



Yearly Status Report - 2018-2019

Part A

Data of the Institution

1. Name of the Institution		MANIPAL ACADEMY OF HIGHER EDUCATION
Name of the head of the Institution		Dr H Vinod Bhat
Designation		Vice Chancellor
Does the Institution function from own campus		Yes
Phone no/Alternate Phone no.		08202922615
Mobile no.		9845069081
Registered Email		vicechancellor@manipal.edu
Alternate Email		registrar@manipal.edu
Address		manipal.edu, Madhava Nagar, Manipal
City/Town		Udupi
State/UT		Karnataka
Pincode		576104
2. Institutional Status		

University	Deemed
Type of Institution	Co-education
Location	Semi-urban
Financial Status	private
Name of the IQAC co-ordinator/Director	Dr Sandeep S Shenoy
Phone no/Alternate Phone no.	08202922825
Mobile no.	9880368390
Registered Email	iqac@manipal.edu
Alternate Email	compliance@manipal.edu

3. Website Address

Web-link of the AQAR: (Previous Academic Year)	https://manipal.edu/content/dam/manipal/mu/documents/IQAC/AQAR%2017-18.pdf
4. Whether Academic Calendar prepared during the year	Yes
if yes, whether it is uploaded in the institutional website: Weblink :	https://slcm.manipal.edu/loginForm.aspx

5. Accreditation Details

Cycle	Grade	CGPA	Year of Accreditation	Validity	
				Period From	Period To
2	A	3.30	2016	11-Jul-2016	10-Jul-2020

6. Date of Establishment of IQAC	03-Jun-2013
---	-------------

7. Internal Quality Assurance System

Quality initiatives by IQAC during the year for promoting quality culture		
Item /Title of the quality initiative by IQAC	Date & Duration	Number of participants/ beneficiaries
orientation workshop on Preparation for NAAC Re-accreditation	23-Jul-2019 1	25

Orientation workshop on Academic Reputation and World University rankings, Institution of Eminence and National Institute Ranking framework for HoDs at Manipal campus	23-Jul-2019 1	50
Orientation on NIRF / Subject Rankings	24-Jul-2019 1	10
Orientation program for Heads of Departments of Mangalore Campus on Academic Reputation and World University rankings, Institution of Eminence and National Institute Ranking framework	24-Jul-2019 1	30
Workshop on Assessment and Accreditation Process of National Assessment and Accreditation Council	11-Sep-2019 1	41
A workshop on THE Performance Masterclass	08-Jan-2019 1	15
Workshop on Outcome based Education	04-Mar-2019 1	45
WORKSHOP ON OUTCOME BASED EDUCATION	15-Apr-2019 1	27
WORKSHOP ON OUTCOME BASED EDUCATION	04-May-2019 1	32
WORKSHOP ON Assessment of Outcomes in OBE	29-May-2019 1	26
No Files Uploaded !!!		

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

Institution/Department/Faculty	Scheme	Funding Agency	Year of award with duration	Amount
Department of Pharmaceutics, Manipal College of Pharmaceutical Sciences (MCOPS), Manipal	SERB	DST - SERB	2017 1095	2276000
Department of Pharmacology, MCOPS, Manipal	BCIL	DBT	2017 730	3135000

Department of Pharmaceutics, MCOPS, Manipal	SERB	DST	2017 1095	1917000
Department of Biotechnology, Manipal Institute of Technology (MIT) , Manipal	CISEE	VGST	2017 1095	3000000
Department of Chemical Engineering, MIT, Manipal	EMR	DST-SEB	2017 1095	6500000
Department of Electrical and Electronics Engineering, MIT, Manipal	CERI Program	DST	2017 1095	4761900
Department of Mechatronics, MIT, Manipal	Nidhi	DST	2017 1095	330000
Department of Physics, MIT.Manipal	FIST Program - 2017	DST, GoI	2017 1095	7400000
No Files Uploaded !!!				

9. Whether composition of IQAC as per latest NAAC guidelines:	Yes
Upload latest notification of formation of IQAC	View File
10. Number of IQAC meetings held during the year :	1
The minutes of IQAC meeting and compliances to the decisions have been uploaded on the institutional website	Yes
Upload the minutes of meeting and action taken report	View File
11. Whether IQAC received funding from any of the funding agency to support its activities during the year?	No
12. Significant contributions made by IQAC during the current year(maximum five bullets)	
<p>Compiled data for Times Higher Education Ranking 2020 and Ranked No. 1001 Compiled data for QS Ranking 2020 and Ranked No. 701 to 750 Compiled data for Week Hansa Research Survey 2019 and Ranked No. 1 under Private and Deemed Multi Disciplinary Universities Conducted Outcome Based Education training for the constituent units</p>	

No Files Uploaded !!!

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

Plan of Action	Achievements/Outcomes
Design new courses Undertake annual course enrollment review. Introduce courses that encourage innovation, entrepreneurship and the best global practices Target 30 New Courses over the next five years	Twelve
Initiate new program offerings aligning with the learning environments of the future. Develop internationally acceptable curriculum following an approval by the Academic Council.- Target to add two new schools over the next five years to the already existing 19 schools	One
View File	

14. Whether AQAR was placed before statutory body ?

No

15. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to assess the functioning ?

No

16. Whether institutional data submitted to AISHE:

Yes

Year of Submission

2019

Date of Submission

05-Jun-2019

17. Does the Institution have Management Information System ?

Yes

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

Following Management Information Systems are available for various functions 1. Student Information System for managing the student profiles 2. Student Hospital Ledger 3. Online Audit Report , Inward Outward System 4. General Service Help Desk 5. Classroom Allotment 6. Academic Management System for monitoring the teaching and learning process 7. Performance Analysis System for the faculty

performance evaluation 8. Employee Expert HR Management System Financial Accounting System 9. Purchase and Inventory System 10. Hostel Management System 11. Library Management System 12. Online attendance, Online feedback, Administrative procedures including finance, Student admission, Student records, Evaluation and examination procedures, Research administration, etc 13. Patient Management System, Employee Self Service, Biometric attendance system for all the staffs , Employee Search, Vehicle Search etc. 14. Student Lifecycle Management system is a solution developed to automate the entire process which a student undergoes during his or her tenure in the University

Part B

CRITERION I – CURRICULAR ASPECTS

1.1 – Curriculum Design and Development

1.1.1 – Programmes for which syllabus revision was carried out during the Academic year

Name of Programme	Programme Code	Programme Specialization	Date of Revision
MD	M02	Anaesthesiology	19/09/2018
MS	M19	Ear Nose and Throat Surgery	24/07/2018

[View File](#)

1.1.2 – Programmes/ courses focussed on employability/ entrepreneurship/ skill development during the Academic year

Programme with Code	Programme Specialization	Date of Introduction	Course with Code	Date of Introduction
MD	Emergency Medicine	02/05/2019	Emergency Medicine - M91	02/05/2019
DM	Medical Genetics	29/08/2019	Medical Genetics - M53	29/08/2019

[View File](#)

1.2 – Academic Flexibility

1.2.1 – New programmes/courses introduced during the Academic year

Programme/Course	Programme Specialization	Dates of Introduction
MD	Emergency Medicine - M91	02/05/2019
MSc	Data Science	11/05/2019

[View File](#)

1.2.2 – Programmes in which Choice Based Credit System (CBCS)/Elective Course System implemented at the University level during the Academic year.

