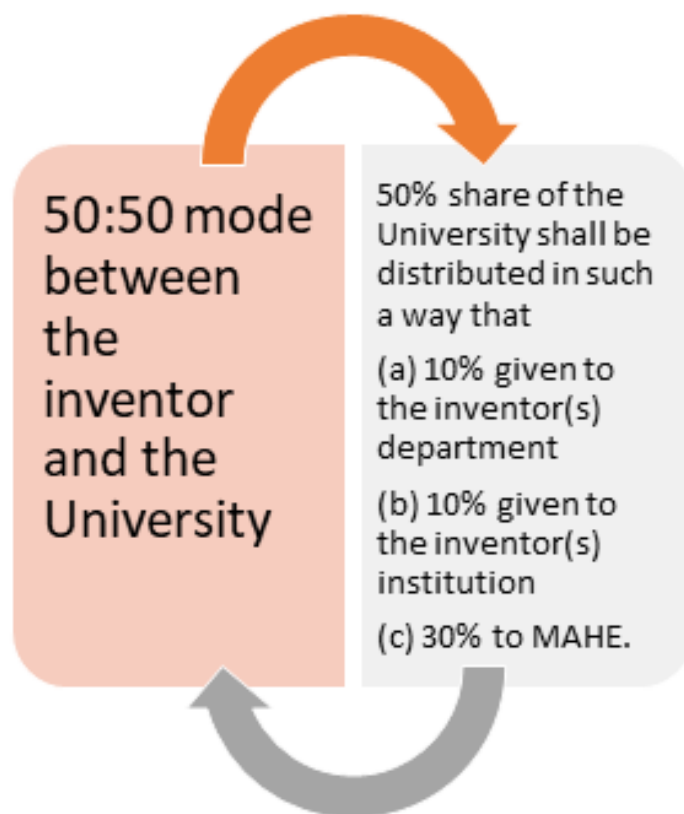
3.5.1 Institution has a policy on IPR and consultancy including revenue sharing between the Institution and the individual, besides a training cum capacity building programme for teachers, students and staff for undertaking consultancy

Response:

Manipal Academy of Higher Education (MAHE), Manipal has IPR/Consultancy policy that is applicable for employees, faculty members, staff (permanent and temporary), visiting scholars, fellows, research scholars, and students associated with MAHE, but not limited to, those who are directly under the University payroll and/or receive assistance in the form of fellowships, scholarships, honorarium, either from MAHE or from outside government and private institutions and agencies. The IPR policy broadly covers following domains of IP..



The University holds the IP wherein University resources are used whereas the author can retain the ownership of the copyright of original work and eligible for financial gain as per the conditions of MAHE. In instances where the patent is owned by the University, the inventor(s) has(ve) the right on such form of the intellectual property till the time protection of such IP is agreed upon by the University and inventor(s). The University reserves the right to initiate discussions on sales/license or technology transfer of patents or other forms of intellectual property, as the case may, and which are deemed suitable for such activity. Upon a successful outcome through sale/license or technology transfer, the revenue sharing from either sale/license or transfer of technology shall be as specified in the royalty terms.



MAHE faculty members are actively engaged in rendering their expertise to industry or an external agency in the form of consultancy. Several such faculty members have been appointed as consultants which cements the credibility of research and faculty expertise. For consultancy, the PI/Consultant/Project Coordinator/Co-Investigator has a revenue share of 60% in the form of incentive payable to him/her and the balance 40% is retained with the parent institution for re-investing in research activities. The maximum limit of revenue generation for faculty per year is 20 lakh INR. In case of clinical trials sponsored by the Centre of Clinical Excellence attached to the Department of Pharmacology, KMC, Manipal, the institutional share will be divided between the Department of Pharmacology and the parent institution on a 15:85 basis.

| File Description | Document |
|---|-------------------------------|
| Any additional information | View Document |
| Link to the soft copy of the IPR and Consultancy Policy | View Document |
| List of the training / capacity building programmes conducted during the last 5 years. | View Document |
| Link of the Minutes of the Governing Council/ Syndicate/Board of Management related to IPR and consultancy policy | View Document |

3.5.2 Revenue generated from advisory / R&D /consultancy projects (exclude patients consultancy) including Clinical trials during the last five years

Response: 12708

3.5.2.1 Amount generated from consultancy year-wise during the last five years (INR in lakhs)

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 571 | 1992 | 1246 | 2488 | 6411 |

| File Description | Document |
|--|-------------------------------|
| List of consultants and details of revenue generated by them | View Document |
| Institutional data in prescribed format | View Document |
| CA certified copy/Finance Officer Certified copy attested by head of the institute (Refer annexure number -01) | View Document |
| Audited statements of accounts indicating the revenue generated through consultancy / clinical trials | View Document |
| Any additional information | View Document |

3.6 Extension Activities

3.6.1 Extension and outreach activities such as community Health Education, Community health camps, Tele-conferences, Tele-Medicine consultancy etc., are conducted in collaboration with industry, community, Government and non- Government Organizations engaging NSS/NCC/Red cross/YRC, institutional clubs etc., during the last five years

Response: 2965

3.6.1.1 Number of extension and outreach activities conducted in collaboration with industry, community Government and Non-Government Organisations engaging NSS/NCC/Red cross/YRC, institutional clubs etc., year-wise during the last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 289 | 735 | 663 | 751 | 527 |

| File Description | Document |
|---|-------------------------------|
| Reports of the events organized | View Document |
| Photographs or any supporting document in relevance | View Document |
| Institutional data in prescribed format | View Document |
| Geo-tagged photographs of events / activities | View Document |
| Detailed program report for each extension and outreach program should be made available, with specific mention of number of students and collaborating agency participated | View Document |
| Description of participation by NSS/NCC/Red cross/YRC, Institutional clubs etc., year-wise for the last 5 years | View Document |
| Any additional information | View Document |
| Link for additional information | View Document |

3.6.2 Average percentage of students participating in extension and outreach activities beyond the curricular requirement as stated at 3.6.1

Response: 83

3.6.2.1 Number of students participating in extension and outreach activities beyond the curricular requirement as stated at 3.6.1, year-wise during last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 10226 | 19950 | 20304 | 23881 | 23957 |

| File Description | Document |
|--|-------------------------------|
| Reports of the events organized | View Document |
| Geo tagged Photos of events and activities | View Document |
| Any additional information | View Document |
| Link for additional information | View Document |

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

Response:

Manipal Academy of Higher Education, Manipal has been at the forefront in reaching out to community through extension and outreach activities. The region has one of the lowest infant mortality rates in the country which is due to the healthcare facilities made accessible by MAHE to people in the region. Manipal Arogya Suraksha, a Group Family Healthcare scheme, offered by MAHE in collaboration with NGOs not only takes care of inpatient services but also offers a host of concessions and free consultations with the specialist on OP basis. The scheme provides each family with medical facilities of up to Rs 30,000.00 per year in case of in-patient services on a floater basis and unlimited OP facilities at concessional fee apart from Personal Accident benefit of Rs 30,000.00 for each member enrolled under the scheme.

- Manipal Arogya Suraksha scheme has a rare distinction of mention in ILO for the bold initiative aimed at mitigating the burden of ever-escalating health care cost and has effectively fulfilled its social obligations.

The Social Welfare Committee (SWC) is the philanthropic wing of the Student Council of KMC, Manipal empowers Girl child through a special welfare fund “Samsriti”

MCODS, Manipal organizes oral health camps at 5 satellites centers [Udupi, Saligram, Udyavara, Hebri, Hiriyadika] and at 7 schools in and around Udupi district to enhance awareness on oral health. A fully equipped mobile dental van delivers oral health care services at door step. This benefits the local community and facilitates student learning while inculcating service attitude among the students. Besides regular camps, institution has organized over 250 overnight camps in the last five years attending to about 36,000 patients. MCODES, for its extension and outreach activities in improving oral hygiene received the following recognition:

- U Sumithra and Ramanath Bhat award for Second Best community outreach program in the country awarded by Indian Association of Public Health Dentistry in the year 2015, and award given by Indian Association of Public Health Dentistry annually to recognize the dental institutions or organizations that organize oral health care awareness programs to the local community.
- Recognition and Appreciation from Government of Karnataka (Department of Collegiate Education) for conducting free dental check-up camp for college students.



MAHE has received a certificate from Guinness Book of Records for creating a world record in Hand Sanitizing Relay in the year 2016. A total of 3422 participants were involved in creating this record.

Departments of Emergency Medicine, Paediatrics and Community Medicine at Kasturba Medical College, Mangalore developed an innovative concept called Teddy Bear Clinic (TBC) to develop a sense of familiarity with the hospital environment in young children (4 to 7 years old), simultaneously giving them a chance to inculcate a sense of empathy and care. This fun filled and creative measure is an aid to help open their minds to different medical treatment options and build a healthy thought process that puts them at ease while accepting medical care when required. TBC concept received Maanyata Awards at St John's Auditorium Bangalore for innovative approach.

Limca Book of Records for creating Culinary Museum at Welcomgroup Graduate School of Hotel Administration

Invitation to participate in The Global Report on Effective Access to Assistive Technology (GReAT) Consultation, 22-23 August 2019 by World Health Organization, Geneva, Switzerland

Nomination in National Institute for Empowerment of Persons with Multiple Disabilities (NIEPMD) (Divyangjan), Tamilnadu

World Diabetes Foundation, Denmark, for successful execution of Diabetic Food Project in the Udupi district for raising awareness about diabetic foot care in the community



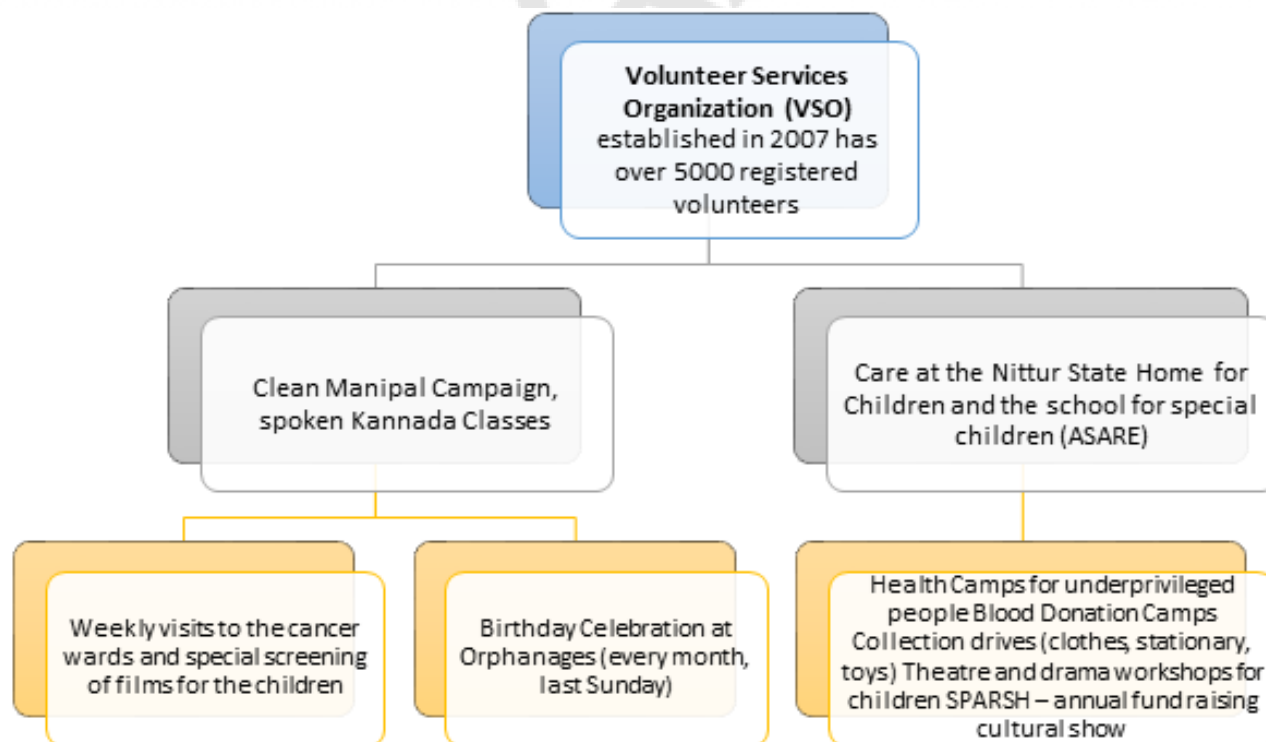
Kasturba Hospital, Manipal in association with Manipal Academy of Higher Education has created a World Guinness Record on the Global Hand washing day, Sanitizing Relay which was celebrated on the 15th October 2015 for the most number of participants of 3422.

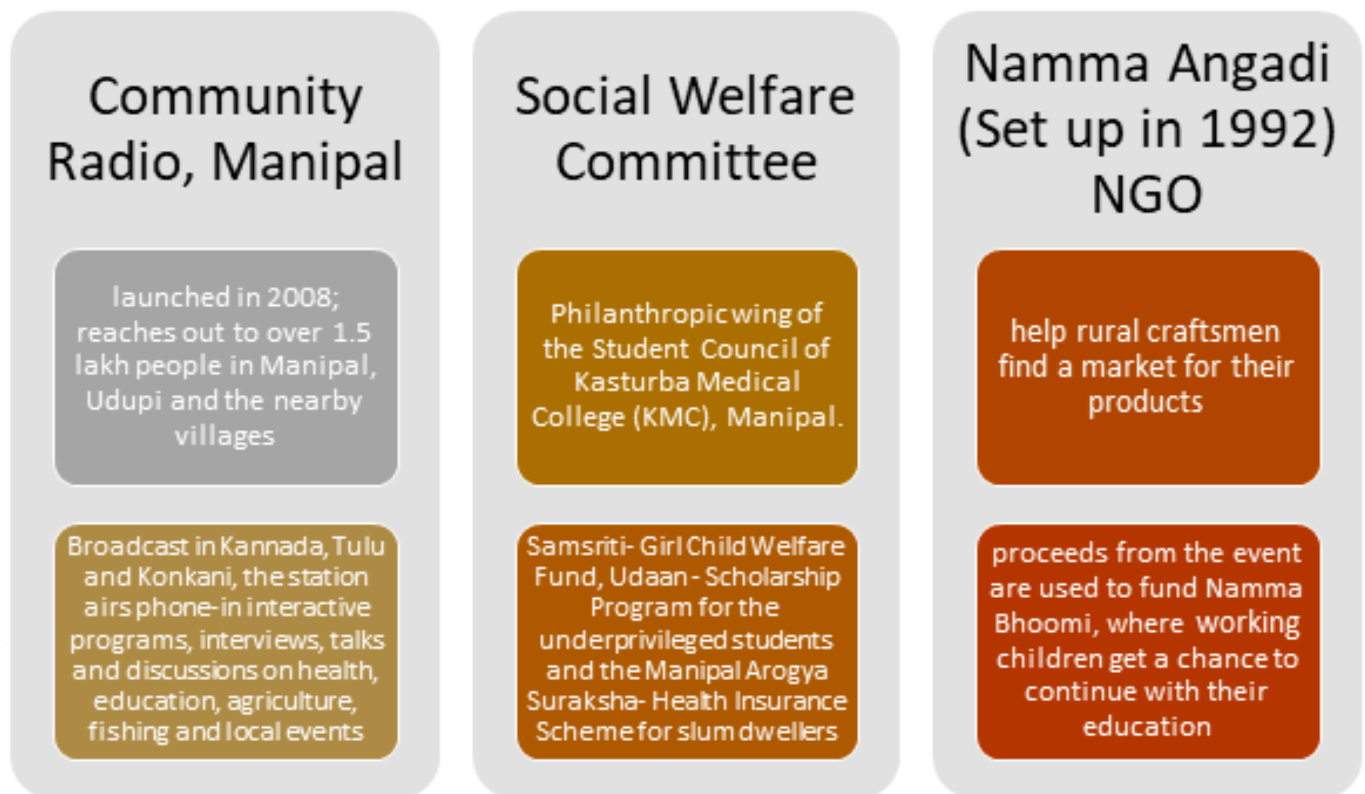
| File Description | Document |
|---|-------------------------------|
| Any additional information | View Document |
| Link for list of Government/other recognized bodies that have given the awards | View Document |
| Link for additional information | View Document |
| Link for number of awards for extension activities in the last 5 years- e-copy of the award letters | View Document |

3.6.4 Institutional social responsibility activities in the neighborhood community in terms of education, environmental issues like Swachh Bharath, health and hygiene awareness, delivery of free/ subsidized health care and socio economic development issues carried out by the students and staff, including the amount of expenditure incurred during the last five years

Response:

Manipal Academy of Higher Education (MAHE) has always been in the forefront of creating a positive impact on the society. Various projects are being undertaken where the students and faculty can contribute towards the benefit of the needy in the community.





Manipal Arogya Suraksha Scheme is a comprehensive healthcare facility aimed at providing quality health care at affordable cost. MAHE in association with NGOs and other organizations successfully implemented Manipal Arogya Suraksha Scheme in the year 2005 with a small base of around 6000 people. The member base has grown beyond 4 lakhs now.

Manipal Arogya Suraksha is a Group Family Healthcare scheme which not only takes care of inpatient services but also offers a host of concessions and free consultations with the specialist on OP basis. Additionally, the scheme also compensates for loss of life and disablement due to accident. Manipal Arogya Suraksha scheme has a rare distinction of mention in ILO for the bold initiative aimed at mitigating the burden of ever-escalating health care cost and has effectively fulfilled its social obligations.

Approximately INR 220 cr spent on Institutional Social Responsibility Activities during the last 5 years by MAHE

Amount spent towards education, environmental issues, Swachh Bharath, health and hygiene awareness, delivery of free/ subsidized health care and socio economic development issues carried out by the students and staff.

ASARE was conceived to lend support to the mentally challenged citizens. MAHE in collaboration with Archana Trust offered to provide a strong sense of support base to those who are unfortunately deprived of the natural mental growth due to varied reasons. ASARE aims to help the mentally challenged regardless of the degree or type of the disability, caste, creed, race or religion, community, economic, or social background. The objective is to create a better world for the specially abled people and instil in them the belief that attitude is the biggest need for progress and every obstacle could be overcome with a strong will. The members of ASARE are encouraged and trained in various vocational activities such as making of envelopes, paper bags, arecanut plates and greeting cards.

Homebelaku

Medium to long term stay and rehabilitation centre for the chronic mentally ill

provide the highest quality clinical care, a nurturing environment for healing, facilitation to integrate the person into society by training in daily living skills, developing work habits, improving social skills and fostering decision making abilities

Rain Water Harvesting

integral part of the Green Campus title of MAHE; rainwater collected in a feeder with capacity of 10000 litres per hour

filtered water is then used for domestic purposes after chlorination; also done by diverting storm water drains and run-off from rooftops to bore wells to recharge them

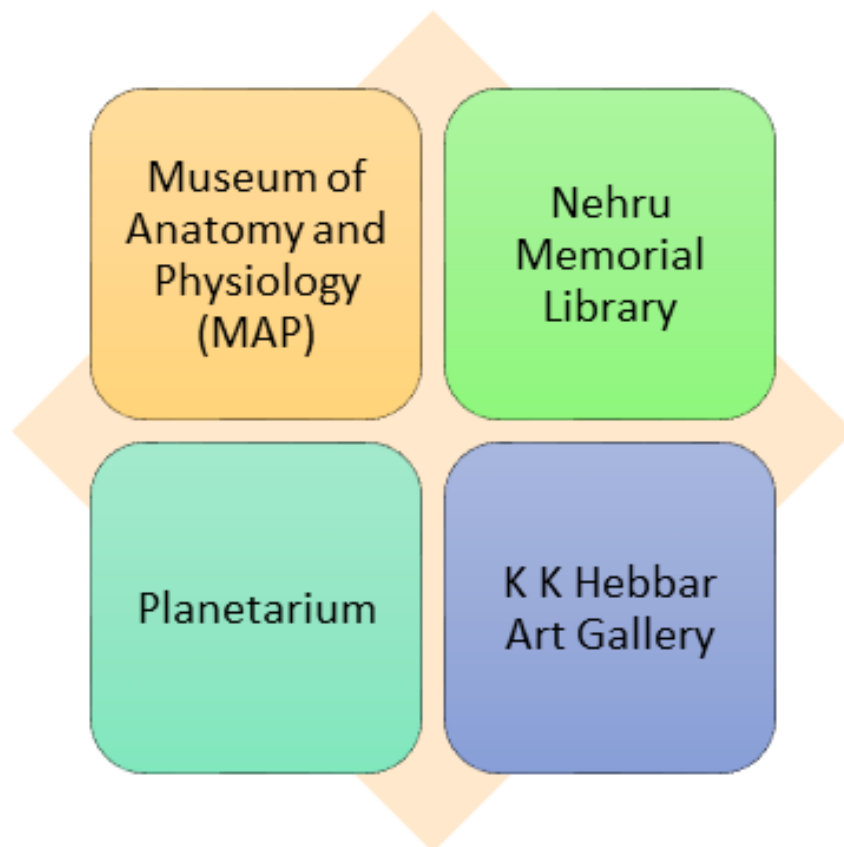
Namma Angadi (Set up in 1992) NGO

twice a week by a team of medical interns, health educator, a postgraduate students and faculty members

Includes health appraisal of school children, health education and training of school teachers.

RMCW (Rural Maternity and Child Welfare) Homes provide maternal and child health services. A network of 7 homes are managed by Department of community medicine, Kasturba Medical College, Manipal. These centres play a substantial role in providing MCH services to the local population.

The centres are equipped with a labour room, a ten bedded postnatal ward, a small laboratory and a minor OT round the clock maternity services. As many as 1200 deliveries are conducted in these centres every year. The clinics provide antenatal, postnatal services and care of under-fives inclusive of growth monitoring, immunization, treatment of illness etc. Besides these, family planning services such as tubectomies and IUD insertions are carried out routinely at these centres.



Museum of Anatomy and Physiology has more than 3000 anatomy specimens and is open to public, Nehru Memorial Library, public library, has rich collection of books and is available to the general public. Nehru Memorial Library can accommodate 50 people at a time and has a separate section for Children's books. Dr T M A Pai Planetarium, conducts astronomy shows for school children, college students and general public on a regular basis .

| File Description | Document |
|---|-------------------------------|
| Any additional information | View Document |
| Link for additional information | View Document |
| Links for Geo-tagged photographs of Institutional social responsibility activities (Refer annexure number -01 as per SOP) | View Document |

3.7 Collaboration

3.7.1 Average number of Collaborative activities for research, faculty exchange, student exchange/ Industry-internship etc per year

Response: 1267.8

3.7.1.1 Total number of Collaborative activities for research, faculty exchange, student exchange year-wise during the last five years

| | | | | |
|---------|---------|---------|---------|---------|
| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
| 701 | 1513 | 1419 | 1750 | 956 |

| File Description | Document |
|---|-------------------------------|
| Institutional data in prescribed format | View Document |
| Certified Copies of collaboration documents | View Document |
| Any additional information | View Document |
| Link for additional information | View Document |
| Link with collaborating Institutional website | View Document |

3.7.2 Presence of functional MoUs/linkages with Institutions/ industries in India and abroad for academic, clinical training / internship, on-the-job training, project work, student / faculty exchange, collaborative research programmes etc., during the last five years.