Name of programmes adopting CBCS	Programme Specialization	Date of implementation of CBCS/Elective Course System
MSc Medical Anatomy	Medical Anatomy-M41	01/08/2018
MSc Medical Physiology	Medical Physiology-M42	01/08/2018
MSc Medical Biochemistry	Medical Biochemistry-M44	01/08/2018
MSc Medical Microbiology	Medical Microbiology-M43	01/08/2018
MSc Medical Pharmacology	Medical Pharmacology-M45	01/08/2018
MSc	Forensic Science-M87	01/08/2018
MSc	Medical Clinical Embryology-M52	01/08/2018
MSc	Genetic Counselling-M74	01/08/2018
MSc	Biostatistics -MBS 508.1 : Demography & Health Survey	14/01/2019
MSc	Biostatistics - MBS 508.3: Operations Research in Healthcare	14/01/2019
MSc	Biostatistics - MBS 508.4: Design and Analysis of Clinical Experiments	14/01/2019
MSc	Biostatistics - MBS 607.2 : Bayesian Statistical Modelling	23/07/2018
MSc	Biostatistics - MBS 607.1 : Time Series Analysis	23/07/2018
MSc	Biostatistics -MBS 607.3 : Non-parametric & Non-linear Regression	23/07/2018
MSc	Biostatistics - MBS 607.4 : Advanced Linear Algebra & Linear Models	23/07/2018
MSc	Clinical Psychology	01/08/2018
MSc	Nuclear Medicine Technology - MNMT 703 Elective Course in pre-clinical studies in nuclear medicine and cross sectional Imaging	01/08/2018
MPT	Cardiopulmonary Sciences - MPT 702.1.1 Critical Care Physiotherapy	01/08/2018
MPT	Cardiopulmonary Sciences - MPT 702.1.2 Cardiopulmonary rehabilitation	01/08/2018
MPT	Cardiopulmonary Sciences - MPT 702.1.3 Health promotion and fitness	01/08/2018

MPT	Neurosciences - MPT 702.2.1 Neurological Physiotherapy	01/08/2018
MPT	Neurosciences - MPT 702.2.2 Neurosurgical Physiotherapy	01/08/2018
MPT	Musculoskeletal Sciences - MPT 702.3.1 Manual Therapy	01/08/2018
MPT	Musculoskeletal Sciences - MPT 702.3.2 Sports Physiotherapy	01/08/2018
MPT	Musculoskeletal Sciences - MPT 702.3.3 Hand Therapy	01/08/2018
MPT	Geriatrics - MPT 702.5.1 Healthy Aging	01/08/2018
MPT	Geriatrics - MPT 702.5.2 Aging and Disease	01/08/2018
MPT	Paediatrics -MPT 702.7.1 Paediatric Neurology	01/08/2018
MPT	Paediatrics -MPT 702.6.2 Neonatal and Paediatric Respiratory Care	01/08/2018
MPT	Obstetrics and Gynecology - MPT 702.7.1- Obstetric Physiotherapy	01/08/2018
MPT	Obstetrics and Gynecology - MPT 702.7.2- Gynecological Physiotherapy	01/08/2018
Mtech	Avionics	11/05/2019
MSc	Health Economics	16/08/2018
MSc	Financial Economics	16/08/2018
MBA	General - Marketing Management	28/05/2019
MBA	Global Business - Human Resource Management	28/05/2019
ME	Healthcare Data Analytics	27/11/2018
ME	Vehicular Embedded Systems	19/03/2019
BSc	Animation - Preproduction	11/05/2019
BSc	Animation - Comic Art & Design	11/05/2019
BSc	Animation - Graphic Design	11/05/2019
BSc	Animation - 3D Modeling	11/05/2019
BSc	Animation - 3D Texturing	11/05/2019

BSc	Animation - 3D Lighting & Rendering	11/05/2019
BSc	Animation - 3D Character Animation	11/05/2019
BSc	Animation - Visual Effects	11/05/2019
BSc	Animation - Digital Compositing	11/05/2019

1.3 – Curriculum Enrichment

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

Value Added Courses	Date of Introduction	Number of Students Enrolled
Certificate course in Palliative care	01/06/2018	46
Summer Training at MAHE SRF	01/07/2018	53
View File		

1.3.2 – Field Projects / Internships under taken during the year

Project/Programme Title	Programme Specialization	No. of students enrolled for Field Projects / Internships
BHM	Industrial Training - Hotel Management	162
BA	Culinary Arts	154
View File		

1.4 – Feedback System

1.4.1 – Whether structured feedback received from all the stakeholders.

Students	Yes
Teachers	Yes
Employers	Yes
Alumni	Yes
Parents	Yes

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

Feedback Obtained
<p>A structured feedback system is utilized to obtain feedback on various services delivered by the institution to the students. The feedback from the students is obtained once every year regarding the quality of curricular and co-curricular facilities and opportunities provided for learning. Besides, students are free to provide feedback on the various aspects of the college and hostel facilities for improvement. Similarly, feedback from staff is obtained online on various aspects of academic, research, patient care, and benefits provided to them. The feedback from alumni is obtained informally during their visit to their alma mater to deliver guest lectures or for the alumni reunion programs. The feedback from parents also is collected as and when possible. All the feedback is compiled, discussed during the institution committee meeting and necessary action on the feedback is initiated by the college as soon as possible. Feedbacks are also collected from adjunct/visiting faculty members,</p>

international and national guests, visitors, trainees and delegates. These feedbacks are analyzed, and suggestions are considered towards improving the existing status quo of the institute in terms of improving the teaching quality, methods adopted for training and overall deliverables. Feedback from professional bodies such as national and international health and research organizations, funding agencies and collaborating institutions are also obtained

CRITERION II – TEACHING- LEARNING AND EVALUATION

2.1 – Student Enrolment and Profile

2.1.1 – Demand Ratio during the year

Name of the Programme	Programme Specialization	Number of seats available	Number of Application received	Students Enrolled
MSc	Nanoscience and Technology	15	17	7
MSc	Photonics	15	16	3

[View File](#)

2.2 – Catering to Student Diversity

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

Year	Number of students enrolled in the institution (UG)	Number of students enrolled in the institution (PG)	Number of fulltime teachers available in the institution teaching only UG courses	Number of fulltime teachers available in the institution teaching only PG courses	Number of teachers teaching both UG and PG courses
2018	19961	5039	1118	364	903

2.3 – Teaching - Learning Process

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

Number of Teachers on Roll	Number of teachers using ICT (LMS, e-Resources)	ICT Tools and resources available	Number of ICT enabled Classrooms	Number of smart classrooms	E-resources and techniques used
2385	2385	35	451	48	31

[View File of ICT Tools and resources](#)

[View File of E-resources and techniques used](#)

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

Teacher Guardian / Mentoring Scheme Objective: a) Enable newly joined students to accustom to the campus life the course b) To facilitate mentoring for poor performers at any stage during the course Scope: Undergraduate students who join various professional courses of the University may face challenges with respect to change in setting, academic pressure or interpersonal relationships, all of which require guidance and support. This scheme is a unique initiative in that direction Beneficiaries: a) All newly joined undergraduate students till they complete their first university exam. b) Students with special needs (poor academic performers / those with learning disabilities / or for any valid felt need by the parents) could also avail the facility in the subsequent phase of their training. Functioning Of The Scheme: a) At the time of admission to a new course in the University, every student and parent is briefed about the scheme. b) It is mandatory for all first year students to be enrolled into the scheme. c) The number of wards under a Teacher Guardian / Mentor should be in the range of 5-10 (exceptions being small institutions / departments with an intake of < 10 per year) d) At the time of orientation, the Teacher Guardian / Mentor should meet the parents of his/her ward, apprise them of the scheme and provide them the necessary contact information such as his/her mobile number and e-mail ID • It is also

necessary to ascertain the parent's contact address, functional e-mail ID and mobile number • Parents need to be told the importance of communicating with the Mentor regarding their ward's health, habits and any special needs thereof. The student and parents must be encouraged to brief the teacher guardian about preexisting health related issue if any and the treatment that he/she is already on. Teacher guardian will have a list of such wards under - her/him, so that any health related calls by them may be considered urgent. • Parents also need to be informed about the use of the SIS (Student Information System) portal that will give access to their ward's performance with respect to attendance and grades • During the first 6 months of the course, the student should be instructed to contact the respective teacher guardian at least once a month, or more often if the situation demands • The student should keep the teacher guardian informed if he/she is going to be out of station, or is changing the place of residence • In case of minor ailments, the teacher guardian may direct the student to the Student Health Clinic for medical assistance. In case of hospital admission, it is preferable that the teacher guardians contact the parents and keep them apprised of the situation • The Teacher Guardians could use the SIS link on the MU portal to keep track of their wards' progress •