Response: 323

3.7.2.1 Number of functional MoUs / linkages for faculty exchange, student exchange, academics, clinical training, internship, on-the-job training, project work, collaborative research programmes etc., during the last five years.

Response: 323

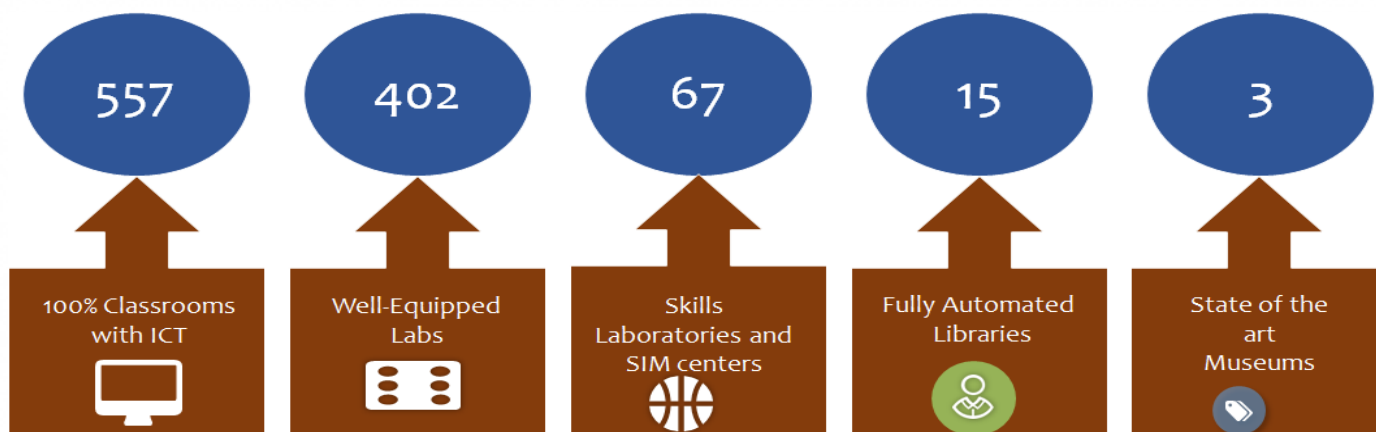
| File Description | Document |
|--|-------------------------------|
| Institutional data in prescribed format | View Document |
| E-copies of the functional MoUs with Indicating the start date and completion date | View Document |
| e-copies of linkage-related Documents | View Document |
| Any additional information | View Document |
| Link for additional information | View Document |

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1 The institution has adequate physical facilities for teaching – learning, skills acquisition etc

Response:



- With a promising, potent blend of academic experience and clinical exposure, the students opting for medical, dental and paramedical programmes at MAHE are certain to receive an enriching and immersive learning environment. This is credited, in large part, to the plethora of infrastructural facilities, being used innovatively to cater to their needs.
- MAHE's medical colleges are attached to much revered teaching hospitals, which provide hands-on clinical exposure to the students. Mangaluru campus was established in 1955 and has the honour of being the first college in the country to be established under a public-private partnership model (District government hospitals -Government Wenlock and Lady Goschen Hospitals). This has spawned a diverse clinical exposure and community outreach, which provide additional clinical experience to students. Both combined, cater to the training requirements of an undergraduate MBBS programme and over 70 postgraduate programmes. The Manipal campus, in addition, offers super speciality programmes across 10 disciplines. These hospitals are equipped with state-of-the-art diagnostic and therapeutic departments, enabling exposure to a wide range of medical and surgical ailments. MTMC ,Jamshedpur is linked to the excellent hospital infrastructure and clinical facility as a part of the consortium agreement.
- Undergraduates are rotated in all the wings of the hospital in their cumulative 4.5 years of programme. Postgraduates are rotated in various subspecialty departments for additional training, with hands-on training by experts in their respective fields. In order to foster a more enriching experience with respect to case discussion and teaching modules, the individual departments are equipped with the standard audio-visual aids such as LCD facility, Wi-Fi, smart classrooms and video-recording facilities. Each department has a permanent library. Few have also initiated interaction web series with distinguished alumni, to establish connectivity and collaborations.
- With an emphasis on collaborations, the medical colleges have engaged in multiple MoUs with national and international universities for student exchange programs, research and academic purposes. The advanced learners are offered clerkships and short-term electives, thus broadening the horizons of learning.
- Medical colleges have a total of 25 large lecture halls with a seating capacity of 200 each and 5

large seminar halls with a seating capacity of 500 each. Each department also houses a demonstration room/seminar hall for academic activities. Simulation laboratory, equipped with mannequin, offers effective training and research facility. The hospitals are well equipped for advanced and sophisticated surgeries such as coronary bypass and open-heart surgery, as well as kidney transplantation. The 280-bed cancer research hospital in Manipal (under the Manipal Comprehensive Cancer Care Centre) comprises a ten cluster Tumour Board to provide the best quality care to the cancer patients. It is also the first Comprehensive Cancer Care Centre in Coastal and Northern Karnataka. The Manipal Anatomy and Pathology museum is a treasure-trove of specimens, the largest in India, attracting students and public alike. The hospitals engage the postgraduates and interns in multiple community health camps, aiding the academic growth of the trainee, while inculcating counselling skills simultaneously.

- In a similar vein, the Manipal College of Dental Sciences (MCOADS) at both Manipal and Mangaluru campuses also offer dental undergraduate and postgraduate programmes. Innovative modules such as patient simulating phantom-head lab- training for preparing the dental tissues and live streaming of the demonstrations are effective teaching tools. In addition to the modern infrastructure, they also offer mannequin facility to train students on the intricacies involved in obtaining intraoral radiographs. Students are inducted into community-centred initiatives such as the ‘Tobacco-cessation clinic’ – involved in identification and counselling of patients with tobacco chewing habits, five satellite clinics at various places to extend the services of oral health care delivery, use of mobile dental vans and field visits.
- The thrust on effective paramedical teaching and training has also been a standout feature of MAHE. The Manipal College of Health Professions (MCHP) has the distinction of being the first institution in India exclusively dedicated to the education of allied health professionals. The institute offers diverse programmes ranging from medical laboratory technology, cardiovascular technology to occupational therapy. Community-based training is offered in various satellite centres affiliated to the hospital, rural health centres, and urban health centres. The interdisciplinary nature of the programmes is a singular feature that aims at an effective learning experience. The Department of Audiology and Speech Language Pathology at KMC, Mangaluru has collaborated with various clinical departments to develop initiatives such as Newborn hearing screening, Dysphagia Lab, Cochlear Implantation, Hearing Aid Clinic, Cognitive Communication Lab, Language Lab, Voice and Aerodynamic Lab, Nasalance Lab, Augmentative and Alternative Communication (AAC) Lab, and Vestibular rehabilitation Lab. Further, Manipal College of Nursing (MCON) provides students with first-hand experience in gaining clinical knowledge as they have access to the facilities of KMC, Manipal. Also, the locational advantage of MCON (it caters to the rural community of district- Udupi) enables students to engage with the rural health centres and community projects.
- The attributes of Manipal College of Pharmaceutical Sciences (MCOPS) are multi-pronged. With the objective of clinical exposure, ward rounds and discussion with clinicians at Kasturba Hospital are ingrained into the curriculum for the students of pharmacy practice department. The institute also houses a Central Animal Research Facility, Manipal-Schrodinger Centre for Molecular Simulations, Centre for Drug Testing, Translational Research Facility for Patient care, Technology Transfers to Industries for Drug Formulations that benefit the society etc., These are a few unique assets that attract students from India and overseas. In the field of life sciences, Manipal School of Life Sciences (MSLS), identified as TIFAC-CORE under vision 2020 in the area Pharmacogenomics, offers the best learning opportunities. For clinicians and patients, it provides timely state-of-the-art, not-for-profit diagnostics facilities through contemporary molecular, cytogenetics and imaging methodologies.
- Emphasis on experiential learning drives students of engineering at Manipal Institute of

Technology to engage in an array of major student projects ranging from artificial intelligence to rocketry apart from interdisciplinary projects. Exclusive facilities are provided to students, in addition to regular laboratories, outside the classroom to further intellectual curiosity.

| File Description | Document |
|---|-------------------------------|
| Any additional information | View Document |
| Links for Geotagged photographs of the facilities | View Document |
| Links for teaching- learning and skills acquisition facilities in the Institution | View Document |

4.1.2 The institution has adequate facilities to support physical and recreational requirements of students and staff – sports, games (indoor, outdoor), gymnasium, auditorium, yoga centre, etc. and for cultural activities


Response:

Sports and cultural Facilities

Athletic Tracks-2, Hockey grounds-3, Football grounds-6, Cricket fields-4, tennis courts-4, Volleyball courts-4, Throw ball courts-4, Basketball courts-6, Handball courts-3, badminton courts-3, swimming pool-2

Dr. TMA Pai International Convention Centre – 2100+ Seating Auditorium

MIT Quadrangle: 3000+ Capacity Cultural Activity Ground



2 Amphitheatres
Art Galleries & Centers

MARENA – Indoor sports complex with G-6+1 storied, 142000Sqft. area in Manipal G+2 storied, 74250Sqft area in Mangalore

Manipal Greens : 5000+ Capacity sports Activity Ground

700 Capacity Dr. TMA Pai Hall

The diversity of the students and the interdisciplinary nature of the campus make MAHE a hub for a plethora of cultural and sports activities.

Facilities for Sports and Games

The sports infrastructure at Manipal Academy of Higher Education is broadly categorised as follows:

- Medical Campus and MIT Campus Sports Facility, Manipal (outdoor facility)

- Marena Sports Complex, Manipal (indoor facility of 1,50,000 Sqft – established in 2009)
- Medical Campus Sports Facility, Mangaluru (74222 Sqft, established in 2012)

Outdoor sports facilities include athletic grounds (299134 Sqft – 01 no and 15752 Sqft -01 no), hockey grounds (71070 Sqft -02 nos, 35637 Sqft -01 no), football grounds (97726 Sqft- 02 nos, 40350 Sqft- 01 no, 33984Sqft – 03 nos), cricket fields (65m- 02 nos and 45m- 02 nos), tennis courts (04), volleyball courts (04), throw ball courts (04), basketball courts (06), handball courts (03), badminton courts (03), and swimming pool (33.5m – 01 no, 25m – 01 no).

Indoor Sports facilities include basketball courts (02), badminton courts (07), cricket practice pitch (with bowling simulator) (02), squash courts (06), table tennis (08), boxing ring (01), and gymnasiums (06).

The following Sports and Games Activities are organised every year:

- Inter collegiate tournaments for Men and Women
- Athletics, Basketball, Badminton, Chess, Cricket, Cross Country Race, Football, Hockey, Swimming, Squash, Table Tennis, Tennis, Throw ball and Volley ball matches and Best Physique contests.
- South Zone and Inter Zone Inter university tournaments
- National and International Conferences on Physical Education and Sports Sciences
- The individual institutions organise sports events: Inter-class competitions/tournaments, All India Inter Medical Tournament MIST and All India Inter Engineering tournament REVELS.

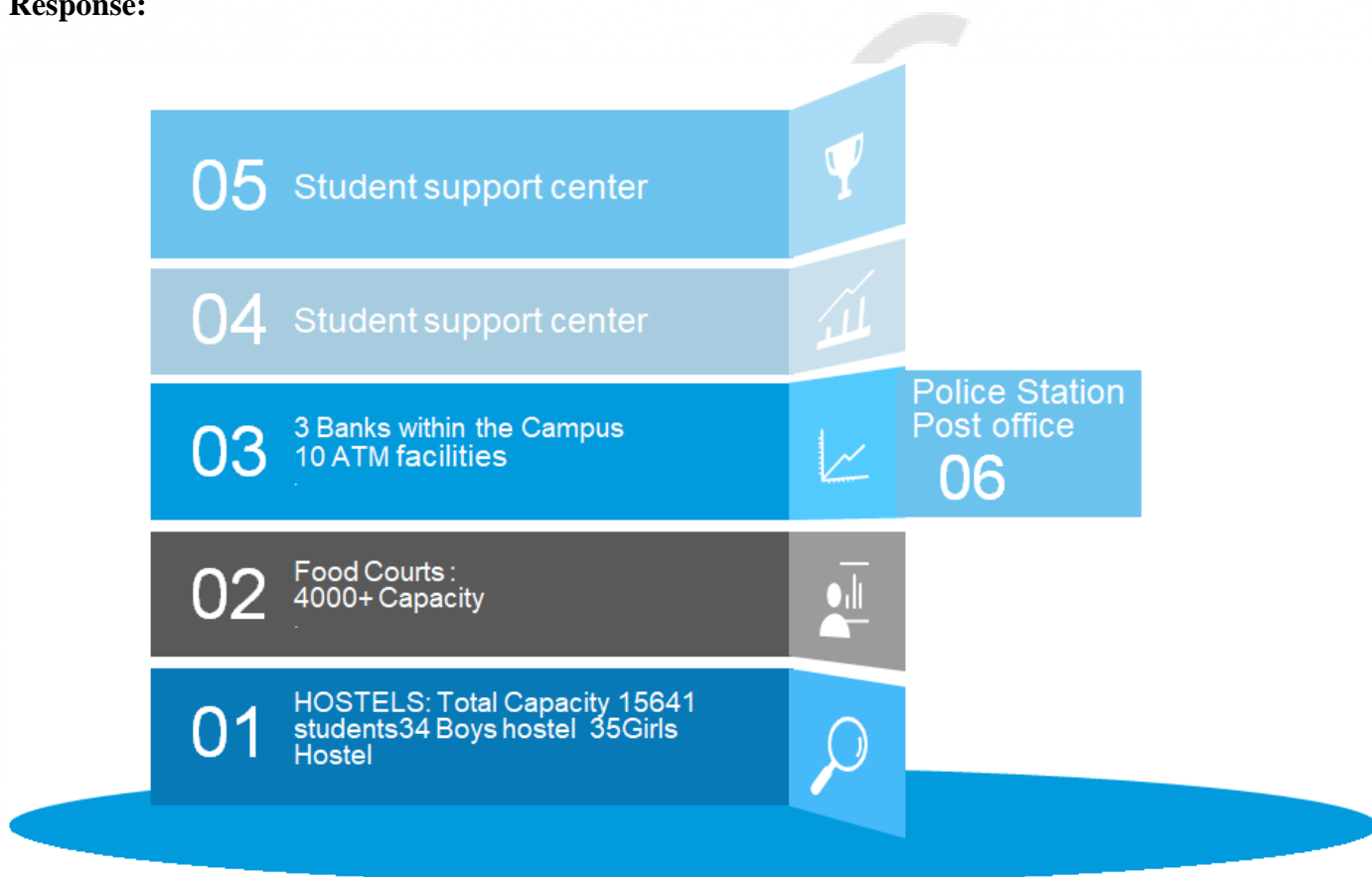
Facilities for Cultural Activities

MAHE campus offers a wide range of opportunities for students to engage in cultural activities. Every institute has its own set of student clubs dealing with diverse cultural activities. Apart from the regular Seminar Halls with a capacity of 200 in constituent units, MAHE has additional facilities. The Convention Centre (established in 2005) an auditorium with a capacity of 4000 in Mangaluru campus, MIT Quadrangle in Manipal with a capacity for 3000, and KMC Greens with a capacity for 6000 ensure that the activities cater to all the students of the campus. WGSHA's Chaitya Hall, with a capacity of 400 is an indoor hall for social gatherings, meetings or dining. KMC's TMA Pai Hall is an auditorium with a capacity of 800. Open air amphitheatres at MIT, Manipal and at Madhav Vihar offer the theatre enthusiasts a space for experimentation. The Hebbur Gallery and Art Center is a space that nurtures and encourages creative expression and art pedagogy that welcomes cross-disciplinary engagement with artists and other cultural practitioners. The Gangubhai Hanagal indoor stadium at Manipal Centre for Humanities with its up-to-date acoustic enabled facilities is used as a site for cultural extravagance. Yakshagana Kalakendra, a school for training Yakshagana, a folk art form of the region, offers unique learning opportunities to aspiring artistes.

| File Description | Document |
|---|-------------------------------|
| Any additional information | View Document |
| Links for Available sports and cultural facilities : geotagging | View Document |
| Link for additional information | View Document |

4.1.3 Availability and adequacy of general campus facilities and overall ambience

Response:



The Manipal Academy of Higher Education (MAHE) is spread across an area of approximately 600 acres and houses the Administrative buildings, Institutional buildings, Hostel blocks for boys(34) and girls(35) in both the medical campus (08+11 boys’ blocks and 14+9 girls’ blocks) and engineering campus (15 boys’ blocks and 12 girls’ blocks) and also residential dwellings for staff. Kasturba hospital caters to all health care requirements of students and staff through the Medicare scheme. The scheme allows access to the hospital facilities without the requirement of payment. The Student Clinic in KMC is specially set up to cater to the needs of students. Three large central food courts cater to the dining needs of the campus, apart from various canteens and shops located across the campus. Other amenities like post office, banks, ATMs are located in close vicinity of the campus. All areas within the campus are connected with metaled roads, which are well maintained, with adequate signposts. Other major utilities like sewage treatment, grey water treatment plants, potable water treatment plants are centrally located and monitored to ensure seamless operation. In order to cater to the parking of vehicles, a central multilevel car park with valet facility has been constructed that can house 700 cars and 300 two wheelers.

The department of general services is responsible for the supervision of estates, security and maintenance of all support services like ancillary, civil, electrical, HVAC, telecommunication, transportation fleet, plumbing & water supply. The various branches of the department maintain the entire infrastructure and are adept at managing challenges, risks and crisis to ensure smooth and seamless functioning of the institutions and hospitals in multiple locations.

The general service department is further sub-divided into *Civil department* which focuses on repair of buildings, replacement of concrete, plaster, masonry, wood, steel structures, painting, flooring work, roofing and manholes repairs. *Ancillary services* work on housekeeping, road cleaning, solid waste and garbage management, facade cleaning, pest control, horticulture, landscaping and plantations, waste management and composting. *Electrical department* maintains 33/11 kV substation & 36 nos. 11/0.433 kV substations and performs the critical function of 24/7 power supply. Uninterrupted backup power supply is ensured through DG sets. Inclusion of green energy is one of the priority areas of focus along with fuel efficiency. *Water supply and Plumbing works* act on plumbing complaints, supervise and monitor water supply system, operate and maintain sewage treatment plants and grey water treatment plants. *Air conditioning department* has 14 central chiller plants with 8,000 standalone equipment operating in the campus. The department contributes to effective cost saving by optimizing the use of resources and efficiency improvement. HVAC systems are upgraded to the best available energy efficient technology. Telecommunications department enables MAHE to communicate effectively with its constituent units via intercom and cellular services. Maintenance is pro-actively planned to deliver high standard of service including system upgradation. Transportation fleet ensures safe and secure mobility of University staff, students and guests.

| File Description | Document |
|--|-------------------------------|
| Any additional information | View Document |
| Link for Photographs/ Geo-tagging of Campus facilities | View Document |
| Link for additional information | View Document |

4.1.4 Average percentage of expenditure incurred, excluding salary, for infrastructure development and augmentation during the last five years

Response: 35.18

4.1.4.1 *Expenditure incurred, excluding salary, for infrastructure development and augmentation year-wise during the last five years (INR in lakhs)*

| | | | | |
|---------|---------|---------|---------|---------|
| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
| 30917 | 38812 | 42239 | 27741 | 34193 |

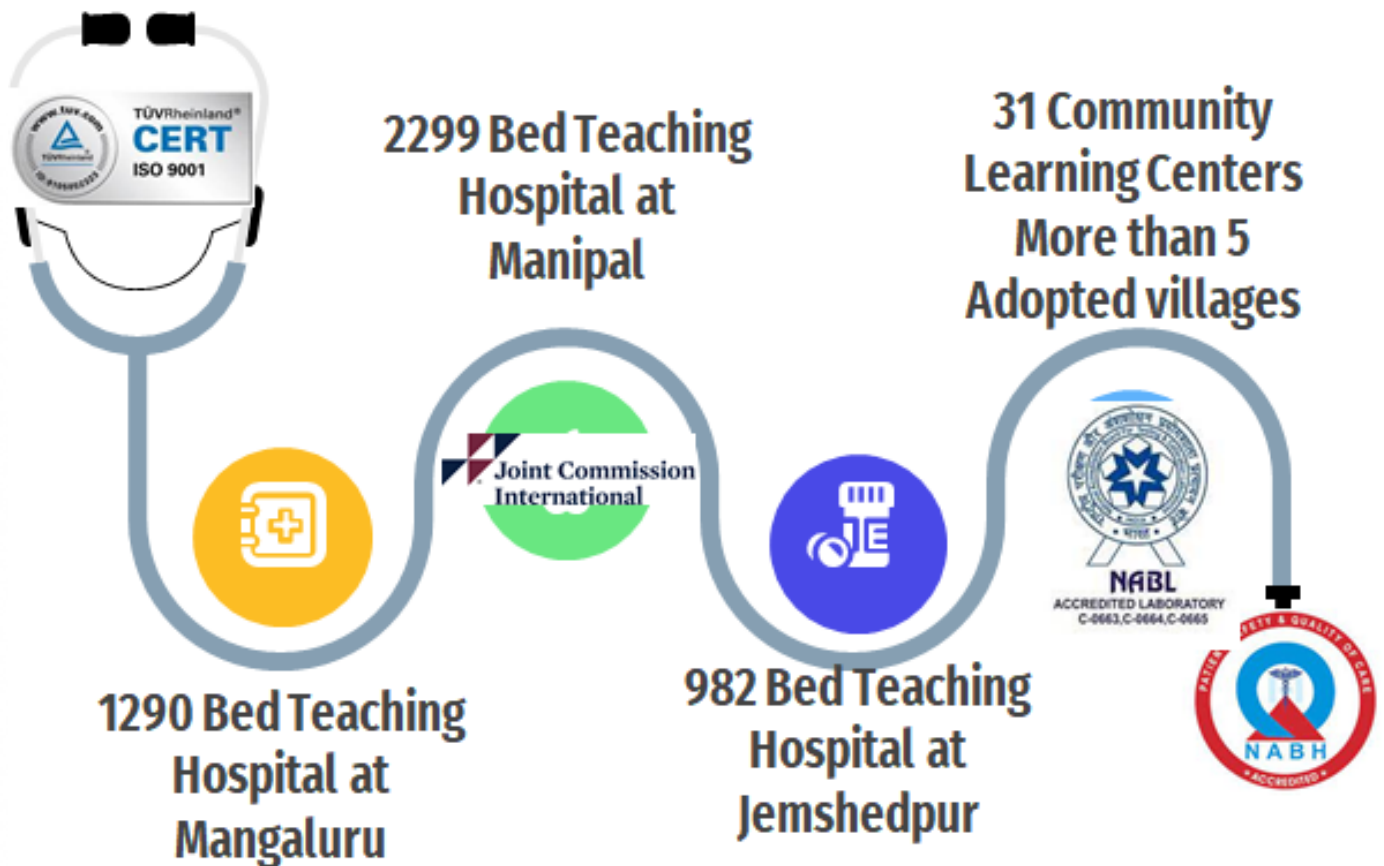
| File Description | Document |
|--|-------------------------------|
| Institutional data in prescribed format | View Document |
| Details of budget allocation excluding salary during the last five years | View Document |
| Audited report / utilization statements (highlight relevant items) (Refer annexure number -01) | View Document |
| Any additional information | View Document |
| Link for additional information | View Document |

4.2 Clinical, Equipment and Laboratory Learning Resources

4.2.1 Teaching Hospital/s, Equipments, Laboratory and clinical teaching-learning facilities including equipment as per the norms of the respective Regulatory Bodies

Response:

Clinical Teaching Learning at MAHE



Creating a conducive ecosystem for active learning for the trainees and effective health care requires detailed infrastructure, customized care delivery and keeping pace with modern technologies. Manipal Academy of Higher Education(MAHE) had already envisioned and acknowledged these needs, laying a foundation for an environment, where patient care is personalized, yet driven by modern technology.

The teaching hospitals are equipped with NABL-accredited diagnostic laboratories. The services in the scope range from clinical biochemistry, clinical pathology & haematology, clinical microbiology & serology to cytopathology. The laboratories at Kasturba Hospital(KH) Manipal provide accredited services for surgical pathology, immunohistochemistry, medical genetics and transplant immunology. Located strategically in the hospital and college premises, these laboratories provide high-end diagnostics like flow cytometry, immunohistochemistry, tests for inborn errors of metabolism tests, HIV viral load testing, autoimmune disease diagnosis, fully automated system for identification and sensitivity testing for bacteria and fungi, COVID-19 testing facilities and automated blood culture systems. The Pathology laboratory in Manipal provides up-to-date services in oncopathology (as per CAP protocol) and referral services, and it also participates in tumour boards for requisite inputs in cancer care. The laboratory services in Mangaluru campus offer free basic investigations to the government Wenlock and Lady Goschen Hospitals. Both hospitals are active in implementation of government health initiatives and are recognized centres for RNTCP programmes and reference labs designated for HIV Sentinel surveillance and the Integrated Counselling and Testing Centre for HIV.

As leaders in healthcare, KH, Manipal is continually engaged in adapting the latest technologies and expansion. KH hosts four centres: Burns Centre, Infertility Centre, Neonatal ICU and the Centre for Nuclear Medicine. Among its vast equipment, the hospital has two a PET scan, 1.5 tesla MRIs, 16 Slice Big Bore CT and 64 Slice CT, 15 X-ray machines and 14 Ultrasounds, LINAC, Brachytherapy, Treatment Planner, 24 dialysis machines, 24 operation theatres and two Cath labs. Other facilities that make KH unique are the availability of the following advanced centres under one roof: Burns Centre, 32 Bed Neonatal ICU, Genetics Clinic, Manipal Assisted Reproduction Centre, Artificial Limb Centre, Dialysis unit with 24 machines, round the clock Radiology Services, Blood Bank, Haemophilia Clinic, Diabetes, Thyroid, HIV Clinics, Intensive Care Units with vital organ function support and bedside/central monitoring systems, and Modular Operation theatres. Further, Neonatal Intensive Care Unit of KH is of the highest quality. Alternative systems of medicine like Ayurveda and Yoga are offered as separate units at KH.

The hospitals have diversified into specific target areas where attention to a specific disease is paramount. KMC Mangaluru possesses a neonatal intensive care unit at the Community Maternal Hospital – providing tertiary care in the region encompassing 8 districts of Karnataka and Kerala. The project was implemented through community funding and is operated by the college. This unit has contributed to reduction of neonatal mortality in the district up to 5.4 per thousand deliveries in the year 2016, one of the lowest mortality rates in the country. Similarly, KH is associated with Dhvani: Universal New-born Hearing Screening Program in Government Lady Goschen Hospital, which is a programme to screen all new-borns and children below 5 years in district for hearing loss. KMC Manipal has initiated 20 centres of excellence phase-wise activities, designed towards innovation and patient-centricity. “Hastha” an app for teachers and parents to screen children with congenital hand deformities, a bioreactor development for ovarian tissue cryobanking in oncofertility, and a WHO accredited centre to provide comprehensive medical care of poisoning cases are some of the ventures towards excellence in healthcare.

The hospitals have accreditations galore to bolster trust in their services. NABH, ISO 9001:2015(Quality Management System), ISO 14001:2015(Environment Management System) and ISO 50001:2011(Energy Management System) have accredited our hospitals. In addition to this, KH, Manipal has achieved the NABH certifications for Nursing services and Emergency Services in 2019. KH has a NABH certified Ethics Committee to ensure ethical and transparent research activities.

Hospitals ensure the necessary precautions for the safety of the patients and the workforce. Various committees are in place to monitor the delivery of quality patient care and services like Quality Improvement Committee, OT Committee, Medical Care Review Committee, Pharmacy Therapeutic Committee etc. Regular clinical and managerial audits are conducted to ensure adherence to the protocols.

The year 2019 was celebrated as the ‘Patient Centricity Year’. Facilities like dining areas, renovated Emergency Pharmacy, Baby Feeding Pods and Satellite Sample Collection areas are a few of the facilities started.

Manipal-TATA Medical College, Jemshedpur(MTMC) is a premium institution for medical education and training under a consortium initiative between Tata Steel and MAHE Manipal houses 982 beds Teaching hospital.

Manipal College of Dental Sciences(MCODS) at Manipal and Mangalore has 643 dental chairs, state-of-the-art dental equipment, continuing professional development(CPD) rooms with audio-visual aids, phantom head simulation laboratories for preclinical training and access to the newer generation of dental

materials.

Manipal College of Pharmaceutical Sciences(MCOPS), Manipal has been instrumental in driving the research wing with laboratories dedicated to cell culture, molecular biology, formulation development, chemical synthesis and herbal drug development. Modern equipment such as the LCMS-MS, Flow Cytometer, Auto analyser, Zeta Sizer, Biosafety Cabinets, CO2 Incubators, Inverted Microscope, Fluorescence Microscope, RT-PCR, Western Blot and Electrophoresis units, Protein Purification Systems, HPLC, HPTLC, High Pressure Homogenizers, Hot Melt Extruder, Tableting Machines, High Speed Homogenizers, Lyophilizer, Refrigerated Centrifuges, Freezers (-20, -80), Liquid Nitrogen storage etc. are a few cited among the equipment and facilities available at MCOPS for pursuing exemplary research.

Manipal College of Health Professions(MCHP), Manipal include the Early Intervention Centre, Parents training programme, New-born hearing screening, Dysphagia Lab, Cochlear Implantation, Hearing Aid Clinic, Cognitive Communication Lab, Language Lab, Voice and Aerodynamic Lab, Nasalance Lab, Augmentative and Alternative Communication(AAC) Lab, and Vestibular Rehabilitation Lab. The department of Audiology and Speech Learning Pathology(ASLP) received grants from various funding agencies such as ICMR, DST, NCERT, Ablenet, and AIISH Research Fund. It has state-of-the-art instrumentation such as the Videokymography, EGI Geodesic EEG system, EMG, Aeroview, VNG, ENG, and Ultrasound. The research initiatives have resulted in collaborations with international agencies.

| File Description | Document |
|---|-------------------------------|
| Any additional information | View Document |
| Links for The facilities as per the stipulations of the respective Regulatory Bodies with Geotagging | View Document |
| Link for additional information | View Document |
| Links for list of facilities available for patient care, teaching- learning and research with geotagged evidences | View Document |

Other Upload Files

1

[View Document](#)

4.2.2 Describe the adequacy of both outpatients and inpatients in the teaching hospital during the

last five years vis-à-vis the number of students trained and programmes offered (based on HIMS / EMR) within 500 words.

Response:

There are a total of seven hospitals functioning under the aegis of the Manipal Academy of Higher Education (MAHE) at Manipal Mangaluru and Jamshedpur campuses. Kasturba Medical College (KMC), Manipal operates at the teaching Hospital- Kasturba Hospital (KH), Manipal alongwith Dr TMA Pai Rotary Hospital at Karkala and Dr TMA Pai Hospital at Udupi. In addition, MCOADS, Manipal provides dental services at Manipal. KMC, Mangalore, works in association with Kasturba Hospital, Attavara and two public hospitals under public private partnership: Wenlock Hospital and Lady Goschen Hospital. MCOADS, Mangaluru provides dental services in the region. Tata Main Hospital (TMH), Jamshedpur, is the attached teaching hospital of MTMC Jamshedpur.

Over five decades, these hospitals have been at the forefront of social service in the region with a singular goal of quality and affordable health care. These hospitals attract a huge number of patients from multiple sections of the society. The 'patient-centric' approach and the commitment to the founder's vision of eradicating ill-health of the region have further ensured that patients of diverse background seek the hospital for treatment. To match these objectives, the hospitals are equipped with state-of-the-art diagnostic and therapeutic services.

Established in 1961, Kasturba Hospital, Manipal has evolved into a model teaching hospital, currently with 2032 beds. Spread over 11, 25, 000 sq. ft., Kasturba Hospital, Manipal caters to an average of 3000 outpatients and has approximately 200 admissions each day. KMC Hospital, Mangalore is a 600-bed multi-disciplinary specialty centre renowned for its medical expertise, nursing care and quality of diagnostics. Importantly, association with two Government Hospitals in Mangaluru- Wenlock Hospital and Lady Goschen Hospital, Mangalore- makes the experience of students at KMC Mangalore truly unique. They get an opportunity to experience the healthcare challenges at the community level. Tata Main hospital Jamshedpur provides similar experience to students and excellent healthcare support in that region.

Both undergraduate and postgraduate students are efficiently posted in OPDs and wards, receiving a holistic environment, where both patient and resource management are ingrained. In addition, there are rotations in the speciality departments such as Cardiology, Neurology, Nephrology, Endocrinology, Infectious Diseases, Cardiovascular Thoracic Surgery, Urology, Paediatric Surgery, Neurosurgery, Plastic surgery and Medical and Surgical Oncology which facilitate a more immersive learning experience.

As a testament to the afore-mentioned goals of patient outreach, there has been a steady increase of patient numbers over the last five years. The following tables provide a glimpse of it (2020/2021 shows impact of Covid -19 pandemic):



| Year | Total number of inpatients | Total number of out patients | Number of students trained and programmes offered (101: Details as per data sheet)(based on HIMS / EMR) |
|------|----------------------------|------------------------------|---|
| 2016 | 167946 | 2268130 | 5845 |
| 2017 | 167685 | 2382882 | 6017 |
| 2018 | 164736 | 2385419 | 6226 |
| 2019 | 170576 | 2399931 | 6385 |
| 2020 | 100267 | 1104757 | 6606 |
| 2021 | 94575 | 972878 | 6612 |

| File Description | Document |
|---|-------------------------------|
| Any additional information | View Document |
| Links for year-wise outpatient and inpatient statistics for the last 5 years | View Document |
| Link for additional information | View Document |
| Links for description of adequacy of outpatient and inpatient statistics as per the norms of the Regulatory Bodies (critical documents to be verified by DVV) | View Document |

| Other Upload Files | |
|--------------------|-------------------------------|
| 1 | View Document |

4.2.3 Availability of infrastructure for community based learning

1. Attached Satellite Primary Health Centers
2. Attached Rural Health Centers available for training of students
3. Attached Urban Health Centre for training of students
4. Residential facility for students / trainees at the above peripheral health centers / hospitals

Response: All of the above

| File Description | Document |
|--|-------------------------------|
| Institutional data in prescribed format | View Document |
| Government Order on allotment/assignment of PHC to the institution | View Document |
| Geo-tagged photographs of Health Centers | View Document |
| Documents of resident facility | View Document |
| Any additional information | View Document |
| Link for any additional information | View Document |

4.2.4 Is the Teaching Hospital / Clinical Laboratory accredited by any National Accrediting Agency? A. NABH accreditation B. NABL accreditation C. International accreditation like JCI., D. ISO certification of departments /institution E. GLP/GCLP accreditation.

Response: B. Any Four of the above

| File Description | Document |
|---|-------------------------------|
| Copies of Accreditation Certificate(s) duly certified | View Document |
| Any additional information | View Document |
| Link for additional information | View Document |

4.3 Library as a Learning Resource

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

Response:

One of the most important locations on any university, the library, serves as a nerve centre of academics. Manipal Academy of Higher Education (MAHE), Manipal has the following 15 libraries in Manipal, Mangaluru, Bengaluru, and Jamshedpur campuses.

- SEARCH – The KMC Health Sciences, Manipal
- KMC Central Library, Mangaluru
- MIT Central Library, Manipal
- WGSMA Library, Manipal
- MIC Library, Manipal
- MIM Library, Manipal
- MCNS Library, Manipal
- Manipal Centre for European Studies Library, Manipal
- Manipal Centre for Humanities (MCH) Library, Manipal

- Manipal School of Architecture and Planning, Manipal
- Manipal Tata Medical College, Jamshedpur
- Department of Geopolitics & International Relations (IR) Library, Manipal
- MIRM Library, Bengaluru
- Nehru Memorial Library (Public Library), Manipal
- General Library, MIC, Manipal



Library Facilities



MAHE has an excellent KMC Health Sciences Library at Manipal. The state-of-the-art library stretching over 1.5 lakh square feet, on five levels is a domain for information seekers. It has the capacity to accommodate 1300 students at a time. Besides the comfortable seating and reading environment, the library is well equipped with modern facilities. There is a separate audio-visual room, computer lab, group study area and private study area in the library. The other two major libraries of MAHE are – KMC Central Library, Mangaluru and MIT Central Library, Manipal.

MAHE Libraries have fully computerized their collection and services using EasyLib library management software in the year 2004, then upgraded with Koha Library Management Software in the year 2018. At present, all the collections and services of MAHE libraries have been fully automated on modern lines using Koha library management software. Koha is an open access ILMS with comprehensive functionality including basic and advanced search options. Koha includes modules for acquisitions, circulation, cataloguing, serials management, flexible reporting with powerful searching, and an enhanced catalogue display. Koha is built using library standards and protocols such as MARC 21, UNIMARC, z39.50 etc. ensuring interoperability between Koha and other systems and technologies, while supporting existing workflows and tools. Koha's OPAC, circulation management and self-checkout interfaces are all based on standards-compliant World Wide Web technologies—XHTML, CSS and Javascript—making Koha a truly platform-independent solution.

All libraries are enabled with Wi-Fi facilities and security systems with Closed Circuit Television (CCTV) and Access control. The KMC Health Sciences Library, Manipal and KMC Central Library, Mangaluru were enabled with RFID technology in the year 2018. KMC Health Sciences Library, Manipal; KMC Central Library, Mangalore and MIT Central Library, Manipal have introduced EZProxy software,

enabling the users to access the library's subscribed e-resources from any part of the world (remote access). The libraries provide various research/project support services such as access to Turnitin (plagiarism check), Grammarly (online grammar and spelling checker), author workshops, literature search service and also access to bibliographical and citation tools (Scopus and Web of Science).

Other services offered by MAHE libraries include reference service, current awareness service, circulation, photocopying, inter-library loan/document delivery, computer services, book bank facility, access to question paper archive, display of faculty publications, display of new acquisitions, digital repository (e-prints), and training in accessing e-resources.



An annual average expenditure of Rs. 1821.45 lakhs on purchase of books, journals and e-resources



| File Description | Document |
|---------------------------------|-------------------------------|
| Link to Geotagged photos | View Document |
| Link for additional information | View Document |

4.3.2 Total number of books and reference volumes as well as collection of ancient books, manuscripts, Digitalized traditional manuscripts, Discipline-specific learning resources from ancient Indian languages, special reports or any other knowledge resource for library enrichment especially with reference to traditional systems of medicines

Response:

The fountain of knowledge is one of the most important locations on any university, often observed as the nerve center of academics. This centre, which sends ripples across the other parts of the academic institutions, is fondly termed as a Library. Manipal Academy of Higher Education (MAHE), Manipal has 15 libraries in Manipal, Mangaluru, Bengaluru and Jamshedpur campuses.

MAHE Libraries are deeply committed to provide physical as well as virtual access to books, journals, online databases and other materials to the students, faculty members and researchers. MAHE Libraries have a rich collection of information resources in the area of Medical Sciences, Dental Sciences, Nursing Sciences, Pharmaceutical Sciences, Health Professions, Life Sciences, Technical/Engineering, Management, Communication, Hospitality Management, Humanities, Geopolitics, Natural Sciences, Library Science, Statistics, Public Health, Social Work and General Subjects.

MAHE libraries have a varied collection of print textbooks, reference volumes/books, ancient books/manuscripts, theses/projects and reports in diverse fields. The total number of textbooks and reference volumes/books are 44651 and 2363 respectively (five years). The ancient books are 2181 in number. Theses/projects and Reports are 27359 and 1555 in number respectively. CDs, audio-visual

materials are 7480 in number.

MAHE libraries provide a growing range of e-resources (online databases, online journals and e-books) on the campus network and these resources are accessible through well-designed library portals. KMC Health Sciences Library, Manipal; KMC Central Library, Mangaluru and MIT Central Library, Manipal have introduced EZProxy / OpenAthens software, thus enabling faculty, students and research scholars to access the library's subscribed e-resources from any part of the world (remote access). The KMC Health Sciences Library, Manipal, KMC Central Library Mangaluru and MIT Central Library, Manipal have provided 'Web-Scale Discovery Service' (Single Window Search tool) to find relevant information across all libraries' subscribed e-resources, open-access resources, library catalogue and MAHE digital repository using the single search box. These Libraries also provide Computer lab/Internet kiosk with Internet access to its users to access e-resources.

There are 33 online databases subscribed (year 2020-21) at MAHE Libraries for students, faculty and research scholars for their teaching/learning/clinical practice/research activities. MAHE libraries also provide access to 17935 online journals and 85211 e-books (year 2020-21). Further, total print journals subscribed are 712 (year 2020-21). 77351 bound volumes of journals also available at MAHE libraries.

| File Description | Document |
|------------------------------------|-------------------------------|
| Links for library acquisition data | View Document |
| Link for additional information | View Document |

4.3.3 Does the institution have an e-Library with membership/subscription for the following:

- 1.e – journals / e-books consortia**
- 2.e-ShodhSindhu**
- 3.Shodhganga**
- 4.SWAYAM**
- 5.Discipline-specific Databases**

Response: All of the above

| File Description | Document |
|---|-------------------------------|
| Institutional data in prescribed format | View Document |
| E-copy of subscription letter/member ship letter or related document with the mention of year to be submitted | View Document |
| Details of subscriptions for e-journals, e-ShodhSindhu, Shodhganga membership etc. for the last five years | View Document |
| Details of e-resources with full-text access | View Document |
| Any additional information | View Document |
| Link for additional information | View Document |

4.3.4 Average annual expenditure for purchase of books and journals (including e-resources) during the last five years

Response: 1821.2

4.3.4.1 Annual expenditure for purchase of books and journals year wise during the last five years (INR in lakhs)

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 2467 | 2139 | 1689 | 1452 | 1359 |

| File Description | Document |
|--|-------------------------------|
| Provide consolidated extract of expenditure for purchase of books and journals during the last five years duly attested by Finance Officer | View Document |
| Proceedings of Library Committee meetings for allocation of fund and utilization of fund | View Document |
| Institutional data in prescribed format | View Document |
| Audited Statement highlighting the expenditure for purchase of books and journal library resources (Refer annexure number -01) | View Document |
| Any additional information | View Document |
| Link for additional information | View Document |

4.3.5 E-content resources used by teachers: 1. NMEICT / NPTEL 2. other MOOCs platforms 3.SWAYAM 4. Institutional LMS 5. e-PG-Pathshala

Response: Any Four of the above

| File Description | Document |
|---|-------------------------------|
| Supporting documents from the hosting agency for the e-content developed by the teachers need to be given | View Document |
| Institutional data in prescribed format | View Document |
| Links to documents of e-content resources used | View Document |
| Link for additional information | View Document |
| Give links e-content repository used by the teachers / Students | View Document |

4.4 IT Infrastructure

4.4.1 Percentage of classrooms, seminar halls and demonstration rooms linked with internet /Wi-Fi enabled ICT facilities (data for the preceding academic year)

Response: 100

4.4.1.1 Number of classrooms, seminar halls and demonstration rooms linked with internet /Wi-Fi enabled ICT facilities

Response: 577

4.4.1.2 Total number of classrooms, seminar halls and demonstration room in the institution

Response: 577

| File Description | Document |
|--|-------------------------------|
| Institutional data in prescribed format | View Document |
| Geo-tagged photographs of the facilities | View Document |
| Consolidated list duly certified by the Head of the institution. | View Document |
| Any additional information | View Document |
| Link for Additional Information | View Document |

4.4.2 Institution frequently updates its computer availability for students and IT facilities including Wi-Fi

Response:

Keeping in tune with the evolving technology and needs of the teaching-learning process, a total of 14191 computer systems are made available at MAHE. Further, IT related services are constantly upgraded. Six prominent initiatives implemented are listed below:

1. SLcM Software Project implementation

A robust and scalable Student Lifecycle Management ERP system on Microsoft Dynamics Platform is used for managing student related process to deliver and configure core functions such as admissions, academics, evaluation and student finance.

The Student Lifecycle Management (SLcM) system is implemented across institutions and departments and it caters to the following functions:

- Admissions & Registration Process
- Academics Delivery

- Evaluation Process
- Student Finance
- Portal Services for Students, their respective Parents and Faculty members

. 2. Lecture Capture Solution implementation in Class Rooms from Impartus

Impartus is a video-based learning platform that helps educational institutes to create and distribute content online. MAHE has implemented the Lecture Capture solution in a total of 84 rooms.

Features of Lecture Capture Solution

- Schedule Based Automated Lecture Recording
- Multi-View Recording – close to real classroom experience
- Multiple Cameras, Board View, Presentation Screen Capture

- Cloud as well as On-Premise Hosting
- Easy interface for editing of lectures
- Access of recorded lectures through Portal to the students

3. Virtual Class Room Solution

Virtual classroom solution connects four locations :Manipal, Jaipur, Sikkim and Dubai.

At Manipal, the facility has been implemented at Sir MV Seminar Hall, Manipal Institute of Technology in 2017. It provides video collaboration opportunities to students and faculty members of different campuses. It encourages students to have face to face collaboration with their counterparts and share common workspaces. Using this, faculty to student interaction happens both ways with AV in real time. Students can join live classes on web and online across devices. Further, universities will have a repository of all live sessions.

4. Wi-Fi Project implementation for Students

MAHE has engaged M/s Dvois Broadband Communication Pvt. Ltd to provide Wi-Fi services to students on campus since 2007. Internet Bandwidth provided is 3400 Mbps to MAHE Campus, Manipal, and 1300 Mbps to MAHE, Mangalore Campus. The number of Wi-Fi Access points installed at Technology Campus, Manipal is 1566, Health Science Campus, Manipal – 1407 and Mangalore campus - 344.

5. IT Security and GDPR Readiness Assessment for MAHE

IT Security and GDPR Readiness Assessment for MAHE are carried out regularly to ensure the following:

- Review and update the existing IT security policies and processes applicable to MAHE
- Conduct secure configuration review of critical network devices and network architecture review of MAHE.
- Perform secure configuration review of servers and databases.
- Perform external penetration testing of all applications listed in the additional Information.