Number of students enrolled in the institution	Number of fulltime teachers	Mentor : Mentee Ratio
25000	2385	1:10.5

2.4 – Teacher Profile and Quality

2.4.1 – Number of full time teachers appointed during the year

No. of sanctioned positions	No. of filled positions	Vacant positions	Positions filled during the current year	No. of faculty with Ph.D
2404	2385	347	328	676

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

Year of Award	Name of full time teachers receiving awards from state level, national level, international level	Designation	Name of the award, fellowship, received from Government or recognized bodies
2018	Dr. Vasudev Ballal	Professor	Academic Excellence award 2018 for outstanding research output Awarded by Indian Association of conservative dentistry and endodontics at 33rd IACDE National conference
2019	Dr. Abhay Kamath	Professor	Nominated by Govt. of India as a member of Dental specialty committee of National Health Authority

[View File](#)

2.5 – Evaluation Process and Reforms

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

Programme Name	Programme Code	Semester/ year	Last date of the last semester-end/ year-end examination	Date of declaration of results of semester-end/ year- end

				examination
MlibISc	502	1 st Sem	08/01/2019	07/02/2019
MSc	M46	1 st Sem	18/12/2018	03/01/2019
View File				

2.5.2 – Average percentage of Student complaints/grievances about evaluation against total number appeared in the examinations during the year

Number of complaints or grievances about evaluation	Total number of students appeared in the examination	Percentage
3	43372	0.0069

2.6 – Student Performance and Learning Outcomes

2.6.1 – Program outcomes, program specific outcomes and course outcomes for all programs offered by the institution are stated and displayed in website of the institution (to provide the weblink)

<https://manipal.edu/mcops-manipal/programs/program-list/bpharm.html>; <https://manipal.edu/mit/program-list.html>; <https://manipal.edu/foa/programs/program-list/barch.html>; <https://manipal.edu/mcon-manipal/program-list/bsc.html>

2.6.2 – Pass percentage of students

Programme Code	Programme Name	Programme Specialization	Number of students appeared in the final year examination	Number of students passed in final year examination	Pass Percentage
D01	BDS	Dental	204	196	96.08
M01	MBBS	Medical	529	495	93.57
View File					

2.7 – Student Satisfaction Survey

2.7.1 – Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design the questionnaire) (results and details be provided as weblink)

<https://manipal.edu/content/dam/manipal/mu/documents/IOAC/Student%20Feed%20Back.pdf>

CRITERION III – RESEARCH, INNOVATIONS AND EXTENSION

3.1 – Promotion of Research and Facilities

3.1.1 – Teachers awarded National/International fellowship for advanced studies/ research during the year

Type	Name of the teacher awarded the fellowship	Name of the award	Date of award	Awarding agency
International	Dr. Adarsh Kudva	Fellowship at Military Hospital, University of Ulm , Germany	04/02/2019	AOCMF
International	Dr Meenakshi Garg	FAIMER- International Fellowship program	01/07/2018	MAHE FAIMER International Institute for Leadership in Inter- Professional

Education

[View File](#)

3.1.2 – Number of JRFs, SRFs, Post Doctoral Fellows, Research Associates and other fellows in the Institution enrolled during the year

Name of Research fellowship	Duration of the fellowship	Funding Agency
Ms Jyothi Ramesh Naik	1794	ICMR, New Delhi
Ms Nisha B K	1794	DST, New Delhi
Ms Joslin D Almeida	1277	DBT, New Delhi

[View File](#)**3.2 – Resource Mobilization for Research**

3.2.1 – Research funds sanctioned and received from various agencies, industry and other organisations

Nature of the Project	Duration	Name of the funding agency	Total grant sanctioned	Amount received during the year
Minor Projects	730	CSIR, New Delhi	76000	56000
Major Projects	1095	VGST, Bangalore	6000000	2000000

[View File](#)**3.3 – Innovation Ecosystem**

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

Title of workshop/seminar	Name of the Dept.	Date
Certificate Course in Intellectual Property Rights	Technology Transfer Office, Directorate of Research, Manipal	04/03/2019
Wearable Device Hackathon	Innovation Center, Manipal Academy of Higher Education (MAHE), Manipal	21/06/2019

[View File](#)

3.3.2 – Awards for Innovation won by Institution/Teachers/Research scholars/Students during the year

Title of the innovation	Name of Awardee	Awarding Agency	Date of award	Category
Cheek and Tongue retractor Winner - "Hacking Dentistry 2019	Dr. VidyaSaraswathi M	Innovation Center MAHE MCODS, Manipal	28/03/2019	Teacher
System and Method of accurate intraoral periapical radiographs	Dr. Shruthi Acharya and Dr. Shruti Singh	IKP-BIRAC Regional Innovation Centre	17/03/2019	Teachers and students

[View File](#)

3.3.3 – No. of Incubation centre created, start-ups incubated on campus during the year

Incubation	Name	Sponsored By	Name of the	Nature of Start-	Date of
------------	------	--------------	-------------	------------------	---------

Center			Start-up	up	Commencement
Manipal Universal Technology Business Incubator	Manipal Universal Technology Business Incubator	National Science and Technology Entrepreneurship Development Board NSTEDB and Department of Science and Technology DST, Government of India	Suma Genomics Pvt. Ltd.	Service providers for genomics	04/01/2019
Manipal Universal Technology Business Incubator	Manipal Universal Technology Business Incubator	National Science and Technology Entrepreneurship Development Board NSTEDB and Department of Science and Technology DST, Government of India	EKAM Rehab Tech Pvt.. Ltd	An Affordable Gait trainer for Differently abled Children	30/01/2019
Manipal Universal Technology Business Incubator	Manipal Universal Technology Business Incubator	National Science and Technology Entrepreneurship Development Board NSTEDB and Department of Science and Technology DST, Government of India	UWS Technologies Pvt. Ltd.	360 degree virtual tour of properties	01/04/2019
No file uploaded.					

3.4 – Research Publications and Awards

3.4.1 – Ph. Ds awarded during the year

Name of the Department	Number of PhD's Awarded
ATREE, Bangalore	7
CDFD, Hyderabad	11
Centre for Wildlife Studies, Bangalore	1

Department of Atomic and Molecular Physics, Manipal	1
Department of Commerce	1
Department of Science	2
Manipal Institute of Virology, Manipal	1
Manipal School of Architecture and Planning, Manipal	1
FRLHT, Bangalore	2
IBAB, Bangalore	4
ICIRC, Ahmedabad	2
ILS, Bhubaneshwar	1
IOB, Bangalore	2
Kasturba Medical College, Mangalore	4
Kasturba Medical College, Manipal	10
Lupin Research Park, Pune	5
Manipal College of Dental Sciences, Mangalore	1
Manipal College of Dental Sciences, Manipal	1
Manipal College of Nursing, Manipal	4
Manipal College of Pharmaceutical Sciences, Manipal	6
Manipal Institute of Management, Manipal	4
Manipal Institute of Technology, Manipal	38
Nature Conservation Foundation, Mysore	1
NCBS, Bangalore	15
NCF, Mysore	1
NIAS, Bangalore	3
PPISR, Bangalore	1
RCB, Faridabad	11
RGCB, Trivandrum	4
SACON, Coimbatore	3
Manipal College of Health Professions, Manipal	5
Manipal Institute of Communication, Manipal	2
Manipal School of Life Sciences, Manipal	1
Manipal Institute of Regenerative Medicine, Bangalore	4