6. Digital Transformation Project

The project named S.H.I.F.T. (Sustained, Holistic Impact For Tomorrow) aims at establishing a digital strategy for MAHE based on an understanding of the target stakeholders. It creates a digital transformation roadmap for MAHE. First, it outlines a roadmap for the first year of transformation, and then envisions a high-level roadmap for the next four years.

| File Description | Document |
|---|-------------------------------|
| Any additional information | View Document |
| Links for documents relating to updation of IT and Wi-Fi facilities | View Document |

| Other Upload Files | |
|--------------------|-------------------------------|
| 1 | View Document |
| 2 | View Document |

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

Response: ?1 GBPS

| File Description | Document |
|--|-------------------------------|
| Institutional data in prescribed format | View Document |
| Details of available bandwidth of internet connection in the institution | View Document |
| Bills for any one month of the last completed academic year indicating internet connection plan, speed and bandwidth | View Document |
| Any additional information | View Document |
| Any additional information | View Document |
| Annual subscription bill / receipt | View Document |

4.4.4 Facilities for e-content development such as Media centre, audio visual centre, Lecture Capturing System(LCS), etc.,

Response:

MAHE has made concerted efforts to integrate the best of the ICT enabled facilities to the teaching learning process. The ICT features are used at diverse levels such as classroom teaching, information sharing and dissemination, and in digitizing the learning process.

The campus is wi-Fi enabled with internet facility of more than 1 GBPS. Further, MAHE has 577 rooms with ICT facilities such as LCD, Wi-Fi and so on (471 rooms with LCD and Wi-Fi + 22 rooms with smartboard + 84 rooms with audio-video recording facility).

MAHE has introduced a video-based learning platform that enables institutions to capture, edit, and distribute the learning content. A total of 78 rooms are equipped with Lecture Capture System. The platform (Impartus) enables automatic audio video recording and distribution of classroom lectures. The platform uses turnkey solution to automatically record classroom experience. The adaptive and secure videos can be consumed live or on-demand from web and mobile applications. The platform also enables students and faculty members for collaborative learning by sharing content. Enriched with advance search, analytics and editing facility, the solution is seamlessly integrated with blackboard, conventional classroom lectures and other well-known LMSs.

Another important ICT enabled feature used is the Virtual Classroom. This platform is used to enrich existing programs by extending the class online. Sir MV Seminar Hall, MIT hosts the virtual classroom facilities at Manipal. Using these features, the speaker can live-stream videos, hold real time interaction with students through video conferencing, live chat and polls. The facility is used for live streaming the guest lectures for the benefit of students and faculty members of other campuses. It enables the students to organise special interactions on online and attend from a remote location. Using video conferencing solution, faculty members can interact in real time with students through live interactions.

The Audio Visual (AV) Department, MAHE offers specialised services to teaching departments in the field of Photography, Video coverage and Audio Systems. The department is well-equipped with

sophisticated facilities for video recording, voice recording, editing, and creation of visual materials. Teaching departments, primarily health care institutes at MAHE, utilise the AV department facilities to record clinical experiments and classroom dissemination of ideas. Further, Sound studio, TV studio, Editing Lab at the Manipal Institute of Communication (MIC) acts as a resource hub for video creations of academic material for all the constituent units. Students get practical training in audio-visual content production in MIC's in-house studios using modern gadgets and equipment such as digital mixers, cameras, lighting equipment, workstations for post-production activities, and vision mixer consoles.

Media Studio at the Manipal Institute of Technology (MIT) provides students with opportunities to excel with their creativity. These Laboratories are equipped with the latest software from Esko Graphics for Packaging designing, Xitron Navigator RIP and Technova PoliRIP for prepress technology, IGT Printability Tester and KPP Flexo proofer for Quality Testing, X-rite devices and software to study colour Management, Hybrid Flexo cum Gravure Machine and Auto Print offset machines for printing purposes.

| File Description | Document |
|--|-------------------------------|
| Links for the e-content development facilities | View Document |
| Links for Geo-tagged photographs | View Document |

4.5 Maintenance of Campus Infrastructure

4.5.1 Average percentage of expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component during the last five years

Response: 53.76

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

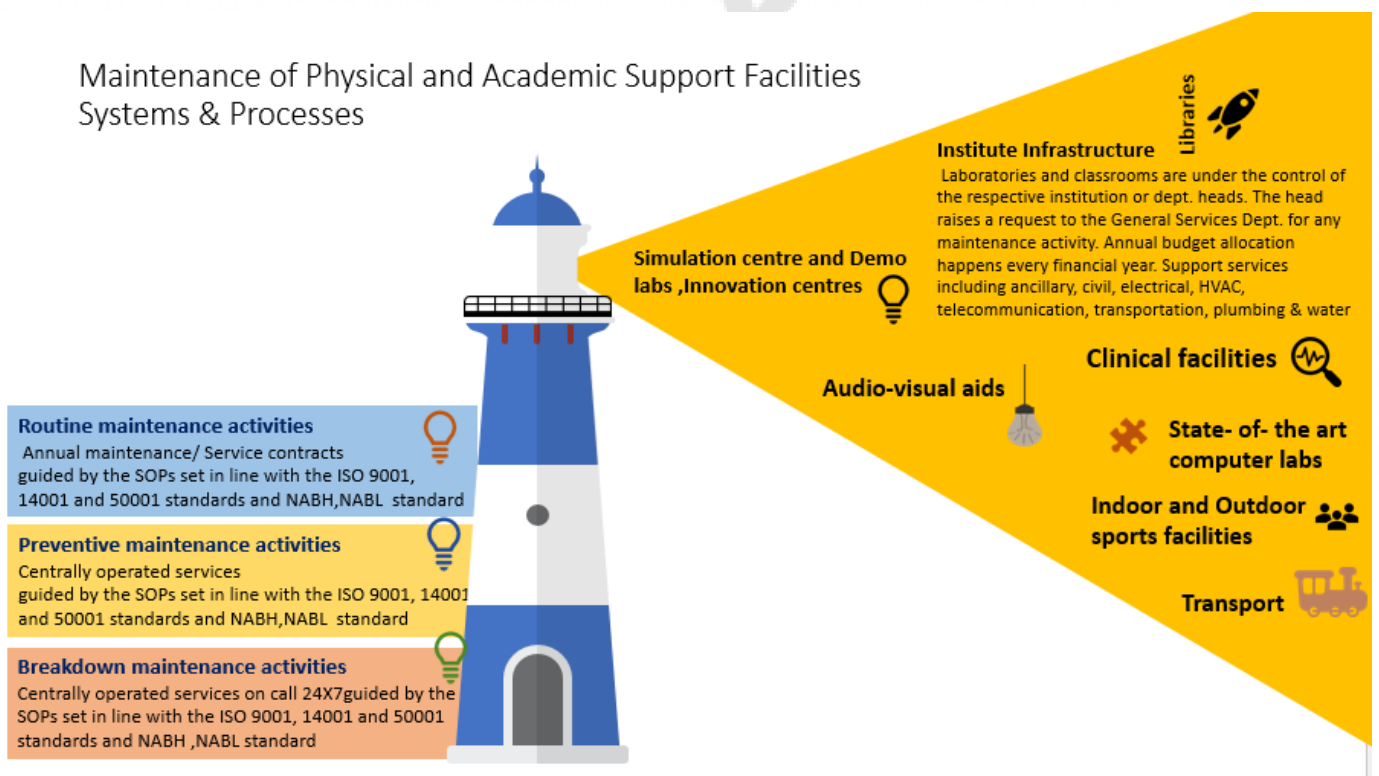
| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 47089 | 59213 | 56162 | 52493 | 49758 |

| File Description | Document |
|---|-------------------------------|
| Institutional data in prescribed format | View Document |
| Details about approved budget in support of the above | View Document |
| Audited statements of accounts for maintenance (Refer annexure number -01 as per SOP) | View Document |
| Any additional information | View Document |
| Link for additional information | View Document |
| Provide link to ERP | View Document |

4.5.2 There are established systems and processes for maintaining physical and academic support facilities: (laboratory, library, sports facilities, computers, classrooms, etc.)

Response:

Maintenance of Physical and Academic Support Facilities Systems & Processes



MAHE has well -established systems and processes for maintaining its physical and academic support activities. Institutional buildings, housing laboratories and classrooms are under administrative control of the respective institutions or department heads. If there is any maintenance activity required, the head raises a request to the General Services Department. Annual budget allocation happens every financial year and the budget is operated to provide repair and maintenance upon receipt of such requests. The department of General Services is responsible for the maintenance of all support services including ancillary, civil, electrical, HVAC, telecommunication, transportation, plumbing & water supply. The various departments are guided by the standard operating procedures set in line with the ISO 9001, 14001 and 50001 standards.

Routine maintenance activities such as external painting, overhead water tank cleaning, and water dispensing stations are carried out as per schedule. Other services like lifts and air-conditioning are covered under annual maintenance contracts with respective approved service providers. Centrally operated services such as power supply, water supply, wastewater treatment, waste management are directly supervised by the General Services department.



53.76% of the annual expenditure is utilized in up-keeping the physical and academic support facilities



Libraries on campus are fully computerized using Library Management Software. At present all the collections and services of MAHE libraries have been fully automated on the modern lines using Koha/ EasyLib Library Management Software. The libraries provide a growing range of e-resources (online databases, online journals and e-books) on the campus network and it is also remotely accessible.

The campus offers adequate indoor and outdoor sports facilities. The indoor sports complexes with an approximate built-up area of 150000 and 74000 Square feet at Manipal and Mangaluru respectively cater to the needs of sports like tennis, shuttle, squash, table tennis, basketball and other simulated sports including gymnasium. This is especially useful during the monsoon season. Swimming pools within the sports complex as well as the independent pool cater to the needs of aquatic sports. All these are maintained on daily basis for the upkeep as well as smooth functioning. Other outdoor sports facilities include football, tennis, hockey, basketball, athletic tracks, and cricket stadium. Most of these surfaces are turfed and the landscaping team carries out regular maintenance of the same.

State-of-the-art computer labs are established centrally as well as in institutes. The IT team has established a helpline and engages the services of various service providers for attending to all IT related issues both hardware as well as software including internet connectivity within the campus network.

Audiovisual aids are available in all classrooms and the infrastructure is maintained by the audiovisual department to ensure seamless connectivity during lectures in classrooms both within the campus as well as intra-campus.

The transport department with an in-house fleet of vehicles caters to the mobility requirements. This is also augmented by a fleet of electric vehicles that cater to the airport transfer requirements of staff and students.

Monthly review meetings are conducted by the Director General Services to ensure smooth resolution of outstanding issues if any. New initiatives are also discussed for implementation in this meeting.

| File Description | Document |
|--|-------------------------------|
| Any additional information | View Document |
| Links for minutes of the meetings of the Maintenance Committee. | View Document |
| Links for log book or other records regarding maintenance works. | View Document |

| Other Upload Files | |
|---------------------------|-------------------------------|
| 1 | View Document |

MAAAC

Criterion 5 - Student Support and Progression

5.1 Student Support

5.1.1 Average percentage of students benefited by scholarships /free ships / fee-waivers by Government / Non-Governmental agencies / Institution during the last five years

Response: 49.51

5.1.1.1 Number of students benefited by scholarships /free ships / fee-waivers by Government / Non-Governmental agencies / Institution during the last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 25073 | 21116 | 8571 | 3921 | 3412 |

| File Description | Document |
|--|-------------------------------|
| Self-attested letters with the list of students with Government-sanctioned scholarships and fee-waivers | View Document |
| List of students benefited by scholarships / fee-waivers etc. provided by the institution and other non-government schemes | View Document |
| Institutional data in prescribed format | View Document |
| Copies of sanction letters from the University / non-government schemes | View Document |
| Consolidated document in favor of free ships and number of beneficiaries duly signed by the Head of the institution | View Document |
| Attested copies of the sanction letters from the sanctioning authorities | View Document |

5.1.2 Institution implements a variety of capability enhancement and other skill development schemes

1. Soft skills development
2. Language and communication skill development
3. Yoga and wellness
4. Analytical skill development
5. Human value development
6. Personality and professional development
7. Employability skill development

Response: All of the above

| File Description | Document |
|--|-------------------------------|
| Institutional data in prescribed format | View Document |
| Details of capability enhancement and skills development schemes | View Document |
| Detailed report of the Capacity enhancement programs and other skill development schemes | View Document |
| Link to institutional website | View Document |
| Link for additional information | View Document |

5.1.3 Average percentage of students benefited by guidance for competitive examinations and career advancement offered by the Institution during the last five years.

Response: 30.29

5.1.3.1 Number of students provided with training and guidance for competitive examinations and career advancement offered by the Institution year-wise during the last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 6702 | 8256 | 7705 | 6634 | 7113 |

| File Description | Document |
|---|-------------------------------|
| Year-wise list of students attending each of these schemes signed by competent authority | View Document |
| Program/scheme mentioned in the metric | View Document |
| List of students (Certified by the Head of the Institution) benefited by guidance for competitive examinations and career advancement offered by the institution during the last five years | View Document |
| Institutional Data in Prescribed format | View Document |
| Copy of circular/brochure of such programs | View Document |
| Link for additional information | View Document |

5.1.4 The institution has an active international student cell

Response:

MAHE is known globally and enjoys one of the highest international populations in India. International students are admitted to undergraduate, postgraduate and Super Speciality programs in Health Sciences, Technology, Management, Humanities, Liberal Arts and Social Sciences based on the qualifications recognized by the Association of Indian Universities (AIU), New Delhi.

The **International Admission Office** issues letters to the admitted students for obtaining a Student Visa from the Indian Embassy/Consulate. The department also submits details of admitted foreign/NRI students to the relevant ministries of Ministry of Health & Family Welfare (MOHFW), Ministry of Human Resource Development (MHRD), Ministry of External Affairs (MEA), Government of India (GOI) to obtain the 'No Objection Certificate' (NOC) for the students to pursue their higher education at MAHE.

The **Department of Student Affairs** looks after the day-to-day affairs of the foreign / NRI students. It ensures physical safety and security of international students. The office also facilitates medical and legal assistance in case of emergencies.

The **Office of International Affairs and Collaborations** (OIAC) at MAHE is the University's comprehensive resource for study, research, internship, and other educational experiences worldwide. It provides the necessary expertise various aspects of settling in on the campus and compliance with immigration requirements for all international students, faculty, staff and short-term exchange visitors.

Student exchange programs are promoted with all partner universities and research organizations across India and around the world. The OIAC facilitates inbound and outbound mobility allowing the students to experience the academic and cultural bonding at an international university abroad. The office also helps the students with their application, accommodation, food, logistics, FRRO (Foreigners Regional Registration Office) registration and any other ancillary services associated with the exchange.

The international student associations on campus, **International Association for the Exchange of Students for Technical Experience (IAESTE)**, **AIEMEC (International Association of Students in Economic and Commercial Sciences)**, **SPIE (International Society for Optics & Photonics)** and **IPSF (International Pharmaceutical Students' Federation)**, facilitate paid/volunteered internship opportunities for students. While these student bodies function independently, they report to the OIAC on the developments and activities undertaken.



International Student associations on Campus

Manipal Academic Exchange for Student Traineeship and Research Outreach (MAESTRO) is an initiative of the OIAC to promote international student training and research internship. MAESTRO is a central pool of research projects which will be published in consultation with faculty and consultants. These topics range from a wide gamut of disciplines ranging from physical to health sciences and from literature to fine arts.

International Students' Day KAIROS is celebrated on the 2nd Friday of August, where students from different countries get an opportunity to know each other better and enjoy the cultural diversity and exchange pleasantries. Literary events like **World Café**, **Turncoat** and others are keenly contested.

Summer/Winter schools – Short term immersion programs are organized at various institutions for international students which are tailor-made based on the academic specialisation of the visiting students blended with a cultural touch showing the flavours of Indian traditions, nature, food and community.

| | 2018 | 2019 | 2020 | 2021 (Jan-Jun) |
|--|----------------------------------|-----------------------------------|----------------------------------|----------------------------------|
| Number of international collaborations (Partnerships + associations) | 197 | 235 | 230 | 237 |
| Number of collaborations with Top 500 universities (attach details in a separate excel file) | 63 | 74 | 80 | 82 |
| Number of incoming students (OIAC + internship numbers) | 616 +85 (internship) = 701 | 614 +149 (internship) = 763 | 161 +33 (internship) =194 | 46 +17 (internship) =63 |
| Number of semester exchanges (incoming) | 3 | 9 | 7 | 3 |
| Number of outgoing students (OIAC + internship numbers) | 245 +96 (internship) = 341 | 222 +235 (internship) = 457 | 149 +24 (internship) = 173 | 193 +16 (internship) = 209 |
| Number of semester exchanges (Outgoing) | 32 | 8 | 10 | 1 |

| File Description | Document |
|--|-------------------------------|
| Link for additional information | View Document |
| Links for international students' cell | View Document |

5.1.5 The institution has a transparent mechanism for timely redressal of student grievances / prevention of sexual harassment and prevention of ragging

- 1. Adoption of guidelines of Regulatory bodies**
- 2. Presence of the committee and mechanism of receiving student grievances (online/ offline)**
- 3. Periodic meetings of the committee with minutes**
- 4. Record of action taken**

Response: All of the above

| File Description | Document |
|---|-------------------------------|
| Minutes of the meetings of student Grievance redressal committee and Anti-Ragging committee | View Document |
| Institutional data in prescribed format | View Document |
| Circular/web-link/ committee report justifying the objective of the metric | View Document |
| Link for additional information | View Document |

5.2 Student Progression

5.2.1 Average percentage of students qualifying in state/ national/ international level examinations during the last five years (eg: NET/SLET/GATE/GMAT/GPAT/CAT/GRE/TOEFL/PLAB/USMLE /AYUSH/AICTE/ Civil Services/Defense /UPSC/State government examinations/PG-NEET/ AIIMSPGET, JIPMER Entrance Test, PGIMER Entrance Test etc.,)

Response: 89.48

5.2.1.1 Number of students qualifying in state/ national/ international level examinations (eg: NET/SLET/GATE/GMAT/CAT/GRE/TOEFL/ PLAB/ USMLE /Civil services/ Defense/UPSC/State government examinations/ **PG-NEET**/ AIMSPGET, JIPMER Entrance Test, PGIMER Entrance Test etc.,) year-wise during the last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 301 | 342 | 186 | 160 | 55 |

5.2.1.2 Number of students appearing in state/ national/ international level examinations (eg: NET/SLET/GATE/GMAT/CAT/GRE/TOEFL/ PLAB/ USMLE/Civil Services/State government examinations **PG-NEET**/ AIMSPGET, JIPMER Entrance Test, PGIMER Entrance Test etc.,) year wise during the last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 337 | 359 | 198 | 187 | 66 |

| File Description | Document |
|---|-------------------------------|
| Pass Certificates of the examination | View Document |
| List of students qualifying for state/national/international-level examinations during the last five years with their roll numbers and registration numbers | View Document |
| Institutional data in prescribed format | View Document |
| Link for additional information | View Document |

5.2.2 Average percentage of placement /self employed professional services of graduating students during the last five years

Response: 55.13

5.2.2.1 Number of outgoing students who got placed / self-employed year- wise during the last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 2315 | 3015 | 3800 | 3559 | 3522 |

| File Description | Document |
|---|-------------------------------|
| Self-attested list of students placed/self-employed | View Document |
| Institutional data in prescribed format | View Document |
| Annual reports of Placement Cell | View Document |
| Link for additional information | View Document |

5.2.3 Percentage of the graduates in the preceding academic year, who have had progression to higher education.

Response: 17.44

5.2.3.1 Number of batch of graduated students of the year before preceding year, who have progressed to higher education

Response: 1209

| File Description | Document |
|--|-------------------------------|
| Supporting data for student/alumni in prescribed format. | View Document |
| List of students who have progressed to Higher education preceding academic year | View Document |
| Institutional data in prescribed format | View Document |

5.3 Student Participation and Activities

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

Response: 135

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

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 14 | 26 | 36 | 33 | 26 |

| File Description | Document |
|---|-------------------------------|
| Institutional data in prescribed format | View Document |
| Certified e-copies of award letters and certificates. | View Document |

5.3.2 Presence of Student Council and its activities for institutional development and student welfare

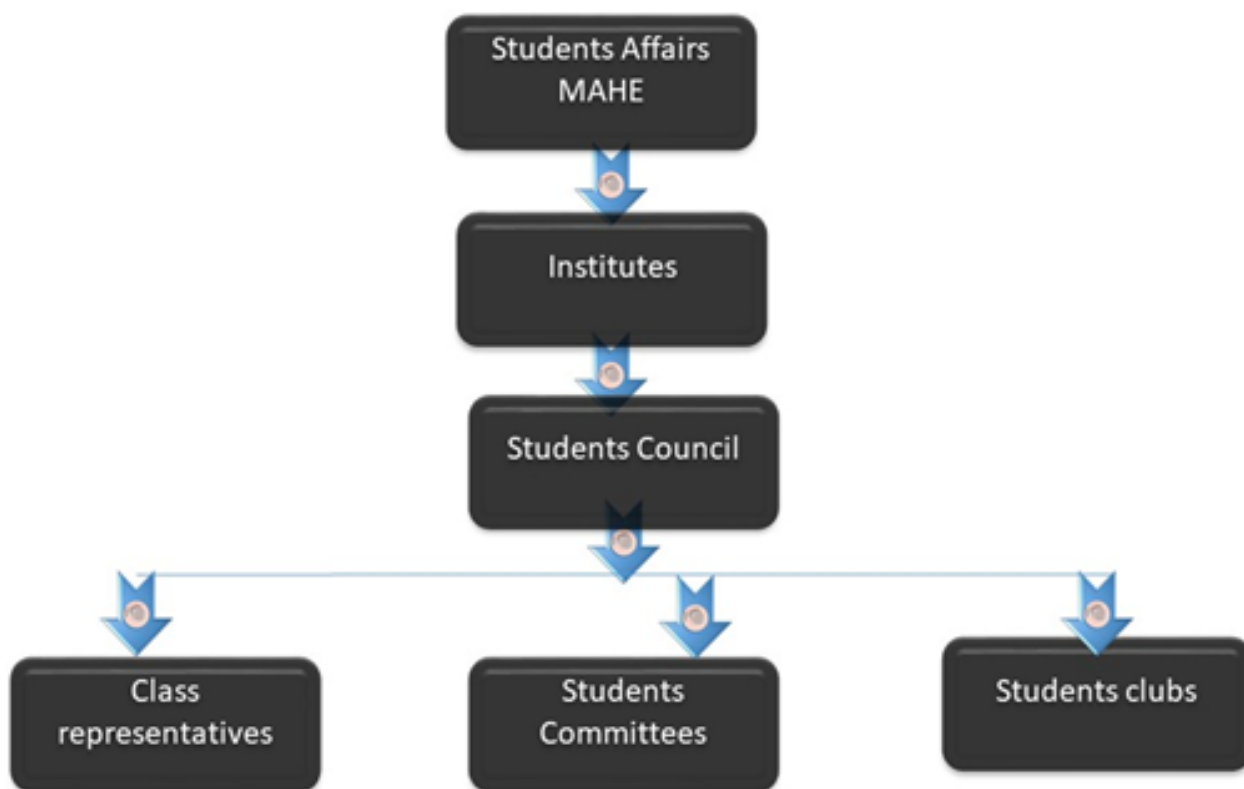
Response:

Student Councils at MAHE

The constituent units of MAHE have a well-structured Student Council functioning as a link between the administration and the student community in matters related to academics, extra-curricular activities, and grievance redressal. The student council of the institute is either an elected body or nominated by the administration, or a mix of both. The council representatives are usually elected by the class representatives (e.g. 120 class representatives elect the 30 member board of the student council at MIT, Manipal) and are responsible for the effective functioning of the institute activities.