3.4.2 – Research Publications in the Journals notified on UGC website during the year

Type	Department	Number of Publication	Average Impact Factor (if any)
National	Kasturba Medical College, Mangaluru	74	0.22
International	Kasturba Medical College, Mangaluru	121	0.63
View File			

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

Department	Number of Publication
Manipal Institute of Technology, Manipal	77
Kasturba Medical College, Manipal	59
View File	

3.4.4 – Patents published/awarded/applied during the year

Patent Details	Patent status	Patent Number	Date of Award
A Passively acting, habit corrective, attachable oral healthcare apparatus with a pressure detecting mechanism by A Sthiyabalan, Ayman, Dr Pratibha, Dr Santhosh, et al	Filed	201841024947	04/07/2018
Helical Steel Concrete Core Pile by Arunkumar Y and Soumik Guha	Filed	201841025531	09/07/2018
View File			

3.4.5 – Bibliometrics of the publications during the last academic year based on average citation index in Scopus/ Web of Science or PubMed/ Indian Citation Index

Title of the Paper	Name of Author	Title of journal	Year of publication	Citation Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self citation
Treading the beaten path with old and new obstacles: a report from the Indian HIPEC registry	Bhatt A., Mehta S.S., Zaveri S., Rajan F., Ray M., Sethna K., Katdare N., Patel M.D., Kammar P., Prabhu R., Sinukumar	International Journal of Hyperthermia	2018	3	Department of Surgical Oncology, Fortis Hospital, Bangalore, India Department of Peritoneal surface oncology,	1

	S., Mishra S., Rangarajan B., Rangole A., Damodaran D., Penumadu P., Ganesh M., Peedicayil A., Raj H., Seshadri R.				Saifee Hospital, Mumbai, India Department of Surgical Oncology, Manipal Hospital, Bangalore, India etc.	
Two fossil shark teeth from lower eocene shales of the khuiala formation, Jaisalmer Basin, India	Pandey D.K., Chaskar K., Case G.R.	Journal of the Palaeo ntological Society of India	2018	1	Earth and Planetary Sciences Group, Manipal Center for Natural Sciences, Manipal Academy of HIGHER EDUCATION, MADHAV NAGAR, MANIPAL, KARNATAKA, 576104, India P.O. BOX 664, LITTLE RIVER, SC 29566, United States	1
View File						

3.4.6 – h-Index of the Institutional Publications during the year. (based on Scopus/ Web of science)

Title of the Paper	Name of Author	Title of journal	Year of publication	h-index	Number of citations excluding self citation	Institutional affiliation as mentioned in the publication
Treading the beaten path with old and new obstacles: a report from the Indian HIPEC	Bhatt A., Mehta S.S., Zaveri S., Rajan F., Ray M., Sethna K., Katdare N., Patel M.D.,	Internatio nal Journal of Hypertherm ia	2018	105	1	Department of Surgical Oncology, Fortis Hospital, Bangalore, India Department of

registry	Kammar P., Prabhu R., Sinukumar S., Mishra S., Rangarajan B., Rangole A., Damodaran D., Penumadu P., Ganesh M., Peedicayil A., Raj H., Seshadri R.					Peritoneal surface oncology, Saifee Hospital, Mumbai, India Department of Surgical Oncology, Manipal Hospital, Bangalore, India etc.
Two fossil shark teeth from lower eocene shales of the khuiala formation, Jaisalmer Basin, India	Pandey D.K., Chaskar K., Case G.R.	Journal of the Palaeo ntological Society of India	2018	49	1	Earth and Planetary Sciences Group, Manipal Center for Natural Sciences, Manipal Academy of HIGHER EDUCATION, MADHAV NAGAR, MANIPAL, KARNATAKA, 576104, India P.O. BOX 664, LITTLE RIVER, SC 29566, United States
View File						

3.4.7 – Faculty participation in Seminars/Conferences and Symposia during the year

Number of Faculty	International	National	State	Local
Attended/Semina rs/Workshops	797	1244	542	883
Presented papers	384	407	102	32
Resource persons	59	135	43	54
No file uploaded.				

3.5 – Consultancy

3.5.1 – Revenue generated from Consultancy during the year

Name of the Consultan(s) department	Name of consultancy project	Consulting/Sponsoring Agency	Revenue generated (amount in rupees)
Dr. Sneha G K	Histology Slides	G S Medical College, Pilkhuwa, Uttar Pradesh	140448
Dr. Sneha G K	Histology Slides	Malabar Dental College, Kerala	16509

[View File](#)

3.5.2 – Revenue generated from Corporate Training by the institution during the year

Name of the Consultan(s) department	Title of the programme	Agency seeking / training	Revenue generated (amount in rupees)	Number of trainees
Dr Vidya Patwardhan	Consultancy	SELCO, Bangalore	50000	20
Chef Thiru and chef Nitish	Consultancy	Reliable Cashews	220000	23

[View File](#)

3.6 – Extension Activities

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

Title of the activities	Organising unit/agency/ collaborating agency	Number of teachers participated in such activities	Number of students participated in such activities
School Dental Health Program	Department of Pedodontics and Preventive Dentistry, MCODS, Manipal	6	186
Oral Hygiene Week	Department of Periodontics, Manipal College of Dental Sciences (MCODS), Manipal	10	18

[View File](#)

3.6.2 – Awards and recognition received for extension activities from Government and other recognized bodies during the year

Name of the activity	Award/Recognition	Awarding Bodies	Number of students Benefited
Voluntary Community Service	Gold Certification for Community Service	Voluntary Service Organisation (VSO) Manipal,	4
Education the society	Jean Monnet Centre of Excellence in India-EU Interdisciplinary Studies - Culture,	Education, Audiovisual and Culture Executive Agency (EACEA), European	200

[View File](#)

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

Name of the scheme	Organising unit/Agency/collaborating agency	Name of the activity	Number of teachers participated in such activities	Number of students participated in such activities
Breast cancer awareness program	MCODS, Manipal Students council	National Breast Cancer Awareness Month' to highlight the importance of breast cancer awareness, education and research	2	20
Swachh Bharat	Student council of MCOCS, Manipal with VSO, MAHE-Manipal	Swachh Mann Abhiyan , Swachh Dante Abhiyan , Health and Hygiene	6	12

[View File](#)

3.7 – Collaborations

3.7.1 – Number of Collaborative activities for research, faculty exchange, student exchange during the year

Nature of activity	Participant	Source of financial support	Duration
Work on DM2	Dr Basavaraj	Pharmacy company	730
Temperature regulation and measurement in Katibasti Treatment.	Dr Basavaraj	University Seed Money	730

[View File](#)

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

Nature of linkage	Title of the linkage	Name of the partnering institution/ industry /research lab with contact details	Duration From	Duration To	Participant
Community outreach workshop on demonstration of preparation	Community outreach workshop	Centre for Urban Studies, Faculty of Architecture, MAHE and	06/10/2018	06/10/2018	Exe. M. Arch. students

of compost with kitchen and organic waste and vermi composting to the people of Siddharthanagar, a local community settlement		ITDP, Udipi and Alevoor Grama Panchayat.			
Design for Mother and Child Centre -The Anganwadi, at Shirthady in Mangalore District for rural communities through participatory approach and intense community engagement	iDiDe 2019 (Intercultural Dialogue through Design)	Deakin University, Australia	08/01/2019	26/01/2019	UG Students from MSAP Deakin University, Australia

[View File](#)