The major functions of the Student Council are listed as below:

- Coordinate and carry out the student related activities in the institute (organizing national level Cultural activities, Sports activities, Technical activities)
- Manage and support Student Project Activities
- Provide academic and mentoring support to students (Student-mentor-student initiative)
- Represent student concerns in the right forum
- Facilitate communication channels among the students
- Represent student grievances and provide peer support (Peer Support Group in emotional distress management)
- Coordinate inter-institute, intra-institute and inter-batch cultural, sports and other competitions
- Manage and enhance the student club activities (technical clubs: 55; non-technical clubs: 45)
- Encourage community service activities.
- Represent the student community in the Academic Committee, Hostel Committee, Mess Committee, and in the Placement Office



Student Council members voice the concerns of students related to academic issues, logistic matters, issues related to student activities, and hostel related issues with the administration in structured meetings scheduled by the institutes. Most importantly, student council members operate as the official communication channel between the students and the administration.

A network of communication is maintained with each section through class representatives for administrative representation by the respective student council. In turn, the members of the student councils of different institutes of MAHE are in regular contact with the Department of Student Affairs, MAHE and assist in ensuring the overall well-being of all the students of MAHE.

| File Description | Document |
|--------------------------------------|-------------------------------|
| Any additional information | View Document |
| Links for Student Council activities | View Document |
| Link for additional information | View Document |

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

Response: 45.4

5.3.3.1 Number of sports and cultural activities / competitions organised by the Institution year-wise during the last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 12 | 54 | 52 | 59 | 50 |

| File Description | Document |
|--|-------------------------------|
| Report of the events/along with photographs appropriately dated and captioned year-wise | View Document |
| Institutional data in prescribed format | View Document |
| Event photograph if available (random selection with titles and date(s) of the events marked) | View Document |
| Copy of circular/brochure indicating such kind of activities | View Document |
| Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution) | View Document |
| Link for additional information | View Document |

5.4 Alumni Engagement

5.4.1 The Alumni Association/Chapters (registered and functional) has contributed significantly to the development of the Institution through financial and other support services during the last five years

Response:

Alumni Relations of the Manipal Academy of Higher Education (MAHE) puts in concerted efforts to bring all Manipal Alumni of different institutions on one platform to create a global group of Manipalites and build long lasting relations. We, at Alumni Relations are working with Manipal Alumni towards creating opportunities to network, share nostalgic moments, help Alumni to connect and partner in the growth of their Alma-mater, MAHE.

Alumni Relations MAHE aims to have a very strong and engaged group of Manipal Alumni globally. In order to achieve this goal and develop a mutually beneficial relationship between the Alumni and the Alma mater; we have a theme to CONNECT, INSPIRE & SUPPORT.

Connect: In this era of digitalization, we connect using emails and social network like Facebook and Twitter @Manipalalumni. Alumni Relations has an alumni portal, which records and maintain the alumni data at manipalalumni.manipal.edu. It provides an update of alumni activities and achievements. We have an alumni network over **1.61 lakhs across MAHE** of which **49 thousand alumni** have voluntarily registered on our portal.

Inspire: Effective engagement with alumni happens across Institutions as adjunct faculty/visiting faculty/guest faculty etc. Due to the Covid 19 pandemic, alumni activities at Manipal/Mangalore campus have been cancelled due to reasons beyond our control. However, virtual meetings are conducted to engage our alumni across the globe.

Last year, over 80 teaching/consulting/visiting/adjunct faculty etc. were involved and about 200 Guest lectures/ Oration/keynote addresses/workshops/Seminars etc. were held through online mode. About 9 virtual alumni events of multiple alumni departments/batches were held across MAHE.

| Sl# | Alumni Contribution | 2016-17 | 2017-18 | 2018-19 | 2019-20 | 2020-21 |
|-----|---|---------|---------|---------|---------|---------|
| 1 | Teaching/Consulting/Visiting /Adjunct Faculty etc. | 5 | 15 | 26 | 37 | 83 |
| 2 | Guest lectures/ Oration/keynote address/workshops/Seminars etc. | 53 | 67 | 149 | 119 | 246 |
| 3 | Alumni Re-unions/Meets | 36 | 37 | 58 | 47 | 9 |
| 4 | Any Other Activities | 22 | 31 | 102 | 76 | 42 |
| 5 | Financial contributions amount (INR in lakhs) | 10.48 | 8.19 | 37.58 | 138.44 | 47.98 |

Support: The Golden Re-union class of 1969 KMC initiated the **Manipal Alumni Endowment Scholarship Fund**. The generous contribution of Mr. Faizal Kottikollon MIT alumnus has led to the establishment of **MIT KEF R&D Center** at Manipal and WGHSA alumnus Vikas Khanna has been very instrumental in establishing the **Museum of Culinary Arts** at Manipal . Similar activities happen throughout the year.



| File Description | Document |
|--|-------------------------------|
| Audited statement of accounts of the Alumni Association (Refer annexure number -01 as per SOP) | View Document |
| Any additional information | View Document |
| Link for details of Alumni Association activities | View Document |
| Link for additional information | View Document |
| Links for quantum of financial contribution | View Document |
| Links for frequency of meetings of Alumni Association with minutes | View Document |

5.4.2 Provide the areas of contribution by the Alumni Association / chapters during the last five years

1. Financial / kind
2. Donation of books /Journals/ volumes
3. Students placement
4. Student exchanges
5. Institutional endowments

Response: A. All of the above

| File Description | Document |
|---|-------------------------------|
| List of Alumni contributions made during the last 5 years | View Document |
| Certified statement of the contributions by the head of the Institution | View Document |
| Annual audited statements of accounts/ Extract of Audited statements of highlighting Alumni Association contribution duly certified by the Finance Officer and Head of the Institutions | View Document |
| Link for any additional information | View Document |

MAAC

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1 The Institution has clearly stated vision and mission which are reflected in its academic and administrative governance.

Response:

Yes. The Institution has a clearly stated vision and mission. They are reflected in its academic and administrative governance as follows:



Vision

Global leadership in human development, excellence in education and healthcare

Mission

Be the most preferred choice of students, faculty and industry

Be in the top 10 in every discipline of education, health sciences, engineering and management.



In line with the vision of the Institution, the 'leadership' is committed towards **continual improvement, sustained development, and nurture a culture of quality**. The leadership of the **ISO certified, self-financing, Institution of Eminence, Deemed to be a University in the private sector** is guided by the **elements of sound judgment, effective communication, and setting standards/ benchmarks in quality education and administration, and desire to excel in stakeholder customer satisfaction**. The vision and mission are **strategized in 15-year strategies and five year rolling implementation plan and monitored continuously** with Management Review Meeting IQAC, Academic Council, and Board of Management.

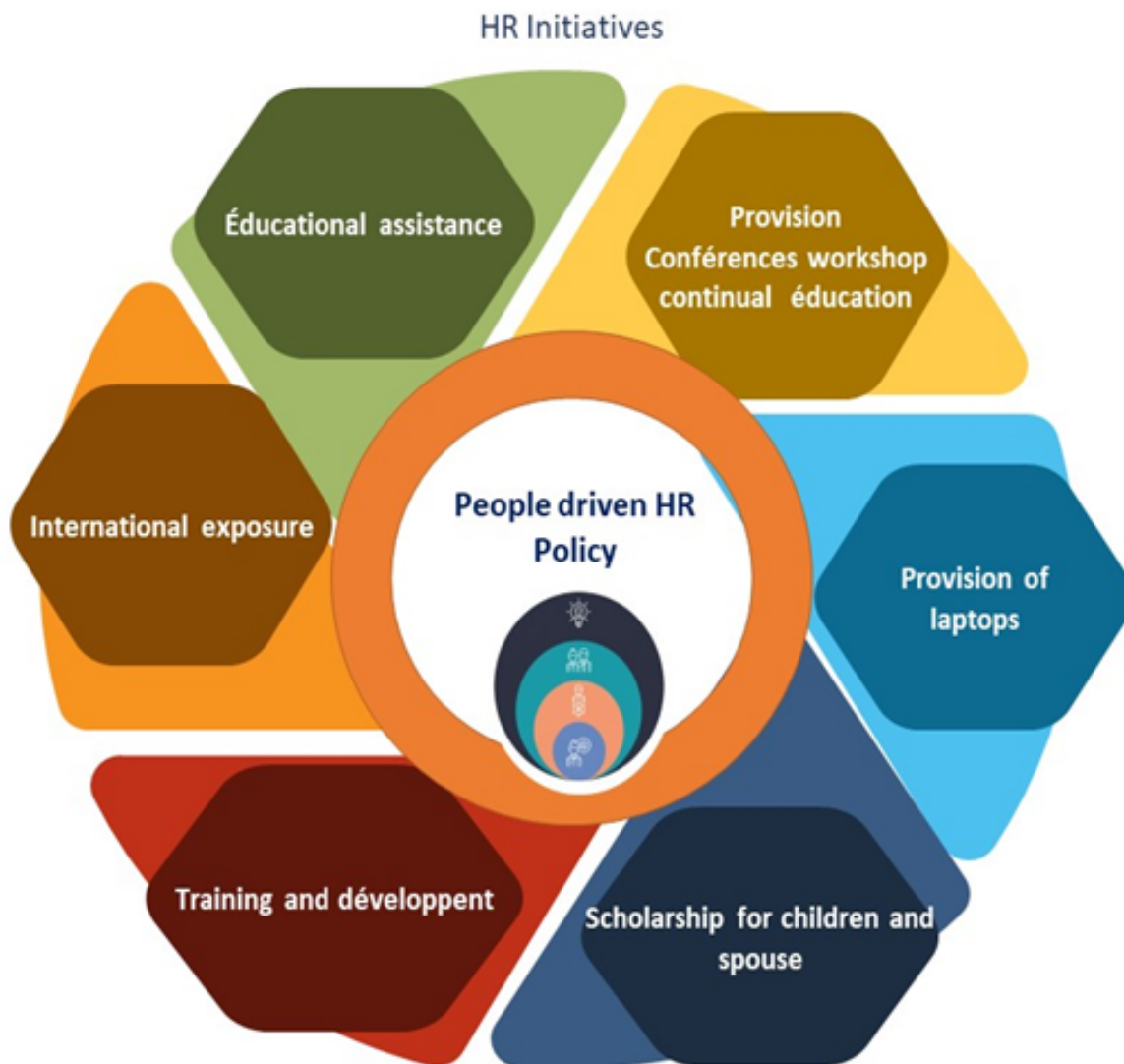
Management directly interacts with the stakeholders, obtains regular feedback, and takes prompt actions based on feedback analysis.



Senior leaders effectively set the strategic direction of accomplishing the organization's objectives through careful **top-down, bottom-up alignment of departments, constituent institutes, and key functional areas**. This alignment is achieved through the strategic planning process as the prioritized strategic objectives cascade to organizational, departmental, and employee goals. The senior management then reviews the objectives and university goals. It identifies the roles of departments and constituent institutes in achieving those objectives and goals by utilizing their expertise and daily interactions with students, patients, employees, industry and the community. From this information, they propose their individual goals through guided discussions with their respective HoI and HoD. Proposed department and institutions goals are validated and aligned by heads of institutions and heads of departments through discussions with key leaders in their department to enable internal linkage of goals, establish standards of performance for shared goals, and ensure that all university goals have been assigned. The senior leaders ensure that the university goals and objectives are supported and strengthened by the goals and objectives of constituent units and their departments.

The policies of the University are framed in such a way that there is **continuous improvement in every aspect**. The senior leaders communicate effectively with the faculty and the staff through regular meetings, newsletters and bulletins, University's internet/ intranet and media activities.

University has a **people-driven HR policy to motivate the employees to strive for excellence**. The following are a few of them:



Internal audits are the best ways to encourage process-driven planning and execution. The issues that are taken up at MRM/IQAC are finalized and documented.

Leaders participate in discussions, both formal and informal, to facilitate decision-making that enhances planning and execution skills. **Exit interviews are carried out to sustain an atmosphere congenial to learning and development.**

| File Description | Document |
|--|-------------------------------|
| Any additional information | View Document |
| Link for vision and mission documents approved by the Statutory Bodies | View Document |
| Link for report of achievements which led to Institutional excellence | View Document |
| Link for additional information | View Document |

6.1.2 Effective leadership is reflected in various institutional practices such as decentralization and participative management etc.

Response:

Yes. University encourages participatory management by involving the stakeholders at all levels.

Academic administrative decentralization

- Department meetings are held at the departmental level, wherein all faculty members participate. Faculty members are also members of the department Board of Studies.
- Heads of Department (HoD) meetings are held at the institutional level. Department heads are also members of the institution Board of Studies.
- At the university level, Heads of Institution (HoI) meetings are held, where all the HoIs take part and discuss the management issues.
- HoIs are also members of the Academic Senate, which is entrusted with the primary responsibility of maintaining academic standards.
- HoIs are also members of the Executive committee, and three of the HoIs are also members of the Board of Management.
- Academic and Administrative Heads meetings
- Executive committee meetings
- Select senior faculty members are entrusted with additional responsibilities of senior official positions at the University.

University **promotes the culture of decentralization and participative management.**

In addition to the academic council, board of management, finance committee, faculty selection committee, planning and monitoring, executive committee, and IQAC, **there are 40 other committees at the University level**, which create a participatory ecosystem.

The overall administrative activities, operational issues, and the overall control of constituent institutes are under the university leadership for decision-making purposes. Hence, all issues such as planning, strategic development issues, academic issues, administrative issues and financial control are vested with the University, under various and appropriate committees.

However, **institutes receive unparalleled support from and constructive, participatory role by the University** in all their endeavors to provide a holistic educational experience to their students, to create a benchmark for quality education, and leverage technology in the teaching-learning process.

All constituent institutes of the University have functional autonomy to carry on with the academic and administrative activities to ensure that the vision and mission of the University and the institution are achieved.

Financial decentralization

The Head of the department in consultation with faculty members proposes annual capital and operation budget. The proposed budget is discussed with the Head of the Institution. The Head of the institution

compiles the budget requirements of all the departments and prepares a consolidated Annual budget for the institution based on the priority of the capital and operation budget items. At the university level, Director Finance consolidates the budget requirements of all the constituent institutes. Top management along with heads of institutions, deliberates on the proposal, and the budget is allotted based on the available resources.

This autonomy and participatory administrative support steadily promote innovation in teaching and learning, research and healthcare. The result is **evidenced in the student achievements and placement records** enhancing MAHE's reputation and global recognition as one of the elite institutions in the education and health care sector.

| File Description | Document |
|---|-------------------------------|
| Link for information / documents in support of the case study | View Document |

6.2 Strategy Development and Deployment

6.2.1 The institutional Strategic plan is effectively deployed.

Response:

Strategy Planning

MAHE prepared **Fifteen-years Strategic Plan with five-year rolling implementation plan**. The Fifteen-year plan is a strategic plan to meet the **objectives and characteristics of Institution of Eminence (IoE)**, and it contains quantified milestones and timelines for the Institution to achieve excellence as laid down in guidelines. It also outlines **SWOT analysis indicating its present status in the quality hierarchy** and proposed measures to address the shortcomings. The rolling five-year implementation plans contain details and tangible action plans to achieve the objectives laid out in the strategic plan.

The following are the five key pillars for achieving the Institution of Eminence Deemed to be University status:

- Excellence in Education
- Exemplary Research and Innovation
- Expanding Reach and Internationalization
- Effective Engagement and Alumni Relation
- Enabling Foundation

Some of the salient features are: **offer education of the highest standards in a congenial environment** facilitated by competent academics to every active learner adopting **a curriculum accepted nationally and internationally**, be an **exemplary model in research and innovation** creating a balanced ecosystem that **enables interdisciplinary research collaboration**, **secure global recognition** as an internationally reputed organization **facilitating knowledge and cultural exchanges recognizing the diversity and inclusivity**, develop **a deepening and sustaining relationship with important stakeholders** which is mutually beneficial through industry, alumni and societal interactions, and enable infrastructure for world-class facilities for teaching, research, administration, and student life

Deployment

The strategic plan was shared with all the constituent institutions and they prepared their individual institutional developmental plan in alignment with the university plan. The university strategy plan is monitored by the Directorate of Planning and it is reviewed by the management every six months. It is realigned by the institutional heads and top management every year. MAHE has almost achieved the goals set up to 2021. MAHE continues to be recognized by accrediting agencies like NAAC, IoE, ISO NBA NABH AAHRP, and IFCA.

Effective implementation is also seen in the form of improvement in NIRF ranking from 18 to 7 by 2021. MAHE also expanded its campuses and courses offered. In a dynamic interdisciplinary environment, students at MAHE have a choice of over 270+ globally recognized and accredited programs from 37 constituent units across 29 disciplines under the faculties of Health Sciences, Technology and Management, and Humanities, Liberal Arts and Social Sciences.

MAHE was India's first private and Deemed to be University to breakthrough into the Top 100 of the QS BRICS and Top 200 of the QS Asia Universities Rankings.

15 YEAR VISION

- In Top 100 of World Overall and Top 50 for Medicine & Pharmacy
 - Corpus from INR 7 Billion to 20 Billion
 - INR 800 Million for Need Blind Scholarships
 - Collaborate with 30 of Top 50 World
 - Maintain 1:10 FSR
 - 32000+ Students | 3200+ Faculty | 400+ Programmes | 30+ Disciplines | 75% PhD Faculty International Origin Faculty & Students
 - 22000 Research Papers with Average of 10 Citations Per Paper | 40% Papers with International Co-Authors
-

| File Description | Document |
|--|-------------------------------|
| Any additional information | View Document |
| Link for minutes of the Governing Council/ other relevant bodies for deployment / monitoring of the deliverables | View Document |
| Link for Strategic Plan document | View Document |

6.2.2 Effectiveness and efficiency of functioning of the institutional bodies as evidenced by policies, administrative setup, appointment and service rules, procedures etc.

Response:

MAHE as an Institute of Eminence Deemed to be University is functioning as per the framework/MOA of UGC with an independent Board of Management (BoM). It has developed a very robust self-governance structure under the guidance of highly qualified and eminent academic leaders. BOM is empowered to function independently without any interference from MAHE Trust.

MAHE has constituted all statutory committees as prescribed by the regulatory authorities both at University and at Institute levels. Following are the major committees effectively functioning under the University:

- Academic Council
- Finance Committee
- Executive Committee
- Faculty Selection Committee
- Internal Quality Assurance Cell
- Planning and Monitoring Board

All the above committees are functioning as per the defined time schedule, and relevant documents are maintained at the University.

The Academic Council is the primary academic body of MAHE. It monitors and manages the standards of teaching, research and training, approval of syllabus, coordination of research activities, and quality of examinations and tests.

The Executive Committee meets at defined intervals and takes decisions on various administrative matters approved by the BoM. MAHE has constituted Faculty Selection Committee (FSC) under the Chairmanship of Vice-Chancellor of the University to recommend eligible and suitable candidates for teaching positions.

The Finance Committee monitors the annual budget, annual accounts and financial estimates of the

University. The Faculty Selection Committee (FSC) also conducts personal interviews of faculty members for their career promotion. MAHE ensures the presence of external/subject experts in the committee for recruitment /promotion of faculty members at the level of Professor. Proceedings of the FSC are maintained in the University. Internal Quality Assurance Committee initiates, plans and monitors the quality of various academic activities. The planning and monitoring committee of MAHE monitors the development of various academic programs under the University. Apart from this, MAHE also has other important committees such as the Grievance Committee, Anti-Ragging Cell, Internal Complaints Committee for prevention of Sexual Harassment. Various other committees are also functioning at the institution level.

MAHE has developed a feedback system to understand the performance of its functional departments and various services extended to its internal stakeholders.

MAHE has well-defined Service Rules governing the terms of employment of its teaching and non-teaching staff. Service Rules are aligned with the applicable statutes of the country. Copy of Service Rules is annexed.

MAHE recruitment policy strictly adheres to the principle of non-discrimination based on gender, cast, colour, religion, language, disability, gender identity. MAHE attracts the best talent through effective and fair recruitment and selection practices that are consistent and aligned with its primary goals of teaching and research.

| File Description | Document |
|---|-------------------------------|
| Any additional information | View Document |
| Link for Annual Report of the preceding academic year | View Document |
| Link for organogram of the University | View Document |
| Link for minutes of meetings of various Bodies and Committees | View Document |

6.2.3 The University has implemented e-governance in the following areas of operation

1. Planning and Development
2. Administration (including Hospital Administration & Medical Records)
3. Finance and Accounts
4. Student Admission and Support
5. Examination

Response: All of the above

| File Description | Document |
|---|-------------------------------|
| Screen shots of user interfaces, if any | View Document |
| Institutional data in prescribed format | View Document |
| Institutional budget statements allocated for the heads of E-governance implementation ERP Document | View Document |
| E-Governance architecture document | View Document |
| Any additional information | View Document |

6.3 Faculty and Staff Empowerment Strategies

6.3.1 The institution has effective welfare measures for teaching and non-teaching staff, and other beneficiaries.

Response:

MAHE, realizing that the well-being of teaching and non-teaching staff is important for the effective functioning of the institution, offers a wide range of welfare measures to its employees. It also practices various faculty empowerment strategies to upgrade the professional competencies of its faculty members.

Summary of welfare practices are detailed below:

- **Statutory benefits:** Provident Fund, Gratuity & ESI scheme - Fully complied as per the respective enactments.
- **Pension Scheme:** MAHE has introduced National Pension System (NPS), covering all the teaching and non-teaching staff on the rolls with effect from April 01, 2016. MAHE contributes 10% basic pay of every employee to the NPS fund.
- **Medical Coverage:** MAHE has covered its teaching and non-teaching staff with a medical insurance scheme (Medicare) for 3 lakhs and 1.5 lakhs per annum respectively. Premium towards this Medical insurance is being shared between MAHE and employees in the ratio 70:30 for non-teaching staff and 50:50 for the teaching staff.
- **Life Insurance & Permanent Disability Coverage:** The employees are covered under the Group Term Life Insurance Scheme with the coverage for life and permanent disability with Rs.50 Lakhs and Rs. 10 Lakhs for teaching and non-teaching staff respectively. Management contributes 80% of the premium for non-teaching staff and 50% in the case of teaching staff.
- **School Fees Reimbursement:** Provides reimbursement of children's educational expenses up from nursery to standard XII for two children with a top ceiling of Rs. 10,000/- per child / annum.
- **Scholarship to children/spouse for higher education:** MAHE provides a scholarship to children/spouse of employees for pursuing professional courses under the University. The scholarship is linked to the annual income of both parents.
- **Conference Facilities:** Faculty members are entitled to Rs. 50,000 per year as financial support to attend conferences/workshops. It can also be used for reimbursement of publication charges/fees for patents.