3.7.3 – MoUs signed with institutions of national, international importance, other universities, industries, corporate houses etc. during the year

Organisation	Date of MoU signed	Purpose/Activities	Number of students/teachers participated under MoUs
Clinfound clinical research services pvt ltd ., Kumaramangalam, Todupuza, KERALA	04/10/2018	To take up research activities Title- Amulticenter, open label, randomized, parallel group clinical study designed to examine the efficiency safety of TLY-001 in both kashayam and kashayam tablet form twice daily oral dose in 150 patients with newly dia	3
Kings College London, UK	18/07/2018	General Agreement for Academic Cooperation	1

[View File](#)

CRITERION IV – INFRASTRUCTURE AND LEARNING RESOURCES

4.1 – Physical Facilities

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

Budget allocated for infrastructure augmentation	Budget utilized for infrastructure development
9676355000	10508151000

4.1.2 – Details of augmentation in infrastructure facilities during the year

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

[View File](#)

4.2 – Library as a Learning Resource

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

Name of the ILMS software	Nature of automation (fully or partially)	Version	Year of automation
KOHA	Fully	17.11.00.000	2018
EASYLIB	Fully	4.5.2	2003

4.2.2 – Library Services

Library Service Type	Existing		Newly Added		Total	
Text Books	276585	176443225	9251	13955152	285836	190398377
Reference Books	14888	3473174	198	83079	15086	3556253

[View File](#)

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

Name of the Teacher	Name of the Module	Platform on which module is developed	Date of launching e-content
Dr. Ramesh S Ve	EBP in Health Care	MOOCS	27/08/2018
Dr. K. Ramnarayan	Necrosis Granulomatous inflammation	NPTEL	01/11/2018

[View File](#)

4.3 – IT Infrastructure

4.3.1 – Technology Upgradation (overall)

Type	Total Computers	Computer Lab	Internet	Browsing centers	Computer Centers	Office	Departments	Available Bandwidth (MBPS/GBPS)	Others
Existing	13019	3198	12883	12	196	944	8544	4160	137
Added	136	56	0	0	10	31	28	0	11
Total	13155	3254	12883	12	206	975	8572	4160	148

4.3.2 – Bandwidth available of internet connection in the Institution (Leased line)

4160 MBPS/ GBPS

4.3.3 – Facility for e-content

Name of the e-content development facility	Provide the link of the videos and media centre and recording facility
Recording Facility, Lecture Capturing System, Virtual Class Rooms	https://manipal.edu/mu/important-links/e-content.html

4.4 – Maintenance of Campus Infrastructure

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

Assigned Budget on academic facilities	Expenditure incurred on maintenance of academic facilities	Assigned budget on physical facilities	Expenditure incurred on maintenance of physical facilities
1873090000	1606581000	2009440000	1745998000

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

All the infrastructural facilities are maintained as per the laid down policy of MAHE. Overall activities for the upkeep of physical, academic and support facilities is carried out by maintenance department comprising of functions like plumbing and water supply, electrical maintenance, air conditioning department, ancillary services as well as security. Director General Services, MAHE oversees the operations and is the nodal point of contact. Activities are carried out as per two schedules, daily schedule and weekly schedule. Activities under each are described below:

- Clearing of waste around the facility and removal of general garbage from the departments/cabins and disposing to the central collection bin for the further handling.
- Sweeping followed by wet mopping of departments/HOD cabins/labs/classrooms and common areas once in a day
- Thorough cleaning and sanitizing of wash rooms and regular maintenance
- Dusting of furniture, computers and other office equipment's
- Cleaning of notice boards and sign boards inside the facility
- Cleaning of lifts followed by sanitizing and spraying of air fresheners

Weekly Schedule:

- High dusting of departments, corridors and other common areas
- Machinery scrubbing of floors followed by polishing and buffing
- Dusting and cleaning of tube lights/TV/fans/switch boards/AC grills/fixtures/AHU's pertaining to the facility
- Spot cleaning of the walls wherever required
- Cleaning and scrubbing of water coolers
- Cleaning of glass and frames in cabins and other common areas up to reachable height
- Scrubbing of wash rooms and polishing of fixtures followed by de-scaling of the toilets
- Polishing of

leather sofas kept in office and in general visiting areas • Scrubbing and washing of foot mats • Manual scrubbing of staircase steps and polishing • Polishing of steel railings and steel fixtures wherever fixed • Scrubbing and cleaning of waste bins, buckets and mugs • Manual scrubbing and cleaning of emergency fire exit areas • Cleaning of sign boards outside the facility

Policies and Procedures : Sports activities at Manipal Academy of Higher Education are supervised by the University Sports Council headed by the Pro Chancellor and Vice-Chancellor as the Chairperson and Vice-Chairperson, respectively. Each college also has a staff sports advisors who are part of this council. Every year, one of the Directors of Physical Education is elected as the Chief Sports Coordinator who oversees the university sports activities. The University Sports Council organises inter-college sports events and makes selections for the university team for various inter-university tournaments. The council also organises staff sports events annually

Laboratory Service : MAHE extends state of the art laboratory facilities to support practical learning of the different aspects of virology, Microbiology, Pathology Etc. Students are trained to work using high-end technologically, updated equipment and cutting-edge instruments. Audio-visual teaching aids are provided in all the classrooms. MAHE maintains a dedicated library with all the relevant books and articles.

<http://172.16.19.76/page.aspx?id=14>

CRITERION V – STUDENT SUPPORT AND PROGRESSION

5.1 – Student Support

5.1.1 – Scholarships and Financial Support

	Name/Title of the scheme	Number of students	Amount in Rupees
Financial Support from institution	AGE Scholarship, AICTE Scholarship etc.	2958	389186714.95
Financial Support from Other Sources			
a) National	ARIVU- Govt. Scholarship, Dept. of Social Welfare etc.	700	27852590
b)International	he Medical Committe Netherlands- Vietnam sponsred student, Free State Provincial Govt, South Africa etc. (Amount in USD)	31	315980

[View File](#)

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

Name of the capability enhancement scheme	Date of implemetation	Number of students enrolled	Agencies involved
Professionalism and Communication in Dentistry	24/12/2018	40	Dr. Amitha Ranauta
Pathways to a successful dental	13/01/2019	70	Dr. Siddharth, INDEL Academy,

[View File](#)

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

Year	Name of the scheme	Number of benefited students for competitive examination	Number of benefited students by career counseling activities	Number of students who have passed in the comp. exam	Number of students placed
2018	Career Guidance	0	1904	0	1795
2018	Competitive Exams	434	0	371	229

[View File](#)

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

Total grievances received	Number of grievances redressed	Avg. number of days for grievance redressal
10	10	9

5.2 – Student Progression

5.2.1 – Details of campus placement during the year

On campus			Off campus		
Name of organizations visited	Number of students participated	Number of students placed	Name of organizations visited	Number of students participated	Number of students placed
ITC, Oberoi, Taj, Hyatt, Lemon Tree, Air Vistara, Marriott, Hotel Equatorial, Grand Hyatt, St Regis, Westin, Ritz Carlton, Mielcke, Hurtigkarl, Morada	101	101	Accor, Morada	17	17

[View File](#)

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

Year	Number of students enrolling into higher education	Programme graduated from	Department graduated from	Name of institution joined	Name of programme admitted to
2019	1	BDS	Dental	Boston University	DDS
2019	1	BDS	Dental	Yenepoya	MDS

[View File](#)

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

Items	Number of students selected/ qualifying
NET	10
SET	2

[View File](#)

5.2.4 – Sports and cultural activities / competitions organised at the institution level during the year

Activity	Level	Number of Participants
Dentalthon - Interclass sports	Interclass	250
Inter MAHE student Basketball tournament	Intercollegiate	120

[View File](#)

5.3 – Student Participation and Activities

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

Year	Name of the award/medal	National/ Internaional	Number of awards for Sports	Number of awards for Cultural	Student ID number	Name of the student
2018	Brandscan - Group dance - 1st place	National	0	1	161401190, 181401348	Janet Dsouza, Sehr Bansal
2018	Gold medal in Badminton Singles	National	1	0	160301276	Monisha PC
2018	Silver medal at all India squash tournament	National	1	0	140301118	Shriya Verma

[View File](#)

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

The Student councils of all the institutions of the Manipal Academy of Higher Education(MAHE) have numerous technical and cultural student clubs, through which various academic and extracurricular activities are conducted throughout the year. One of the noteworthy activities is the plethora of community outreach programs, which inspire students to give back to the society like Daan Utsav, blood donation camps, visits to orphanages, old age homes, district government schools, special schools, etc. The students of MAHE also believe in creating awareness on various issues in the society by conducting street plays, skits and talks on Swachh Bharat Yojana, 'good touch bad touch' for kids, substance abuse, etc. The students of MAHE, being associated with medical and

dental colleges, provide awareness on various medical issues like breast self-examination, breast cancer, dental hygiene, radiology, designer drugs, junk food hazard, etc. One of the student clubs has also made strides in disseminating hygienic menstrual practices for women in underprivileged sections of society. Students have conducted gender champion workshops to sensitize both genders on their responsibilities and empower women to a higher level. Also, students have conducted various intercollegiate academic competitions like quiz, debate, poster, collage, essay, photography, etc. to create awareness regarding these social issues. Academic clubs like the Student Research Forum concentrate on research activities and competitions to develop the existing technical knowledge and encourage publishing scientific papers in various indexed journals, as well as participation in national and international conferences. The student councils have also conducted national-level innovation contests, hackathons, scrapathons, etc. for the youth to improve the understanding of technical challenges in different avenues. MAHE encourages students to materialize their business ideas by conducting sessions on leadership, management, finance, entrepreneurship, incubation, innovation, student technical projects, etc. MAHE believes in comprehensive growth there are many sports competitions for students of all institutes. MAHE students also inculcate social responsibility through Walkathons, Marathons, Cyclothon, and exhibitions on substance abuse, the menace of ragging, mental health awareness, etc. All the institutions of MAHE also celebrate various national days as prescribed by, government of India, such as Surgical Strike Day, Matrubhasha Divas, Unity Day, Youth Day, Constitution Day, National Yoga Day, Education Day, Republic Day, Independence Day and Gandhi Jayanthi. Every year MAHE conducts its annual cultural fest "UTSAV" which comprises inter-collegiate competitions in music, dance, drama, literary and debating events, creative art, photography, etc. At individual college level, students are involved in various cultural activities like poetry writing, cartooning, painting, singing, dancing, essay, elocution, creative writing, etc. As a sign of communal harmony, all festivals, irrespective of religion and caste are celebrated by MAHE students in the campus. Moreover, students conduct motivational seminars/talks with eminent speakers from various backgrounds to inspire MAHE students. In addition to conduction of 'Science Day' annually, student clubs also organise seminars for high school and pre-university students at their decisive years on career guidance. Workshops on mental health awareness and peer support workshops are conducted to improve the support system for the students.

5.4 – Alumni Engagement

5.4.1 – Whether the institution has registered Alumni Association?

No

5.4.2 – No. of registered Alumni:

35491

5.4.3 – Alumni contribution during the year (in Rupees) :

3758488

5.4.4 – Meetings/activities organized by Alumni Association :

21 Re-unions were held in Academic year 2018-19 in Manipal and other places

CRITERION VI – GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 – Institutional Vision and Leadership

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

Given the significantly large scale of Institutional operation, and in order to ensure that the various Constituent Units are able to manage execution with agility, it is imperative that there is a high degree of decentralization and participative management in our institutional practice, which MAHE provides within its organizational strategic and structural framework MAHE provides a hub-and-spoke based support mechanism and facilitates empowerment for each of its constituent units. Every Constituent Unit proposes its institutional or departmental budgets, which is reviewed, approved and allocated centrally. However, every Unit is empowered to manage its budgetary spend, based on its annual operating plan, post such central allocation All Units are custodians of full functional freedom on all operational matters in routine administrative functioning. Besides managing their individual Unit based budgets, all staff requirements based on projections by the Unit leadership, once approved, are the responsibility of the said Unit leadership. The identification and recruitment of staff is the sole responsibility of the said Unit. There is central support provided through the office of the Human Resource department, however the power to select and appoint qualified staff, remains within the authority of the Constituent Unit. A case in point is the Department of Evaluations, which plays a vital role in ensuring that the evaluation and result management of all Constituent Units are provided a high degree of decentralization as is evident in the operational autonomy that is provided. The Department of Evaluations supports such autonomy in assessment, evaluation and publication of results for constituent units, within the ambit of its Standard Operating Procedural framework that the Department of Evaluations provides and monitors on an ongoing basis. The Department of Evaluations ensures support through Policy and by defining how the Process works. Based on operational complexity of the constituent unit, and its leadership capability, the Department of Evaluations empowers the said unit with the autonomy to manage its evaluation process and result publications. Constituent units can also initiate new programs and courses and manage their own academic calendar through their own offices. However, central support is continuously provided in areas such as admission management so that economies of scale and logistical efficiencies are taken advantage of. The Department of Evaluations provides policy guidelines and a structural framework within which each Unit needs to ensure operational rigor. Units are continuously audited within these guidelines, so as to keep a check on compliance and integrity of the various policy and process elements

6.1.2 – Does the institution have a Management Information System (MIS)?

Yes

6.2 – Strategy Development and Deployment

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

Strategy Type	Details
Admission of Students	<ol style="list-style-type: none"> 1.Participation in ranking processes and display of ranking in social media to improve visibility 2.Regular upgradation of course curriculum 3.Availability of updated information like Eligibility Admission Process, Program contents, Career Opportunities on institute website / program webpages 4.Regular program specific webinars with institute faculty as resource

persons, to answer all student / parent queries 5.Increase in social media presence 6.Participation in School Contact Program (SCP)and National International Education fairs

Industry Interaction / Collaboration

A number of academic and research collaborations have been explored for general academic cooperation, student and faculty exchange, and for research purposes. Industrial experts are invited regularly to deliver guest talks, lectures in the latest technologies

Human Resource Management

1.SMILE - leadership program to develop a pool of leaders within the MAHE to exhibit critical leadership positions across the organisation. 2.HR department has designed a new online induction module along with a Three-day orientation module named "FITLAR" (Fundamentals In Teaching, Learning, Academic Leadership and Research) are conducted for the newly joined faculty covering elements in pedagogy, research, academic leadership, and well-being to equip the new joiner with skills and attributes of pursuing excellence the 'MAHE way'. 3.MAHE sponsors Rs.50,000 per financial year for conference facility as support to faculty members to attend professional conferences, workshops in their respective area of specialization. 4.HR has developed an online Performance management system (PMS) for transparent review. 5.MDPs/FDPs/Guest Lecturers/Talks organized by MAHE its units/departments for upgradation of knowledge. 6.Deputation of faculty members to premier institutes in the country for pursuing doctoral programmes with full salary during the leave period. 7.We have also hosted scholars through fellowships such as Ramalingaswami, INSPIRE etc and providing research grants in their area of research. 8.Emphasis on recruitment of foreign faculty from all continents 9.Emphasis on recruitment of multi-talented and multi-cultural personnel 10.Training Development programs on skill cum Technology upgradation 11.Emphasis on awareness of community welfare and environmental protection 12.Recruitment through new technologies (telephonic video conferencing) 13.Reduction of paper consumption by

adopting electronic means of communication
14. Developing a new internal ERP module for HR payroll
15. Biometric system for monitoring timely attendance