- **Incentives for Research & Publication:** Provides cash incentives/sponsorships to the conference under the scheme based on the points earned by the faculty members for their research publications.
- **Research incentives:** Provides incentives for research grants and consultancies with a top ceiling of Rs. 15 Lakhs per year.
- **Subscription to Professional Societies:** All the faculty members are eligible for reimbursement of subscription fees to professional society with a ceiling of 7,500/- per annum.
- **Dr. TMA Pai Endowment Chairs:** MAHE has constituted 20 endowment chairs of Rs.10 Lakh each per year to exemplary researchers.
- **Interest subsidy on utility/housing loan:** Provides for 4% interest subsidy on utility/housing loans.
- **Leave Travel Concession:** Middle and senior-level faculty members are covered under this scheme.
- **Institutional accommodation:** MAHE provides accommodation to the staff based on availability.
- **Laptops:** Every faculty member is provided with a laptop for academic purposes.
- **Sodexo vouchers:** Provisions available for Sodexo meal/gift vouchers for faculty members and non-teaching staff
- **Recreation facility:** Faculty members have access to MARENA, a world-class indoor sports facility and membership to the Valley club.

| File Description | Document |
|--|-------------------------------|
| Link for policy document on welfare measures | View Document |
| Link for list of beneficiaries of welfare measures | View Document |

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

Response: 67.04

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

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 2036 | 2509 | 1487 | 1216 | 1285 |

| File Description | Document |
|---|-------------------------------|
| Policy document on providing financial support to teachers | View Document |
| List of teachers provided with membership fee for professional bodies | View Document |
| List of teachers provided with financial support to attend conferences, workshops etc. during the last five years | View Document |
| Institutional data in prescribed format | View Document |
| E-copy of letter/s indicating financial assistance to teachers and list of teachers receiving financial support year-wise under each head. | View Document |
| Audited statement of account highlighting the financial support to teachers to attend conferences/workshops and towards membership fee for professional bodies. | View Document |
| Any additional information | View Document |
| Link for additional information | View Document |

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

Response: 369

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

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 453 | 351 | 417 | 319 | 305 |

| File Description | Document |
|--|-------------------------------|
| Reports of Academic Staff College or similar centres Verification of schedules of training programs | View Document |
| List of professional development / administrative training programmes organized by the University year-wise for the last five years | View Document |
| Institutional data in prescribed format | View Document |
| Detailed program report for each program should be made available Reports of the Human Resource Development Centres (UGC ASC or other relevant centres). | View Document |
| Copy of circular/ brochure/report of training program self conducted program may also be considered | View Document |
| Certified list of the participants who attended the professional development/administrative training programmes during the last five years | View Document |
| Certified list of organisations / agencies that sponsored/supported/supervised the programmes | View Document |

6.3.4 Average percentage of teachers undergoing Faculty Development Programmes (FDP) including online programmes (Orientation / Induction Programmes, Refresher Course, Short Term Course etc.) during the last five years..

Response: 86.92

6.3.4.1 Total Number of teachers attending such programmes year-wise during the last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 2653 | 2158 | 2217 | 2006 | 1986 |

| File Description | Document |
|---|-------------------------------|
| List of teachers who attended Faculty Development Programmes including online programmes during the last five years | View Document |
| List of sponsoring/supporting/supervising agencies | View Document |
| Institutional data in prescribed format | View Document |
| E-copy of the certificate of the program attended by teacher | View Document |
| Annual reports of the IQAC and the University for the last five years. | View Document |
| Annual reports of the AQAR submitted to NAAC | View Document |

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

Response:

MAHE recognises the value of its employees and understands that the quality of University services depends upon employees. MAHE has a well-defined performance management policy applicable to its faculty members. MAHE has upgraded its Performance Management System (PMS) from the paper format to Online mode through internally developed software. Based on the assessment scores, faculty members are graded as 'A+++', 'A++', 'A+' and 'A' through relative ranking in the ratio of 30:30:30:10 respectively. Performance Incentives at approved rates are sanctioned based on the grades obtained by the faculty members. The faculty members with grades 'A' are not eligible for performance incentives for that particular year.

The annual appraisal process begins with self-appraisal followed by assessment by respective Heads of the Departments. Further, the assessment report is reviewed by the Head of the Institution who recommends the appropriate performance grades and submits the report to MAHE. Annual appraisal reports thus received are reviewed by a committee chaired by the Vice-Chancellor for final approval. Student feedback on faculty is conducted at the Institute level, which is also a part of the PMS process. Faculty members are assessed every calendar year i.e, from January to December. Performance incentives based on the above assessments are sanctioned from the month of April every year.

PMS reports and grades are essential parts while considering faculty members for promotion to the next level and also while considering for leadership positions such as Heads of the Departments and so on.

?The non-teaching staff are assessed through a uniform assessment format annually. They are assessed on various parameters which are critical for the functioning of the departments/institution. PMS reports of non-teaching staff are also being used to identify the training need areas.

| File Description | Document |
|--|-------------------------------|
| Link for performance appraisal policy of the institution | View Document |

6.4 Financial Management and Resource Mobilization

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

Response:

Manipal Academy of Higher Education (MAHE), being a self-financed Deemed to be University, mobilizes its financial resources through the following sources:

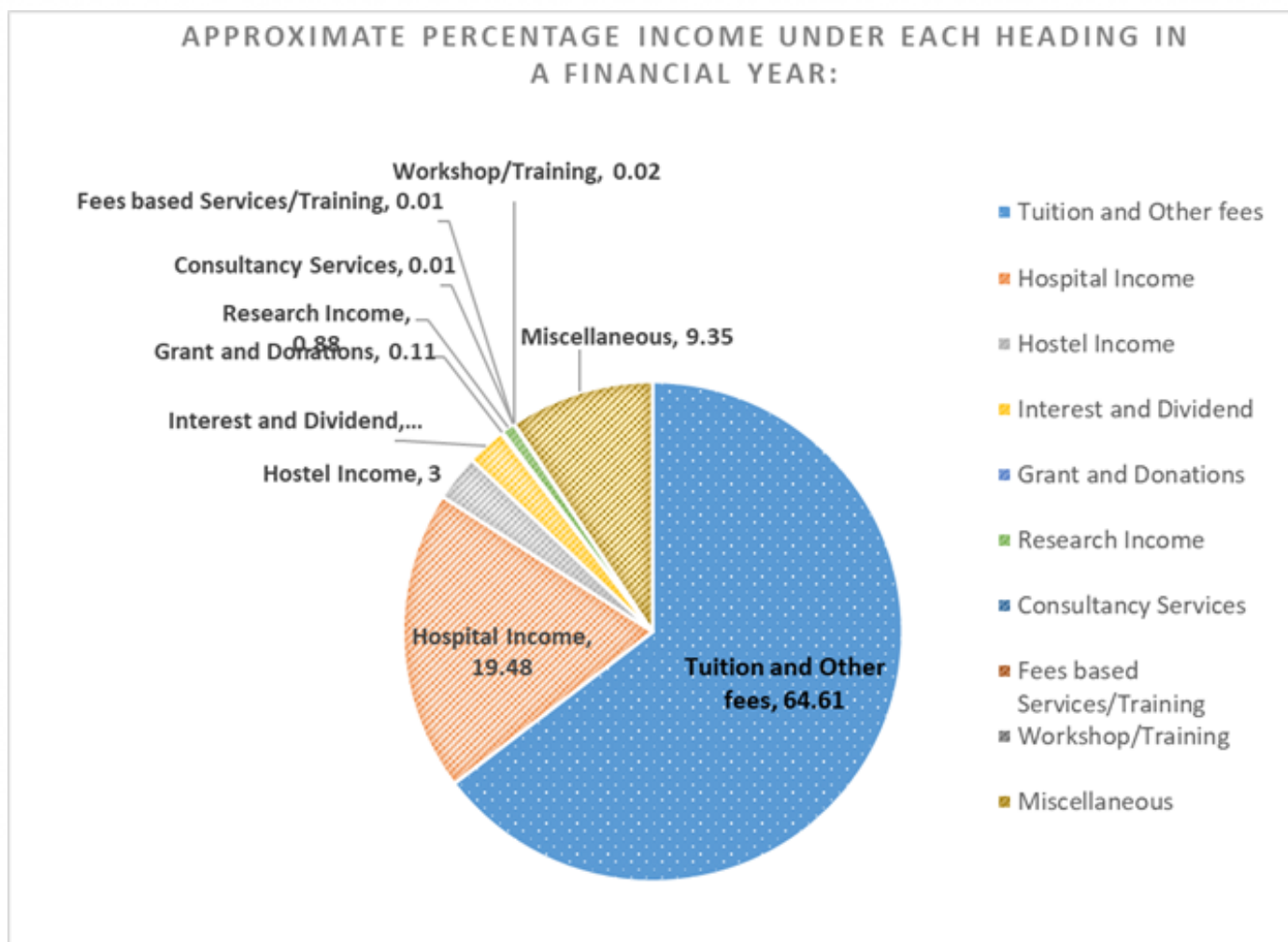
1. Tuition Fees
2. Research Grants
3. Consultancy Services
4. Services – Hospital, Diagnostic etc.
5. Donations – Alumni & Philanthropists
6. Endowments
7. Hostel fees
8. Interest and dividend
9. Miscellaneous sources

Sources of Revenue

1. Tuition Fees: MAHE is a self-financing university. The tuition fee is the primary source of income for the University. A fee fixation committee, headed by a retired High Court judge, decides the fee structure for a block period of three years. Accordingly, the fee is fixed for each batch of students at the time of their admission and it is communicated to the students. It is also displayed in the university website.
2. Research Grants: A research grant refers to a sum of money given to a researcher for meeting the expenses involved in the research project (a grant that funds research). MAHE encourages its faculty members to submit proposals for research grants to various funding agencies both within the country and outside. It also encourages collaborative research activities. MAHE provides incentives to the researchers as per the research incentive policy of MAHE.
3. Consultancy Services: Consulting Services refer to services of an advisory and/or intellectual nature provided by consultants using their professional skills to study, design, organize, and manage projects encompassing multiple activities and disciplines. MAHE motivates its faculty to render consultancy work.
4. Hospital and Diagnostic Services – These services facilitate the provision of timely, cost-effective, and high-quality diagnostic care in safe and secure environments. It includes the clinical services of Pathology and Laboratory Medicine, Radiology, Nuclear Medicine etc.
5. Donations – Alumni & Philanthropists: It refers to the voluntary contributions from alumni and philanthropists to partially fund the augmentation of infrastructure and/or provide scholarships to the students. MAHE approaches the philanthropists and alumni for donations / Institute awards, scholarships, etc.

6. Endowments: Endowment funds received towards the establishment of centres of excellence, chair, grants and awards.
7. Hostel Fees: MAHE provides its students with the excellent option of boarding and lodging in its on-campus hostels.
8. Interest and Dividend.
9. Miscellaneous sources: MAHE organizes workshops/training, plenaries with industry or corporate sponsorships and delegate fees.

Following pie chart shows the financial resource mobilization under each heading in a financial year:



Allocation of funds

The Head of the Department in consultation with faculty members proposes annual capital and operation budget. The proposed budget is discussed with the Head of the Institution. The Head of the Institution compiles the budget requirements of all the departments and prepares a consolidated annual budget for the institution based on the priority of the capital and operation budget items. At the University level, Director Finance consolidates the budget requirements of all the constituent units. Top management along with Heads of Institutions deliberates on the proposal and the budget is allotted based on the available resources.

| File Description | Document |
|---|-------------------------------|
| Link for procedures for optimal resource utilization | View Document |
| Link for resource mobilization policy document duly approved by BoM / Syndicate / Governing Council | View Document |

6.4.2 Funds / Grants received from government / non-government bodies / philanthropists during the last five years (excluding scholarships and research grants covered under Criterion III)

Response: 2849

6.4.2.1 Total funds / Grants received from government /non- government bodies year-wise during the last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 167 | 427 | 1192 | 234 | 829 |

| File Description | Document |
|---|-------------------------------|
| Provide the budget extract of audited statement towards Grants received from non-government bodies, individuals, philanthropist duly certified by chartered accountant and/or Finance Officer | View Document |
| List of government / non-Governmental bodies / philanthropists that provided the funds / grants | View Document |
| Institutional data in prescribed format | View Document |
| Copy of letter indicating the grants/funds received by respective agency as stated in metric | View Document |
| Audited statements of accounts for the last five years (Refer annexure number -01 as per SOP) | View Document |
| Any additional information | View Document |

6.4.3 Institution conducts internal and external financial audits regularly

Response:

Audit Process at Manipal Academy of Higher Education: The Audit at MAHE is being carried out by external agencies who are appointed by the Finance committee.

The audit is by way of:

- Internal Audit.
- Statutory Audit

The **Internal Audit** for the last four financial years has been entrusted to an external agency. They carry out the audit for each quarter of the year. They are mainly into transactional audit, which is carried out on a test basis. They also look into the physical verification of stocks, cash verification at the institutional level. They look into the internal controls of the financial system. They highlight the deficiency in the system, if any, and advise the Management for remedial measures.

The **Statutory Audit** is carried out annually. In order to reduce the burden at the end of the financial year, the external audit team visits MAHE at the end of six months, i.e., September and carries out the half-yearly audit. Subsequently, the Final audit is carried out in the month of June /July.

The financials are prepared according to the prevailing laws. They are then approved by the Finance committee.

Along with the above two Audits, MAHE also has the following:

- Audit of its PF Trusts and Gratuity trust
- ISO Audit
- Audit of the Research Grants
- Audit of the conference and workshop conducted

There are no major observations from the external auditors or internal Auditors to date.

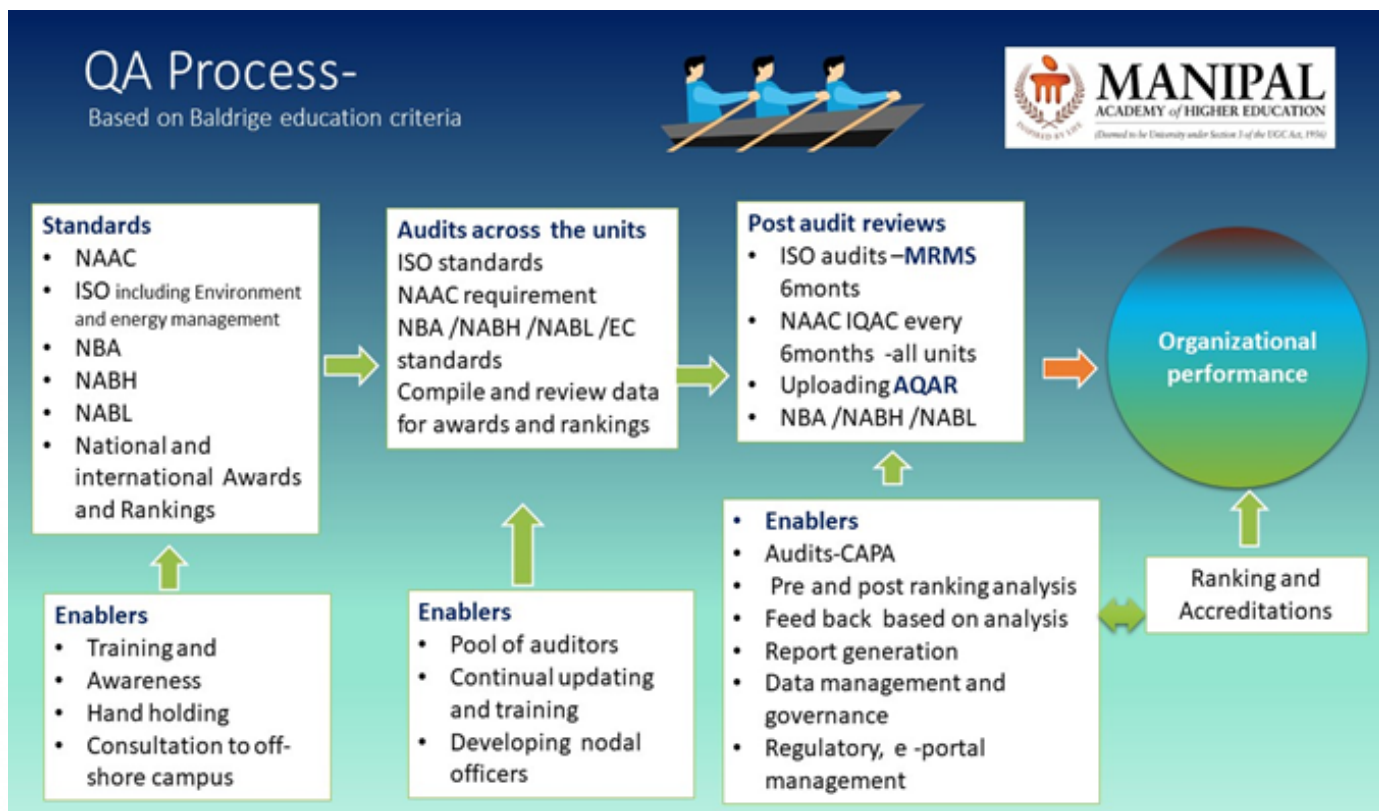
| File Description | Document |
|---|-------------------------------|
| Link for policy on internal and external audit mechanisms | View Document |
| Link for financial audit reports for the last five years (Refer annexure number -01 as per SOP) | View Document |

6.5 Internal Quality Assurance System

6.5.1 Institution has a streamlined Internal Quality Assurance Mechanism

Response:

MAHE is well-known for its quality education and health care. It obtained ISO certification 18 years ago and voluntary NAAC accreditation in 2004. Following is the Quality assurance mechanism at the institution:



MAHE has a central Internal Quality Assurance Cell (IQAC) with representation from various institutional and functional departments as members along with external stakeholders. Each institution has institutional IQAC.

MAHE participates in accreditation like ISO, NBA, NABH, NABL AAHRP. The IQAC meets on regular basis and approves the annual quality assurance reports to be submitted to NAAC.

The compilation, validation, and submission of data for participating in all the rankings of the institution are done by the IQAC. Following are some of the important rankings the institution participates every year:

- ✓ Times Higher Education World University Ranking
- ✓ Times Higher Education Asian University Ranking
- ✓ Times Higher Education Emerging Economies University Ranking
- ✓ Times Higher Education Impact Ranking
- ✓ QS Asian University Ranking
- ✓ QS Subject Ranking
- ✓ QS India University Ranking
- ✓ UI Green Metric World University Ranking
- ✓ NIRF Ranking
- ✓ Week Hansa Research Survey
- ✓ Education World Ranking
- ✓ Career360 Ranking

Team of auditors

Quality Assurance team comprises around 350 members, which includes nodal officers and internal auditors from various constituent units. MAHE continuously develops and upgrades the skills of the team members through auditory training, refresher courses and participation in cross audits.

Training / Workshops:

- GUIDE BY SIDE session by the internal team on introduction to risk management relevant to ISO 9001-2015 for the HoDs of MIT Manipal
- An Interactive Session on “Academic Reputation and World University rankings” was held by Dr. Karthick Sridhar, M/s ICARE Chennai, for the HoDs of Manipal Campus
- Analysis of NIRF ranking 2018 of Health sciences disciplines was presented at the MAHE Health Sciences Council meeting by the Quality team.
- GUIDE BY SIDE session by the internal team on introduction to risk management relevant to ISO 9001-2015 for the HoDs and Internal auditors of MCHP Manipal
- Half-a-day session on NIRF ranking Awareness was conducted to the HoDs of MCODES Mangalore by the Quality team.
- Half-a-day session on analysis of NIRF Ranking on MEDICAL discipline with specific insights to KMC Mangalore was conducted to HoDs of KMC Mangalore
- An orientation workshop on Preparation for NAAC Re-accreditation w.r.t. new methodology was conducted by Mr. Syed Mujahid, M/s ICARE Chennai for the MAHE Quality team and some of the institution Nodal officers.
- Two batches of the Orientation program for Heads of Departments of Manipal Campus on “Academic Reputation and World University rankings, Institution of Eminence and National Institute Ranking Framework” by Dr. Karthick Sridhar, Vice Chairman, M/s ICARE Chennai
- Orientation on “NIRF / Subject Rankings – way forward” for the Director, Joint Director, Associate Directors, QMR & Dy. QMR of MIT by Dr. Karthick Sridhar & team, M/s. ICARE Chennai.
- Orientation program for Heads of Departments of Mangalore Campus on “Academic Reputation and World University rankings, Institution of Eminence and National Institute Ranking framework” by Dr. Karthick Sridhar, Vice Chairman, M/s ICARE Chennai
- One-day workshop on Assessment and Accreditation Process of National Assessment and Accreditation Council was organized by Mr. Syed Mujahid, M/S ICARE Chennai for the NAAC Action team consisting of 41 members, who would compile and collate information for preparing NAAC Self Study Report for Reaccreditation.

| File Description | Document |
|--|-------------------------------|
| Link for the minutes of the IQAC meetings | View Document |
| Link for the structure and mechanism for Internal Quality Assurance | View Document |
| Link for the report on the initiatives for the appointment of a fulltime Director/Officer for the IQAC | View Document |

6.5.2 Quality assurance initiatives of the Institution include: 1. Academic and Administrative Audit (AAA) and initiation of follow-up action 2. Conferences, Seminars, Workshops on quality 3. Collaborative quality initiatives with other Institution(s) 4. Orientation programmes on quality issues for teachers and students 5. Participation in NIRF process 6. Any other quality audit by recognized State, National or International agencies (ISO, NABH, NABL Certification, NBA, any other)

Response: A. All of the above

| File Description | Document |
|---|-------------------------------|
| Report /certificate of the Quality Assurance Initiatives as claimed by the Institutions eg: NBA, ISO, NABH, NABL, AAA etc., | View Document |
| Institutional data in prescribed format | View Document |
| e-copies of the accreditations and certifications | View Document |
| Annual reports of the University | View Document |
| Link for AQARs prepared by IQAC. | View Document |

6.5.3 Impact analysis of the various initiatives carried out and used for quality improvement

Response:

QA Initiatives

- Curriculum Design and Development
- Academic Flexibility
- Feedback System
- Student Enrolment and Profile
- Teacher Quality
- Student Performance and Learning Outcomes.
- Promotion of Research
- Resource Mobilization for Research

- Research Publications and Awards
- Consultancy
- Collaboration
- Student Mentoring and Support
- Faculty Empowerment Strategies
- over 2000 outreach and extension activities in collaborations with government, industry and NGO's.

Impact of the initiatives

- 8 new interdisciplinary programs have been approved for 2021 so far (Total 54 programs in the last five years) CBCS is implemented in 93.36% of the programmes
- Audit option available in 47 programs across 3 institutions/departments
- Continues feed back from stakeholders are taken and integrated with the delivery system.
- Faculty percentage with Terminal degrees have improved to 29.34% faculties with PhD and 64.74% faculties with Terminal degrees.
- 65% of students are from outside state and 6% are international students
- Outcome Based Education is documented in all the constituent units . Attainment of Student Learning Outcomes is being monitored .
- Over 25 thousand [Actual is 27313] students were actively engaged in learning through MOOCs
- Average % of students qualifying in these exams during last five years have improved to 89.48% .
- Average Seed Funding of 146.15 lakhs INR is provided to faculty each year (last 5 years)
- Out of 128 grant proposal submitted during the period 71 proposal are interdisciplinary in nature.
- 21 % of the publication published during the calendar year 2020 is interdisciplinary, 27% of publications with international collaborations
- 221 faculties are currently in the editorial board of national and international journals.
- In year 2020: 2774 publication in Scopus with 34% of which in Q1.
- Revenue generated from advisory/R&D /Consultancy projects including clinical trials during the last five years is 12708 Lakhs INR.
- Crisis management teams under the offices of Student Welfare ensures timely response for any student related emergencies. 62093 students have benefited from various scholarships and fee waivers in the last 5 years. (About 50%)
- MAHE in its journey to meet the objectives of IoE. These have led to better realization of goals.
- MAHE ranked 7th in the University category in NIRF ranking and 751-800 in QS world ranking, Pharmacy 151-300 and Medicine 351-400 in QS Subject Ranking
- Teaching Hospitals are accredited with NABH and NABL
- Last five years, more than 12000 students are participated in community health services

| File Description | Document |
|--|-------------------------------|
| Link for additional information | View Document |
| Link for relevant documents/information on the process and results of impact analysis on the above aspects | View Document |

NAAC

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1 Measures initiated by the institution for the promotion of gender equity during the last five years.