Library, ICT and Physical Infrastructure / Instrumentation

Awareness programs about the availability and utilization of library resources (physical and online) conducted to enhance the usage. Online Public Access Catalogue (OPAC) facility is offered through internet for document availability of the library. Links to the subscribed online resources are given to the library website category-wise Upgradation of ICT and other Physical Infrastructure, and addition of many more books in MAHE Library Library resources are easily accessible through intranet as well as internet, providing access to online journals, books, databases and other resources. On Campus and off Campus access to online journals and online databases. EZProxy was introduced, thus enabling faculty and post graduates to access the library's digital resources from any part of the world. Computer lab with Internet access. Fully automated libraries using KOHA Library Management Software. Casual reading area. Group study and private study area. Individual study cubicles. Internet kiosks in reading halls. Open access system. Security systems with CCTV, Access Control. RFID enabled library services and security system

Research and Development

Research Orientation - The newly appointed faculty have an orientation program in which they are briefed about the research focus of MAHE, research policies, research ethics, institutional ethics committee, facilities and infrastructure for research across various constituents units of MAHE Seed Money policy for Faculty - Young researchers can avail seed money for their research. Seed money for faculty has been budgeted under research budget. Researchers can use this money for research projects which have a scope of getting published in high impact journals, getting extramural grants or for applying patent Research Incentives - Research incentives are being given for publications. Incentives are directly proportional to the quality of

publication as per the journal quartile Post Doctoral Fellows - Postdoctoral fellows who have worked abroad and have a good acumen for research have been appointed Research Assistants - Faculty have been provided with research assistants to increase the quantum and quality of research

Examination and Evaluation

Initiated the procurement of graphic pads which help the evaluators to write the remarks while marking the answer scripts. Student Life Cycle Management (SLCM) is implemented for result processing and analysis of credit based system. This is being implemented for health sciences courses (annual system) also.

Teaching and Learning

Measures have been taken and implemented to enhance the experiential learning for undergraduates on the learning management system (LMS) such as the IMPARTUS where the didactic lectures are captured in audio visual format and made available for easy access. With respect to e-learning, the faculty duly upload the classes in a pdf format within 24 hours of the classes. Teaching and learning process is developed as per the requirement of Outcome Based Education (OBE) philosophy. The teacher prepares the course plan in the beginning of semester for all the courses to be taught. Course outcomes are defined for each course they are mapped with programme outcomes. The academic performance of the students is assessed through a series of tests, assignments and end semester examination as per the principles of continuous evaluation. At the end of each semester, course outcome analysis is carried out to generate feedback to teachers and administrators. The feedback thus generated is used for correction if any required in course plan

Curriculum Development

There is a curriculum committee in each institution which looks after the curriculum revisions and also meets to discuss the proposed changes by the regulatory authorities. As the scope of the courses and curriculum is within the regulatory authorities' guidelines, little modifications are possible. However, effective implementation and delivery strategies are carried out. The curriculum of all the program are

discussed during the board of studies meetings held twice a year. During the board of studies meeting, a feedback on the curriculum is obtained from students and external subject expert on the curriculum. Based on the feedback, necessary corrective actions are initiated after approval. Almost all the institutes of MAHE adopted outcome based education and the same is being implemented for the all the programs. To realize this, a series of discussions and consultations have been organized with experts.

6.2.2 – Implementation of e-governance in areas of operations:

E-governance area	Details
Examination	<p>1.Item analysis for MCQ through epad is initiated. Pilot data is getting verified. 2.Integration of theory marks from epad and internal assessment marks from various institutions are initiated through SLCM system. 3.PG desperation/ thesis are submitted through online. 4.Online Question paper scrutiny at Bangalore campus. PDF format of QPs are shared through network folders and faculty will do the scrutiny of QPs. This saves the commute time of faculty and improve the quality and turn-around time</p>
Student Admission and Support	<p>1.New Online Application Form with option to view the application status. 2. Remittance of Application fee, Entrance Test Fee, Tuition Fee and Hostel Fee via online. 3. Eligibility document upload option under Candidate login along with the option to view the document approval status. 4. Process Manual of Manipal Entrance Test (MET) environment Online Test Booking System (OTBS) via electronic copy (pdf) and audio-visual mode. 5. Auto reminder via SMS / Email to applicants to complete the application. 6. Customised SMS / Email at various levels of application processing. Report to view the delivery status of these communications. 7. Scanning of eligibility documents and uploading it under candidate record. 8. Display of waitlist status on website. 9. Extensive use of Google docs.</p>
Finance and Accounts	<p>As a process of e - governance - MAHE has implemented the following software's / programmes A): The below mentioned softwares have been developed in-house and are being maintained by</p>

the MAHE ISD (Information and Systems Division) team: 1. SFAS - The accounting software - Students Finance Accounting Software (SFAS) is for accounting of the fees and other income of MAHE. 2. HFAS - The accounting software Hostel Finance Accounting Software is for accounting of the Hostel fess and Utility charges from the students. 3. FAS - The Financials Accounting Software for maintain the accounts of MAHE. 4. CFAS - Similar to FAS this is the Consolidated Financials Accounting Software. This is an Accounting software - which is version 2 of the FAS. Developed for faster accounting and more of automatic entries into the accounts of the units. 5. Purchase and Inventory System- This software is being used for raising a Purchase requisition, raising a Purchase order /Service Order / work order. This software is also used by the Stores department for maintaining the inventory. The Goods received note / Service received note is also getting generated from this software. 6. Billing Software - The billing software helps the users is raising invoice / bills for the GST, MCODS billing, Ayurveda department billing, library dues, emission testing charges, etc. 7. Online Payment Integration - As per the guidelines of UGC this software has been developed for the receiving all the receipts (fees, etc.) online through payment gateways like - Atom, Paytm, HDFC bank and others. 8. Budget software - used for preparation of the Annual Operating and Capex budgets of MAHE. 9. Consolidation and Reports - This is part of CFAS which helps in the consolidation process and generates reports for MIS and Audits of all units of MAHE. 10. MFAS - Multi Unit Financial Accounting Software - this is similar to the FAS used for accounting of MAHE PF Trust, MIT PF Trust, Gratuity Trust, etc. 11. Admission and Online Counselling - The Admission software is an internal developed software used for admission. This is now integrated with Online Counselling software of outside agency called MeritTrac Services through interface. All the above softwares are which are internally developed are interlinked with each other. This helps in

	transfers of data from one software to another. These are the main softwares being used in MAHE which are being supported by many small packages like software for Medicare, etc. B) The below mentioned softwares have been procured from outside agencies: 1. Employee Service Platform by Employee Experts: This software is for all the activities related to payroll of employees of MAHE. i.e., salary, leave, Income tax calculation, Issue of Form 16 online to employees, etc. 2. SLCM - Student Life Cycle Management by Microsoft: The SLCM software is currently being implemented in one of the Unit (MIT) and it will be rolled out in all the units in the very near future.
Planning and Development	1. Online Portal for Open Electives 2. CollPoll App Integration with Student Life Cycle Management 3. Replacement of WAN Devices with Sophos UTM 4. Online Audit Report
Administration	1. Student Information System 2. Student Life Cycle Management System 3. Grants Management Portal 4. RMS Portal 5. Librabry Portal 6. IT Help Desk 7. Employee self Service

6.3 – Faculty Empowerment Strategies

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

Year	Name of Teacher	Name of conference/ workshop attended for which financial support provided	Name of the professional body for which membership fee is provided	Amount of support
2018	Mrs.Nagaveni N Nayak	International Conference SHAAPED 2019(Studies in Habitat with Academic Alliance in Planning Environment and Design) with the theme Conversations in Conservation	NA	8000
2018	Dr.A Ravindra Prabhu	NA	European Renal Association - European Dialysis and Transplant Association(ERA-	13678