Response:

The Manipal Academy of Higher Education constantly strives to maintain international standards of excellence, in academic output, as well as in the holistic emotional, mental, and physical well-being of its students, employees and all its stakeholders. MAHE is committed to creating a healthy environment that enables students and faculty to learn and work without any fear of prejudice, gender bias and gender discrimination. Since inception, MAHE has continued to remain committed to fostering an inclusive environment and to creating a fair and equitable space for all staff and students, irrespective of their gender. This is reflected in the fact that women leaders head various constituent institutes of MAHE. Gender balanced leadership results in a greater diversity of thought and better decision-making, leading to higher employee satisfaction. An overview of the gender equity and sensitization initiatives, offered to students, faculty, and staff of MAHE, is presented below:

- The Director Student affairs is the nodal contact for all student grievances. The Department of Student Affairs (DSA) and the Student Support Centre (SSC) offer practical and constructive support to students in adjusting to a new environment as well as social or personal challenges that are specific to their age group and circumstances. DSA has Single Points of Contact and a Student Advisory Board comprising student leaders from all institutes and both genders, that organize awareness campaigns and outreach sessions across institutes.
- The student handbook provided to all the students during the Orientation Day of the respective institutes contains the telephone numbers of the Director of Student Affairs and University Patrol Vehicles to ensure the safety and security of students.
- Policy on Prevention, Prohibition, and Redressal of Sexual Harassment at Workplace is constituted by MAHE. There is a robust and fair mechanism to address sexual harassment complaints received from students and staff.
- Centre for Women's Studies, established in 2016 organizes an array of events like talks and conferences that revolve around gender equity.
- International Women's Day is organized annually by the University to celebrate the spirit of womanhood. This committee organizes programs at regular intervals on various topics like health and mental well-being, entrepreneurship, and financial well-being of women.
- The Students Council at every institute has a balanced representation of both male and female students, and both are equally responsible for planning, coordination, execution, and reviewing all student activities.
- Deliberating the benefit of students as also keeping in mind the general safety and security of students, each of the institutes has internal committees viz. anti-ragging committee, grievance committee, sexual harassment committee, inquiry committee, and SC/ST & OBC Committee for the overall well-being of the

students.

- Hostel accommodations are provided separately for boys and girls with CCTV cameras positioned across the premises. Entry into each hostel is restricted to the residents with access cards. Male and female faculty members are appointed as wardens for Men's and Women's hostels respectively. The disciplinary committee headed by the Chief Warden, Dean and student representative for disciplinary measures of the hostel.

| File Description | Document |
|--|-------------------------------|
| Link for specific facilities provided for women in terms of- a. Safety and security b. Counselling c. Common Rooms d. Day care center for young children e. Any other relevant information | View Document |
| Link for annual gender sensitization action plan | View Document |
| Link for additional information | View Document |

7.1.2 The Institution has facilities for alternate sources of energy and energy conservation measures

1. Solar energy
2. Biogas plant
3. Wheeling to the Grid
4. Sensor-based energy conservation
5. Use of LED bulbs/ power efficient equipment

Response: Any Four of the above

| File Description | Document |
|--|-------------------------------|
| Institutional data in prescribed format | View Document |
| Geo-tagged photographs of the facilities | View Document |
| Any additional information | View Document |
| Link to additional information | View Document |

Other Upload Files

- | | |
|---|-------------------------------|
| 1 | View Document |
| 2 | View Document |

7.1.3 Describe the facilities in the institution for the management of the following types of degradable and non-degradable waste (within 500 words)

- Solid waste management

- **Liquid waste management**
- **Biomedical waste management**
- **E-waste management**
- **Waste recycling system**
- **Hazardous chemicals and radioactive waste management**

Response:

The Manipal Academy of Higher Education, Manipal is an ISO 9001, 14001 & 50001 certified campus, following a series of voluntary ISO standards on Quality, Environmental & Energy Management Systems. The Environment and Energy Policy is our guiding document that enables the University to achieve continual improvement over time. Focus areas on campus include Institutional buildings, hostels, residences, hospital and other support services.

Solid waste management: Domestic Waste is segregated into recyclables, food is used in farms and vegetable waste is composted. Biomedical waste generated in the hospital and nursing facilities within the campus is handled as per the Biomedical Waste Rules. Hazardous waste, the major component generated in this category, is disposed to authorized recyclers. E-waste, including desktop computers and accessories, compact fluorescent lights and printer cartridges, is collected through separate waste streams and disposed to authorized recyclers

Waste water management: Three sewage plants set up and maintained by the University treat the waste water generated in the campus. These have a combined capacity to treat 6,500 cubic meters per day. Treated water from these plants are fully utilized for gardening and arboriculture. In addition, a grey water treatment plant of 400 cubic meters per day capacity, treats grey water from the treatment plant which is re-circulated to the flush system in some of the hostel blocks.

Rainwater harvesting: MAHE harvests rainwater in two ways: From rooftops of buildings; then using it for domestic purposes after proper filtering, and also by diverting storm water to abandoned bore wells and creation of artificial water body to rejuvenate and improve the water table.

Air quality monitoring: MAHE ensures the emissions from diesel generators are tested at regular intervals to ensure conformity to environmental limits. To control emissions of vehicles moving on our campus, an Emission Testing Centre has been established.

Energy conservation: Energy conservation concept is applied in the planning and developing of all our campus facilities. We are also increasing our energy procurement mix with an increase in renewable sources like solar energy.

Solar Water heaters & PV Systems: Solar powered heaters are exclusively used for heating requirements. Currently, the total installed capacity of solar heaters is four lakh litres per day, thus reducing conventional energy use for heating.

Green Transportation: Transportation of faculty and staff to and from airports and campuses is now being done by electric vehicles. MAHE has engaged the services of a third party for provision of five electric cars, which augments the current existing fleet of vehicles and helps reduce carbon foot print caused by transportation. Campus patrolling is done using EVs.

Exam Pads: MAHE now conducts examinations by using e-pads, which has significantly reduced paper consumption, thus effectively preventing trees from being felled.

The above measures have resulted in substantially reduced carbon emissions. Introduction of e-pads for student examinations has helped achieve a carbon emission reduction along with self-generation & green energy procurement at the main campus.

| File Description | Document |
|---|-------------------------------|
| Link for Geo-tagged photographs of the facilities | View Document |
| Link to relevant documents like agreements/MoUs with Government and other approved agencies | View Document |

7.1.4 Water conservation facilities available in the Institution:

1. Rain water harvesting
2. Borewell /Open well recharge
3. Construction of tanks and bunds
4. Waste water recycling
5. Maintenance of water bodies and distribution system in the campus

Response: All of the above

| File Description | Document |
|---|-------------------------------|
| Institutional data in prescribed format | View Document |
| Any additional information | View Document |
| Geo-tagged photographs / videos of the facilities | View Document |
| Link for additional informational | View Document |

7.1.5 Green campus initiatives include:

1. Restricted entry of automobiles
2. Battery-powered vehicles
3. Pedestrian-friendly pathways
4. Ban on use of Plastics
5. Landscaping with trees and plants

Response: All of the above

| File Description | Document |
|--|-------------------------------|
| Institutional data in prescribed format | View Document |
| Link to additional information | View Document |
| Geo-tagged photos / videos of the facilities | View Document |

7.1.6 Quality audits on environment and energy regularly undertaken by the Institution and any awards received for such green campus initiatives:

- Green audit
- Energy audit
- Environment audit
- Clean and green campus recognitions / awards
- Beyond the campus environmental promotion activities

Response: Any Four of the above

| File Description | Document |
|--|-------------------------------|
| Institutional data in prescribed format | View Document |
| Any additional information | View Document |
| Link for additional information | View Document |
| Audit reports of the institution related to the metric | View Document |

7.1.7 The Institution has disabled-friendly, barrier free environment

- Built environment with ramps/lifts for easy access to classrooms.
- Divyangjan friendly washrooms
- Signage including tactile path, lights, display boards and signposts
- Assistive technology and facilities for Divyangjan accessible website, screen-reading software, mechanized equipment
- Provision for enquiry and information : Human assistance, reader, scribe, soft copies of reading material, screen reading

Response: All of the above

| File Description | Document |
|---|-------------------------------|
| Relevant documents / reports | View Document |
| Institutional data in prescribed format | View Document |
| Link for relevant geo-tagged photographs / videos | View Document |

7.1.8 Describe the institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities (within 500 words)

Response:

The Manipal Academy of Higher Education (MAHE) believes in providing an inclusive environment that promotes students' all-round personality development. MAHE is also committed to upholding harmony with regard to cultural, regional, linguistic, socioeconomic, and other diversities among students, faculty, and staff. MAHE's constituent units encourage students to participate in community services and activities to uphold the sense of civic responsibilities.

The students actively participate in the Voluntary Service Organization (VSO) activities, a social unit of MAHE, initiated to provide an opportunity for students to serve society. VSO undertakes projects which cover community, organizational, and soft skills avenues. Projects are also planned in collaboration with the clubs/organizations of the constituent colleges of MAHE, and executed with MAHE support. VSO organizes activities at school for special children, visits to the paediatric cancer block, monthly birthday celebrations at orphanages, health camps for underprivileged people, blood donation camps, collection drives (clothes, stationery, toys), theatre & drama workshops for children, in addition to SPARSH – an annual fundraising cultural show. Staff and students also participate in a week-long donation drive, and in various community projects aimed at spreading smiles by touching others' lives in Manipal, Udupi, and Mangalore.

The students also participate in outreach programs organized by their respective departments and student councils. The outreach programs allow the students to understand the different perspectives of social issues prevailing in the community. Some of the activities organized as outreach programs are: role play, socio-drama, street play, eye camps, diabetes camps, and blood donation camps. The different institutes under MAHE also observe days of national and international health importance such as World tuberculosis day, World suicide prevention day, World health day, No tobacco day, World breastfeeding week, World mental health day, World heart day, World diabetes day, World Alzheimer's day, etc.

| File Description | Document |
|--|-------------------------------|
| Link to supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution) | View Document |

7.1.9 Sensitization of students and employees of the institution to the constitutional obligations: values, rights, duties and responsibilities of citizens

Response:

MAHE undertakes different initiatives each year, by organizing various activities to sensitize students and employees alike to our constitutional obligation: Values, Rights, Duties and Responsibilities of the citizens. On 26th January, MAHE organizes Republic Day celebrations every year. MAHE also actively celebrates Independence Day every year. Every institution is represented by a contingent of students at the

Independence Day parades, who march and offer their respect to the national flag. The best contingents are awarded prizes. MAHE commemorates ‘National Unity Day’/ Ekta Diwas on 31 October to foster and enforce our dedication and to preserve our unity, integrity and security. A pledge taking ceremony named “Rashtriya Ekta Diwas pledge” is conducted by staff and students to defeat threats to the unity and security of India. MAHE also celebrates the ‘International Mother Language Day’ on 24th February to promote mother tongues and increase awareness of the linguistic and cultural traditions of our country. The idea behind such a day is to inspire solidarity based on understanding, tolerance, cultural traditions and also to create a complete awareness of Indian languages. Elocution competitions related to ‘Patriotism’ are also organized.

MAHE takes pride in engaging and educating the community at large about their democratic rights and responsibilities. The Electoral literacy club and voters’ awareness forum have been created to educate the students and the general public about Democracy. A voters’ pledge programme is organized. MAHE also celebrates the ‘Swachatha Hi Sewa’ campaign between September 14th and October 2nd, and the Constitution Day/ Samvidhan Divas on 26th November. It is insisted that every student should inculcate fraternity, equality and justice among themselves and remember their social responsibilities as citizens of India, to obey the constitutional laws in every walk and step of their lives and strive for the betterment of the society. Youth Day, constitution day, and vigilance awareness weeks are also held for students. The various events held during these days include pledge taking, debate, poem recitation, collage, role play and essay writing competitions for various groups of students. Special Lectures on Human Rights are also organized. The topics emphasize on the six rights - Right to Equality, Right to Freedom, Right against Exploitation, Right to Freedom of Religion, Cultural and Educational Rights, and Right to Constitutional Remedies.

Apart from this, in order to inculcate environmental consciousness among students, a practical event led by Artists Surendran, Srinath and Ravi has guided students on the detailing and importance of simplicity in Diya making. The workshop was planned in a manner that only environment friendly materials were used. Student Empowerment for Environmental Development (SEED) constituted under the Centre for Hospitality and Tourism Research (CHTR), WGSHA, Manipal Academy of Higher Education conducted the programme to inculcate sustainable approach in products and processes. Students have made more than 250 diyas in the workshop. These diyas are used for Diwali celebrations at the WGSHA hostels.

| File Description | Document |
|--|-------------------------------|
| Any additional information | View Document |
| Link to details of activities that inculcate values, necessary to render students in to responsible citizens | View Document |

7.1.10 The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard.

- 1. The Code of conduct is displayed on the website**
- 2. There is a committee to monitor adherence to the code of conduct**
- 3. Institution organizes professional ethics programmes for students, teachers, administrators**

and other staff

4. Annual awareness programmes on code of conduct are organized

Response: Any Two of the above

| File Description | Document |
|--|-------------------------------|
| Institutional data in prescribed format | View Document |
| Institutional code of conduct and code of ethics | View Document |
| Details of the monitoring committee of the code of conduct | View Document |
| Any additional information | View Document |
| Web link of the code of conduct | View Document |

7.1.11 Institution celebrates / organizes national and international commemorative days, events and festivals

Response:

The Manipal Academy of Higher Education celebrates national and international commemorative days with enthusiasm and dedication. Independence Day and Republic Day are celebrated by the University every year. Also, special competitions are organized by its constituent institutes at the grass-root level to instil a sense of patriotism. One such initiative was a drawing competition for the children of a school in Manipal on the theme 'India: Observing our Republic Day'. The students painted and drew on various subjects of pride and concern about their country and felt motivated to contribute to national development.

International Women's day is celebrated every year at the university and institute levels. Rashtriya Ekta Diwas is celebrated to commemorate the birth anniversary and pay tribute to Sir Sardar Vallabhai Patel on the occasion of Rashtriya Ekta Diwas (National Unity Day). A special screening of biographical cinema on Gandhi, Ambedkar and Sardar Patel is organized to educate students about the contributions of these national figures. The birthday of Swami Vivekananda is celebrated every year as National Youth Day on January 12 to channelize the energies of the youth towards national reconstruction. An emphasis has been given to Mahatma Gandhi, wherein a session on Gandhi reading, bhajans was held during the 150-year celebration on Gandhi. Rashtriya Bhasha Divas, is another important event on campus where students from various cultural and linguistic backgrounds participate in seminars and cultural programs. To re-instill the spirit of freedom struggle and national movement among the younger generation, MAHE has celebrated the "Azadi 70 – Yaad Karo Kurbani".

The International Students of Manipal Academy of Higher Education come together to organize and celebrate International Day. This is facilitated by the Office of International Affairs annually. Literary and cultural events are organized by the international community on campus.

World Heart Day is celebrated annually by conducting a walkathon to create awareness among the general public. World Hepatitis Day and World Rabies Awareness day are celebrated by organizing seminars by the respective departments. Oral hygiene day is celebrated by the Dental Sciences College to educate and

motivate the patients regarding the importance of oral hygiene. In order to promote the 'No Tobacco Day', the dental science college organized a logo design competition to create awareness on the harmful effects of tobacco consumption. International Yoga Day is celebrated by the Division of Yoga, Centre for Integrative Medicine, and Research (CIMR). Students, staff, and faculty of MAHE participate in the conduct of Yoga Day.

A panel discussion on "Indian Constitution" is held on the special occasion of Constitution Day Celebrations. As part of "Matribhasha Diwas " different activities were performed by the students of Welcomgroup Graduate School of Hotel Administration (WGSHA) and Manipal College of Nursing. Seminars are organized by other institutes to celebrate this day, annually.

Showcasing its accountability to sustainability, MAHE celebrates World Environment Day annually by planting saplings. Hundreds of students take part in the day's programs, which are designed to help them understand the importance of a good clean environment.

| File Description | Document |
|---|-------------------------------|
| Any additional information | View Document |
| Link for Geo-tagged photographs of some of the events | View Document |
| Link for annual report of the celebrations and commemorative events for the last five years | View Document |

7.2 Best Practices

7.2.1 Describe two best practices successfully implemented by the Institution as per NAAC format provided in the Manual.

Response:

Best Practice - 1

1. Title of the Practice

SMILE - Synergic Manipal Integrated Learning Engagement.

2. Objectives of the Practice

In order to meet its future leadership requirements, MAHE initiated "SMILE" - Synergic Manipal Integrated Leadership Engagement - a 9-month leadership development program in partnership with Global HR Consulting Firm People Business, with clear plans to identify and develop a pool of young academic leaders to take up key positions in the future, by exposing them to the range of responsibilities involved, and the complexities of leveraging preparation program reform in universities.

Main objectives of the program are to:

- Facilitate sustained approach to faculty empowerment
- Aim at leadership development
- Provide an opportunity for growth in in-house talent
- Intend succession planning

3.The Context

The past decade has seen increasing evidence describing the difficulties of leadership in the university environment, changes in leadership roles and organizational practices, and the volatility of the higher education climate.

There has been high growth in student intake, geographical spread, and internationalization; higher focus on innovation and research; quality focus; building new capabilities; higher complexities due to regulations and further education and learning models. The SMILE program was intended to create a pool of dynamic leaders to take up critical/key academic/administrative positions at MAHE and manage the related complexities. A program of this nature is novel in the education sector.

MAHE upskilling leadership at all levels meets a unique need in educational leadership. Making faculty truly capable of leading change unearths hidden individual talent and organizational potential, resulting in a more innovative and adaptive culture. This will help MAHE to drive its culture in the journey of its growth.

4. The Practice

The SMILE strategy, rolled out in January 2015, was to build leadership competencies across the board, from first-level managers to top management. MAHE partnered with experts in the leadership development field - People Business, a global consulting firm, in the design and execution of the SMILE Program.

Profile:

Based on essential eligibility criteria, potential participants for the program were asked to apply for the initiative. This created an aspirational value for the program, and only genuinely motivated candidates applied.

After a rigorous selection process by a MAHE leadership panel, the participants went through a profiling phase that included a development center, 360-degree feedback, and MBTI (Myers Briggs Type Indicator). The profiling was based on key competencies considered essential for future leaders of MAHE.

Major elements:

- The **SMILE 1.0** Programme, took place from February 2015 till October 2015 and involved training of 60 faculty members, many of whom were assigned higher positions at MAHE. Continuing its effort to identify in-house talent, MAHE initiated **SMILE 2.0** in 2016, in which 29 faculty members were trained, enabling MAHE to discover potential candidates for critical leadership positions across the organization in future.
- As developing leadership skills is a continuous process, **Phase 2 of SMILE** was launched in June 2017 for all the participants of SMILE 1.0 and SMILE 2.0. Phase 2 focused on providing the participants with more customized inputs for career development. It involved classroom sessions on

advanced leadership skills, individual development plan, career development plan, management skills development inputs, and providing them with job enrichment to achieve overall career goals. The development inputs were spread over more than 12 months.

Phases of the Program:



Educate: The participants were provided with an understanding of the journey ahead. The benefits of learning and how they would affect their career were provided.

Develop: This phase was based on 70:20:10 principle. This included customized classroom sessions based on key competencies, action learning by executing impact projects relevant to MAHE, coaching by People Business using a customized learning dossier, and mentoring by internal leaders at MAHE. Sample Action Planning projects as part of SMILE were developed.

Evaluate: The program was evaluated on multiple fronts. The immediate reaction feedback showed the overall effectiveness of the classroom session. The behavioural outcomes of coaching and execution of the projects were articulated, emphasizing how they impacted the participant as self, team, and at the institutional levels. The projects were also evaluated.

5. Evidence of Success

Exposure of the faculty to the University Challenges and providing the big picture was a great benefit of SMILE. The impact projects acted as catalysts of innovation and institution building. The program also helped to identify talent to take on enhanced growth and more extensive responsibilities. Involvement of MAHE Leaders as Mentors was well received and helped create a culture of “Leaders Create Leaders”.

Success factors:

1. Since the program was designed in line with institutional priorities with the strong support of the leadership of MAHE, a pool of young leaders with a clear understanding of the vision and mission of the organization was created.
2. Phase 2 of the SMILE program clearly addressed the learning needs of the individual participants, which has helped to strengthen them in key areas impacting the organization.

3. The success of SMILE 1.0 of 2015 inspired MAHE to continue with SMILE 2.0 in 2016 with 29 participants with similar vigour. Realizing the success of SMILE 2.0 through the benefits of the projects executed by the participants, and their acceptance of higher responsibilities at MAHE, Phase 2 of SMILE 2.0 was deployed in the year 2017, which focused on providing customized inputs for career development.

6. Problems Encountered and Resources Required

Resources required for deploying the project in financial terms (estimated 2.1 crores)

| SMILE | | | | |
|-----------------|-------------|---|---|--|
| Content | Year | Total Number of Participants | Per Participant Cost | |
| SMILE | 2015 - 2016 | 60 | 1.55 Lakhs/Participant | |
| SMILE 2.0 | 2016 -2017 | 29 | 1.55 Lakhs/Participant | |
| SMILE –PHASE II | 2017 - 2018 | 82 | <ul style="list-style-type: none"> • Advanced Leadership Program–Rs.20,25,000 • Developing High Potential • Developing Potentials – • Other Category – Rs.3,0 | |
| | | <ul style="list-style-type: none"> • High Potential Candidates: 15 • Potential Candidates: 46 • Others: 21 | | |

No Problems were encountered in implementing the SMILE project. The participants had to dedicate their time to undergo the training and for the completion of projects as a part of the training. This was quite challenging as they had to attend to their assigned job responsibilities, and also devote time for various activities under the SMILE project. However, all of them managed this challenge successfully. On completion of the training, the candidates were included in the talent pipeline to assume leadership positions in MAHE.

7. Notes

Outcome

MAHE has successfully invested time and resources in training the leaders of tomorrow to ensure that senior academic leadership roles are handled by professionals with the right set of skills and clear goals.

The effectiveness of the SMILE Leadership Transformation Program is evident from the fact that out of the 132 participants, 38 were considered ready to take up key leadership roles, and 76 could be considered ready for higher responsibilities in the next 2-3 years with continued inputs. 21 participants have already

taken up key roles, out of which 11 are Women Leaders. The Leadership training program also led to High Impact business projects that had clear ROI for MAHE. Apart from preparing leaders for tomorrow, the program also made the participants effective in their current roles. About 80% of the participants have improved their ratings profoundly when compared to the previous year.

Best Practice - 2

1. Title of the Practice

Epad -Digitization of Examination and Evaluation system

2. Objectives of the Practice

MAHE believes in complete transparency and eco-friendliness in its academic process. The primary objective of digitization of examination and evaluation process is to make it transparent, error-free and quick, with the added advantage of reduced manpower. Another best practice here is the analysis of the outcome measures of academic activities by a software based tool supported by InPods Inc. The output generated by this application gives feedback about the students' outcome achievements to the students and faculty members. Another noteworthy advantage of this digitization is the drastic reduction in paper usage, which significantly aligns with MAHE's environment policy: 'Go Green'.

3. The Context

Previously, examinations at MAHE were being conducted using the conventional paper based method, involving answer books, question papers and stationery. Digitization of examinations has eliminated the use of all these. Previously, papers were coded, bundled and sent to evaluation halls. Examiners had to enter the marks in evaluation sheets and consolidated mark lists. This method was slow and there was scope for errors in calculation, entry etc. Also, totalling errors, questions missed out for evaluation etc. had to be verified manually. These challenges were overcome by using an onscreen marking system. MAHE moved the processing of results to a software based platform. For closing the chain in outcome based education, an analysis to ensure the attainment of the intended outcomes of the academic programs is important. This has been achieved through InPods system. The newly established Student Lifecycle Management System (SLCM) has made the result processing activities simple and fast.

4. The Practice

In this innovative technology, which is practised in almost all institutions of MAHE, the student is provided with a writable tablet device called ExamPad (epWriter) to write the examination. The fingerprint facility available in the device is used for authentication and capturing the attendance. The question paper is uploaded to the system prior to the examination by the academic section concerned. The question paper gets downloaded automatically before the examination, and will open only at the specified time. A specified area for writing is available, on which students can write using a specific stylus. During the progress of the examination, the invigilator can monitor the device status like battery health, time remaining etc. in a separate device called epProctor. Once the examination duration is completed, the device gets locked automatically and does not allow students to continue writing.

The evaluation interface is user friendly and easy to use. The entire marking process replicates the pen-paper based marking system with advanced technology. After the examination, answer scripts are available in the cloud system and evaluators can do the marking online. A username and password is automatically generated for each examiner through the system. Examiners have to submit the marks through the key board or by mouse click. Totalling of marks and questions missed out for evaluation are taken care of by the system. The system also prevents the examiner from awarding more than the maximum marks for a question (specified in the template). Another advantage of this digitized process is the availability of the script with question-wise response. This makes it possible to assign question-wise marking to the evaluators, which ensures uniformity in evaluation.

This digitized process also enables the analysis process for measuring attainment of course outcomes using InPods. The course outcomes marked against each question are tagged to the responses of each student, along with the marks obtained by the respective student by means of the InPods system, which generates the outcome attainment report. Once the evaluation process is completed, the marks verification, tabulation, consolidation with adding the internal assessment component, and the final grade card printing will be done automatically using the SLcM.

Limitations: Adequate training needs to be provided to students and faculty to convince and update them for using the system. Additional training/mock test/practice sessions need to be conducted on request.

5. Evidence of Success

The Epad examination system has been successfully initiated across all the institutions of MAHE except for postgraduate students. Adequate training/mock tests have been provided to the students as well as faculty members. Class tests/Sessional tests/University examinations and evaluations are also being conducted across all the institutions successfully. Students and faculty members have accepted the new system positively and are well versed in the Epad examination process. Arrangements for the availability of expert technicians as well as storage space for the Epads have been made. A system has been established in every institution to provide training and practice to use Epads, every time a new batch of students is admitted. Due to the introduction of question-wise distributed evaluation, the number of instances of marks change/revaluation has reduced. Another significant change evident due to the digitization of the examination process is the drastic reduction in manpower and paper consumption. Evidence on the success of SLcM and InPods implementation is yet to be seen. Overall the entire process of examination and evaluation has become transparent, smooth, efficient, error-free, fast and environment friendly.

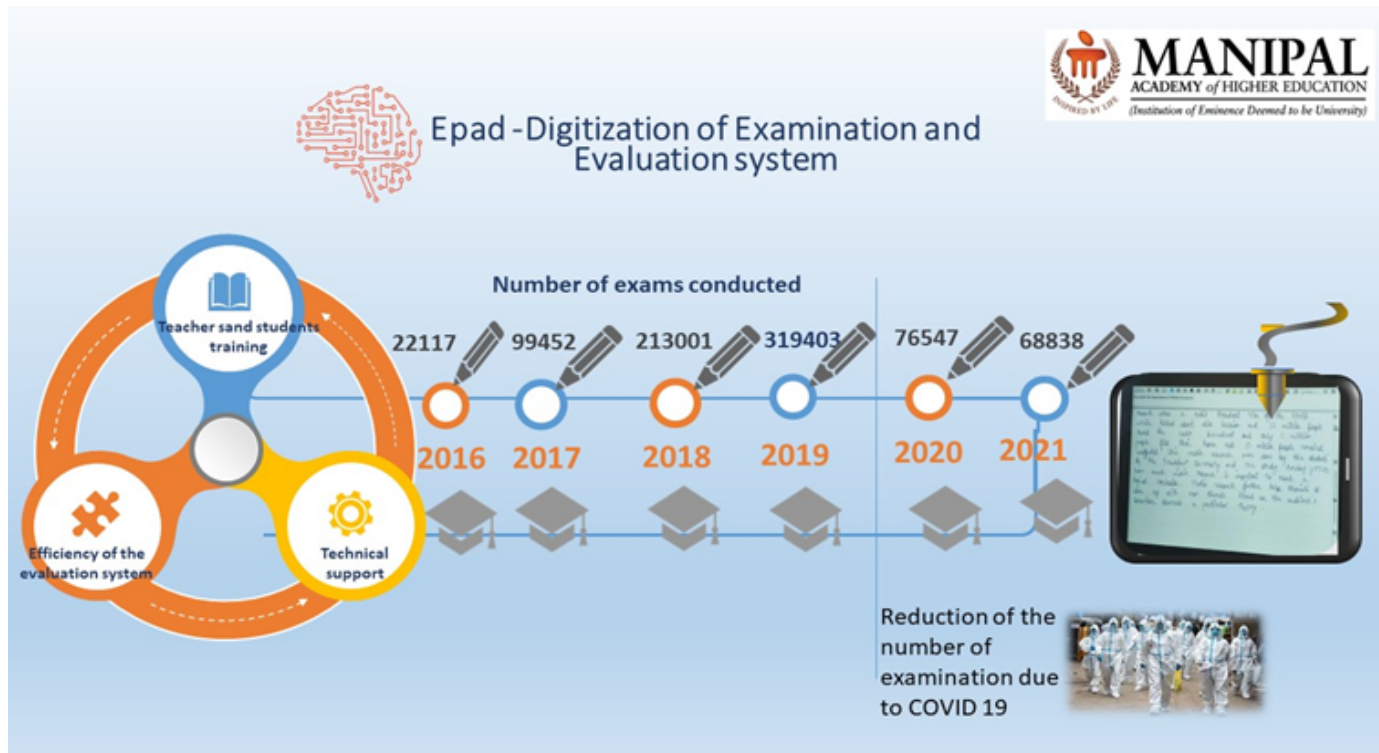
6. Problems Encountered and Resources Required

- Initially the students were not familiar with writing on Epad, hence adequate training and practice needed to be ensured for the successful implementation. The same kind of approach was required for the faculty members, who were new to the system.
- Since onscreen marking was a new technology the evaluators also needed to be trained adequately to adapt to the new system/technology.
- For the success of analysis of attainment of course outcomes using InPods, relevant information needs to be provided by the question paper setters. To achieve this, the curriculum needs to be reformed and the outcomes at different levels need to be identified, which in turn should be conveyed to faculty and students.
- Adequate training and dedicated staff have been extended for rolling out SLcM in all the activities related to various aspects of the examination process.

7. Notes

Outcome

With the plan to automate the processes related to appointment of the examiners and selection of question papers this system is unique and a trendsetter in India. This helps to achieve excellence in the examination and evaluation process and also comply with MAHE's environment friendly 'Go Green Campus' requirements.



7.3 Institutional Distinctiveness

7.3.1 Portray the performance of the Institution in one area distinctive to its priority and thrust within 1000 words

Response:

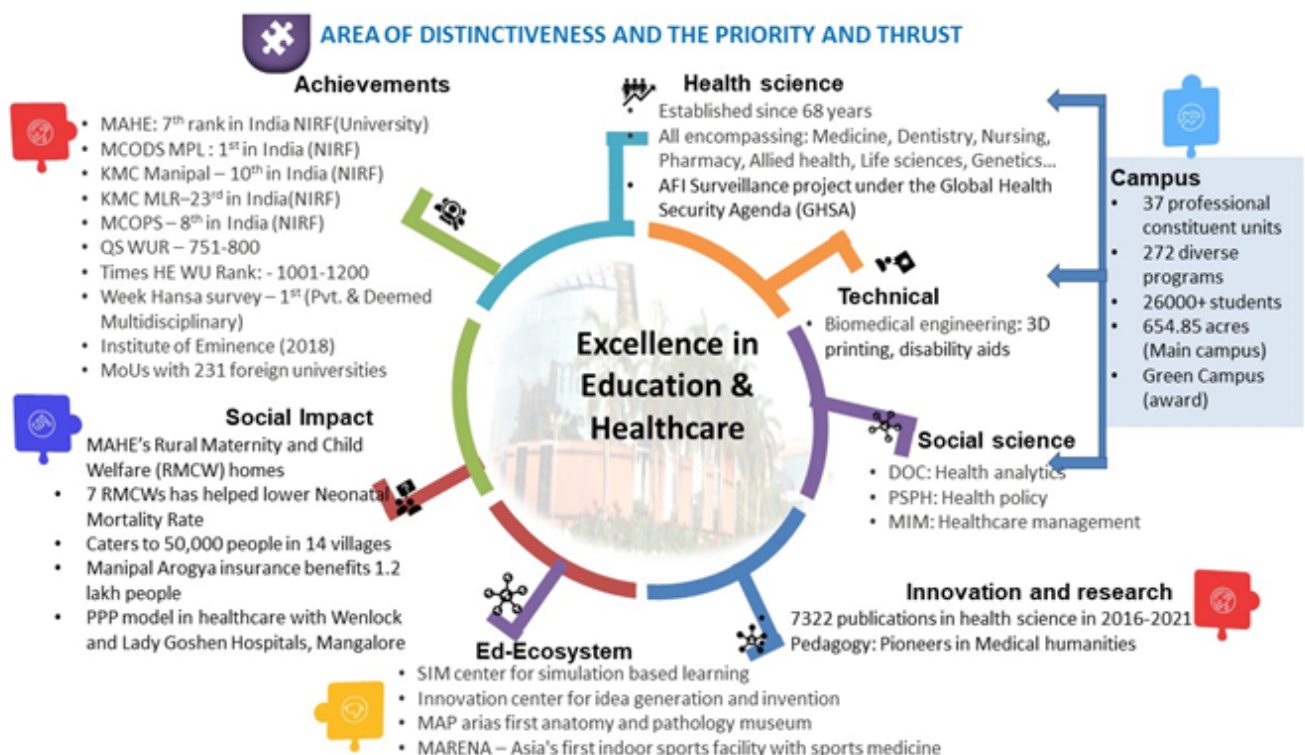
When Dr Tonse Madhav Ananth Pai took the pioneering step of establishing India's first private medical college in 1953, in a quaint little hilltop of Manipal, he was motivated by mantra that India will prosper when healthcare and educational needs of its people, mired in ill-health and illiteracy, are met. That vision

of providing quality healthcare and quality education is the guiding light that Manipal Academy of Higher Education (MAHE) used to focus its journey on and which has helped establish itself as an one of the first set of Institute of Eminence (IoE) in India.

To imbibe these values, and at the backdrop of MAHE’s vision statement of “Global leadership in human development, excellence in education and healthcare”, two stated objectives delineate this priority area. The two objectives being: to promote health sciences education and health services at the community and hospital level & to participate in health services, education and other aspects of local development.

MAHE, which was accorded the deemed-to-be-university status in 1993, today boasts of 37 professional constituent units on its campuses and was ranked 7th best university in the NIRF ranking of 2021. With 272 diverse programs on offer to students, making it a truly multidisciplinary university, MAHE has been an important player in the education landscape. In being a major healthcare provider, MAHE has been contributing to nation building for nearly seven decades .

The medical colleges that Dr TMA Pai established, Kasturba Medical College in Manipal and Mangalore, has metamorphosed into two of India’s premier medical colleges and have churned thousands of dedicated and excellent doctors and have catered to the healthcare needs of two large districts of Karnataka, Udupi and Dakshina Kannada, as well as the adjoining areas. MAHE is globally known for its health science education Presently MAHE has 3 medical colleges, 2 Dental colleges along with College of Nursing, Pharmacy, Healthcare Professional, Public Health and Life sciences. With its multidisciplinary ecosystem students are exposed to collaborative learning research and innovation also with its state of the art facilities like simulation center MAP Indoor sports facilities and international exposure which immerse students with holistic learning experience



One of the biggest impacts that MAHE’s healthcare outreach has had in the area of maternal and child

health. While it is well known that maternal health care and early childhood care parameters, in terms of Ante Natal Care (ANC) visits, Infant Mortality Rate (IMR), Under-5 mortality rate, etc., have a huge room for improvement in India, MAHE's Rural Maternity and Child Welfare (RMCW) homes, set up in conjunction with the local community has made a dent and improved the above parameters. Catering to a population of 50,000 in 14 villages, the 7 RMCWs set up by MAHE has helped lower Neonatal Mortality Rate (Karnataka 20, Udupi 4), IMR (Karnataka 24, Udupi 9.9), Under-5 mortality rate (Karnataka 31, Udupi 11.1).

The Manipal Aarogya Suraksha (MAS) scheme, with a total membership base at 1.05 lakh families comprising of 3.71 lakh lives in 2019-20 has covered a large population giving them a user-friendly scheme. In the year 2020, 10,057 people availed inpatient services and the total benefits availed by these members was over 20.17 crore INR.

MSOLS focuses its research thrust areas to keep pace with the changing scenarios like : (a) Targeting of transcription factors as suppressor elements in cancer, (b) Epigenetics and cancer, (c) Genomics of human variations of cancers, (d) Growth factors and signal transduction, (e) Neuronal human stem cells, (f) Chemo-response modifications in human leukaemia, (g) Pharmacogenomics in human diseases (Type II diabetes, Bipolar disorder, Schizophrenia, Cancer, vitamin deficiency) (h) Human and population variation analysis (i) Clinical metabolomics and proteomics, (j) Cell and molecular biology of medicinal plants (k) Development and translation of genetic testing to clinical environment (l) Genetic studies of human diseases including infertility and congenital cataract (m) Molecular Radiobiology and Experimental Oncology (n) Heavy metal and Nano toxicology (o) Low Level Laser Therapy (LLLT), fluorescence and photoacoustic spectroscopy (p) Bioinformatics and database construction (q) Mycology research and (r) basic research in Ayurveda.

MAHE has pioneered the PPP model 1953 onwards in healthcare with Wenlock and Lady Goshen government Hospitals at Mangalore , such collaborative efforts to provide best healthcare facilities to public-at-large. In addition to the above, MAHE focused on mental health, operates a 34 bedded facility for medium to long term stay and rehabilitation centre for patients with long standing psychiatric illness, which is administratively and functionally integrated with Kasturba Medical College, Manipal.

Screening for congenital heart disease in 3000 students in government schools in Udupi district in 2019-20; screening of more than 79000 children under the state wide screening of nutritional status of school children receiving mid-day meal; screening for refractive errors among school children aiding in early detection of refractory errors among school children; training anganawadi workers sent by the Department of Women and Child Development, Govt of Karnataka, at Anganawadi Training Centre at Manipal (since 1976) under the ICDS program are few of the other initiatives targeted at betterment of child health of our country.

Another important, and what in a post-pandemic world would be of great necessity, work is in the area of disease surveillance. MAHE's Manipal Institute of Virology through its AFI Surveillance project under the Global Health Security Agenda (GHSA) has established 33 field stations in hospitals across 10 states of India including Karnataka, Kerala, Assam, Goa, Gujarat, Maharashtra, Jharkhand, Tripura, Tamil Nadu and Odisha in close coordination and collaboration with the respective state health services. The institute has been instrumental in confirming more than 150 viral outbreaks, while around 30 outbreaks were investigated by MIV team in various parts of the country including Karnataka, Kerala, Goa, Uttar Pradesh and Odisha in the recent past.

MAHE being epicenter of health care and health science education with its distinctive contribution to the nation building is recognized by many accrediting agencies locally and globally

NAAC

5. CONCLUSION

Additional Information :



Quotes by Eminent visitors:

- “Manipal is like the Nalanda of yore. I am happy to see engineering, medicine and the other disciplines being taught in the same campus, an ideal environment for research to flourish.”
Dr. APJ Abdul Kalam, Former President of India
- “It was a most interesting and educational tour of Manipal. I look forward to the day when some of what is happening here could be replicated in Antigua/Bermuda”
Mr Winston Baldwin Spencer, Former Prime Minister of Antigua & Bermuda
- “A magnificent institution. Library facility is extraordinary. The extent and diversity of teaching and research is very impressive.”
Dr Prof .Peter C Doherty, Nobel Laureate, Univ. of Melbourne, Australia
- “State Governments should concentrate on primary education. They should not be burdened with higher education. the achievement of the private sector in higher education is best illustrated by Manipal, which is the Harvard of India.” **Mr Narayana Murthy, Former Chairman , Infosys Technologies Ltd.**
- “When Dr. TMA Pai decided to build a medical college in Manipal, it sounded like an impossible dream. In the space of 50 years, Manipal was transformed into an educational capital, which is proof enough of a powerful vision.” **Mr Azim H Premji, Chairman, Wipro Technologies Ltd**
- “I am more inspired by Manipal, which is the centre of global excellence. India is rapidly emerging as a strong knowledge society where education is the pivotal force and institutions like Manipal have a key role to play.” **Ms Kiran Mazumdar Shaw, CMD, BIOCON**

Concluding Remarks :

Manipal Academy of Higher Education (MAHE) has grown from being a small group of institutions to a **multi-disciplinary university** with **campuses in India and Abroad**. The idea envisioned by **Dr. T. M.A. Pai** has been nurtured with care and developed with dynamic enthusiasm by the next generation leaders **Dr Ramdas M Pai** (son of Dr. T.M.A. Pai), and **Dr Ranjan Pai** (the grandson of Dr. T.M.A. Pai). MAHE has become a role model for both **Public -Private** and **Private -Private** partnerships. While the medical college started by Dr T M A Pai in the 1950s is an example of Public-Private Partnership, the one started in Jamshedpur in 2020 is an example of Private-Private partnership. **MAHE** is among the **few Universities** in India who have **invested in Offshore Campuses** with its campuses in Dubai and Melaka Malaysia. The University founded on the principle of education for all, has steadily built the reputation as an institution with a high quality of education and a global outlook. Over the years, **MAHE** has improved the **quality of education** with strong emphasis on **promotion of quality research, creation of infrastructure, building employer reputation, and focus on internationalization**. This is supported by continuous innovation in curriculum development and delivery. MAHE continuously improves its research ecosystem by making changes within a framework of the highest standards, infrastructure, incentives, and training. It empowers the creative autonomy of individual researchers in their field leading to quality multi-disciplinary research. **MAHE** continues to **strengthen its collaborations** with **reputed universities** across the globe to foster exchanges of students and faculty for academics /research. **The University** has produced more than **134,100 alumni** with several of them holding **positions of distinction** and establishing their presence **across the globe in diverse fields**. Along with its **academic inventiveness**, MAHE is committed to **promoting green initiatives** in its **energy consumption and water recycling programs**.

With **Institution of Eminence status**, MAHE has embarked on its journey to benchmark excellence at global level and establish its presence among the **top 200** universities in the world in the **next 10 years**.

6.ANNEXURE

1.Metrics Level Deviations

| Metric ID | Sub Questions and Answers before and after DVV Verification | | | | | | | | | | | | | | | | | | | | |
|-----------|---|---------|---------|---------|---------|---------|-------|--------|--------|--------|--------|---------|---------|---------|---------|---------|-------|--------|--------|--------|--------|
| 2.4.5 | <p>Average percentage of fulltime teachers who received awards and recognitions for excellence in teaching, student mentoring, scholarships, professional achievements and academic leadership at State, National, International levels from Government / Government-recognized agencies / registered professional associations / academics during the last five years</p> <p>2.4.5.1. Number of fulltime teachers who received awards and recognitions for excellence in teaching and student mentoring, scholarships, professional achievements and academic leadership at State, National, International levels from Government / Government-recognized agencies / registered professional associations / <i>academies</i> during the last five years</p> <p>Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> <th>2016-17</th> </tr> </thead> <tbody> <tr> <td>122</td> <td>233</td> <td>265</td> <td>187</td> <td>135</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1"> <thead> <tr> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> <th>2016-17</th> </tr> </thead> <tbody> <tr> <td>118</td> <td>231</td> <td>265</td> <td>186</td> <td>135</td> </tr> </tbody> </table> <p>Remark : Values as per reworked data provided by HEI for metric 2.4.5</p> | 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 | 122 | 233 | 265 | 187 | 135 | 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 | 118 | 231 | 265 | 186 | 135 |
| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 | | | | | | | | | | | | | | | | | |
| 122 | 233 | 265 | 187 | 135 | | | | | | | | | | | | | | | | | |
| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 | | | | | | | | | | | | | | | | | |
| 118 | 231 | 265 | 186 | 135 | | | | | | | | | | | | | | | | | |
| 3.1.2 | <p>The institution provides seed money to its teachers for research (average per year)</p> <p>3.1.2.1. The amount of seed money provided by institution to its faculty year-wise during the last five years(INR in Lakhs)</p> <p>Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> <th>2016-17</th> </tr> </thead> <tbody> <tr> <td>29.43</td> <td>114.23</td> <td>199.08</td> <td>226.28</td> <td>161.74</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1"> <thead> <tr> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> <th>2016-17</th> </tr> </thead> <tbody> <tr> <td>30.78</td> <td>320.40</td> <td>193.46</td> <td>236.13</td> <td>161.34</td> </tr> </tbody> </table> | 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 | 29.43 | 114.23 | 199.08 | 226.28 | 161.74 | 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 | 30.78 | 320.40 | 193.46 | 236.13 | 161.34 |
| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 | | | | | | | | | | | | | | | | | |
| 29.43 | 114.23 | 199.08 | 226.28 | 161.74 | | | | | | | | | | | | | | | | | |
| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 | | | | | | | | | | | | | | | | | |
| 30.78 | 320.40 | 193.46 | 236.13 | 161.34 | | | | | | | | | | | | | | | | | |
| 5.4.2 | <p>Provide the areas of contribution by the Alumni Association / chapters during the last five years</p> <ol style="list-style-type: none"> 1. Financial / kind 2. Donation of books /Journals/ volumes 3. Students placement 4. Student exchanges 5. Institutional endowments | | | | | | | | | | | | | | | | | | | | |

| | |
|--------|--|
| | <p>Answer before DVV Verification : A. All of the above Answer After DVV Verification: A. All of the above Remark : Previous HEI input considered as per attached documents</p> |
| 7.1.10 | <p>The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard.</p> <ol style="list-style-type: none">1. The Code of conduct is displayed on the website2. There is a committee to monitor adherence to the code of conduct3. Institution organizes professional ethics programmes for students, teachers, administrators and other staff4. Annual awareness programmes on code of conduct are organized <p>Answer before DVV Verification : All of the above Answer After DVV Verification: Any Two of the above</p> |

2.Extended Profile Deviations

| Extended Profile Deviations |
|-----------------------------|
| No Deviations |