[View File](#)

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

Year	Title of the professional development programme organised for teaching staff	Title of the administrative training programme organised for non-teaching staff	From date	To Date	Number of participants (Teaching staff)	Number of participants (non-teaching staff)
2019	Medical Auditing and Certification of Deaths in Orthopaedic Cases	NA	30/04/2019	30/04/2019	21	0
2019	NA	AAC (Access, Assessment Continuity of Care)	03/06/2019	03/06/2019	0	59

[View File](#)

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

Title of the professional development programme	Number of teachers who attended	From Date	To date	Duration
Continuing Dental Education	2	28/07/2018	28/07/2018	1
Awareness Programme	5	17/07/2018	17/07/2018	1

[View File](#)

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

Teaching		Non-teaching	
Permanent	Full Time	Permanent	Full Time
328	328	469	469

6.3.5 – Welfare schemes for

Teaching	Non-teaching	Students
Provident Fund, PF linked Employees' Pension Scheme, Employee Deposit Linked Insurance (EDLI) Scheme, Gratuity, National Pension System (NPS), Medicare Facility, Group	Provident Fund, EDLI and EPF Pension scheme, Gratuity, Employee State Insurance, National Pension Scheme, Medicare Facility to employees, Medicare Facility to	Student Health Clinic, Teacher Guardian, Mentoring scheme, Dedicated support centre for mental wellbeing with clinical psychologists and student

<p>Life Term Insurance, Group Personal Accident Insurance Scheme, School Fees Reimbursement for Children studying in schools up to standard XII, Scholarship on course fee of Employees Children / Spouses Higher education under Manipal Group Institutions, Leave Travel Concession, Interest Subsidy on Utility/housing Loan, Valley Club Facility, MARENA - Recreational and sports Facility, Institutional Accommodation subject to availability, Laptop Facility, CUG plan (AIRTEL) SIM, Sodexo Vouchers in lieu of Variable Allowance, Earned Leave Encashment, Conference facilities, Research Incentives, Incentives for excellence in teaching and research, Seed Money for research, Intra-mural research fund etc.</p>	<p>employee dependent parents ,Group Term Life Insurance for social security of family ,Scholarship on course fee for employee children/spouse studying in MAHE/constituent institutions ,Reimbursement of children educational expenses studying in Manipal Group of institutions/schools ,Scholarship for students of Academy of General Education studying at MAHE,SODEXO Meal/Gift facility ,MARENA Sports Facility ,Concession in course fee for employee higher education ,Institutional accommodation facility,Employee Grievance Redressal Committee ,Sports Cultural activities</p>	<p>counsellors ,Student Grievance Cell , Anti-ragging monitoring Committee, Internal Complaints Committee , Hostel welfare committee,Workshops and Awareness Programs ,Student Clubs ,Yoga Classes ,Student Scholarships</p>
--	--	--

6.4 – Financial Management and Resource Mobilization

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

Yes The Audit in 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 from last 4 financial years has been entrusted to an external party. They carry out the audit for each quarter of the year. They are mainly into transactional audit which is done on the test basis. They also look into the physical verification of stocks, cash verification at institutional level. They look into the internal controls of the financial system. They highlight the deficiency in the system, if any and advice 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 month 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, University also has: • Audit of its PF Trusts and Gratuity trust • ISO Audit • Audit of the Research Grants. • Audit of the conference and workshop conducted. Till to-date there are no major observations from the external auditors or internal Auditors

6.4.2 – Funds / Grants received from management, non-government bodies, individuals, philanthropies during the year(not covered in Criterion III)

Name of the non government	Funds/ Grnats received in Rs.	Purpose
----------------------------	-------------------------------	---------

funding agencies /individuals		
Various Agencies	26083000	For the objectives of the University
No file uploaded.		

6.4.3 – Total corpus fund generated

64682000.00

6.5 – Internal Quality Assurance System

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

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	Yes	Experts from NITK for Engineering college and External Experts for other Colleges	Yes	IQAC
Administrative	Yes	M/s. TUV Rheinland, Bangalore	Yes	Internal auditors

6.5.2 – What efforts are made by the University to promote autonomy in the affiliated/constituent colleges? (if applicable)

Since University is a "deemed to be a university", a unitary university, there is no provision to grant 'autonomous status' to any of its constituent institutions. The overall administrative activities, operational issues and the overall control of constituent institutions are under the university leadership for all decision making purposes. Hence, all issues such as planning, strategic developmental issues, academic issues, administrative issues and financial control are vested with the university, under various and appropriate committees. However, institutions are receiving unparalleled support and encouragement from the university in all their endeavors to provide holistic educational experience to their students, to create a benchmark for quality education and to leverage technology in teaching-learning process. All constituent units of University have functional autonomy to carry on with the academic and administrative activities to ensure the vision and mission of the university and the institution are achieved.

6.5.3 – Activities and support from the Parent – Teacher Association (at least three)

1. Parents and Teachers interact in the orientation program of each course 2. During the Annual day program of each institution, every year the parents have an opportunity to have an overview of the student performance both curricular and extracurricular activities throughout the year 3. Continuous online reporting of progress of the students to parents and when necessary, they meet with the teachers face-to-face.

6.5.4 – Development programmes for support staff (at least three)

1. Conducting Training Development programs like workshops/seminars, Fire Safety etc.,: MAHE and its constituent units regularly conducts training development programmes for the benefits of non-teaching employees. Soft skill trainings such as Email Telephone Etiquettes, Conflict Management Team Work, Skill Development etc. are being conducted covering relevant non teaching

employees. Fire safety and other technical trainings are being conducted for technical staff. The training methodology and design includes audio-video material, game-based exercises and interactive discussions. 2. Microsoft Office training through certified consultant: MAHE in association with Microsoft conducts training programs every year on 'Office 365' for Teaching and Non-Teaching staffs. Training program titled "Learning Network Configuration using Cisco Packet Tracer" was organised by MAHE in association with Manipal School of Information Sciences, Manipal for the benefit of technical staff of MAHE. In addition to this trainings are also being organized in MS Office for the non-teaching staff based on requirement. 3. Gender diversity: In accordance to the directives of the UGC to the University and in compliance with the requirement of The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013, the HR department organizes 'Gender Sensitization Workshops'. The program emphasizes the awareness of the needs, aspirations, abilities and professional value of employees as men and women without any prejudice about their gender.

6.5.5 – Post Accreditation initiative(s) (mention at least three)

1. Initiative on Outcome based education 2. Initiative of New Online application for Admission Process 3. PhD All India online test for Jan 2019 admissions 4. Initiative of Examination on e -Pad (Paperless Exam) in Manipal Institute of Technology, Manipal

6.5.6 – Internal Quality Assurance System Details

a) Submission of Data for AISHE portal	Yes
b) Participation in NIRF	Yes
c) ISO certification	Yes
d) NBA or any other quality audit	Yes

6.5.7 – Number of Quality Initiatives undertaken during the year

Year	Name of quality initiative by IQAC	Date of conducting IQAC	Duration From	Duration To	Number of participants
2019	THE Performance Masterclass - A workshop was conducted by Dr. Nickie Hosreman, Mr. Kenneth Sim and Mr. Ritin Malhotra from Times Higher Education	08/01/2019	08/01/2019	08/01/2019	15
2019	Workshop on "Outcome based Education" was conducted for all the Heads of	04/03/2019	04/03/2019	04/03/2019	35

Institutions
and Heads of
MAHE
Teaching
departments

[View File](#)

CRITERION VII – INSTITUTIONAL VALUES AND BEST PRACTICES

7.1 – Institutional Values and Social Responsibilities

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

Title of the programme	Period from	Period To	Number of Participants	
			Female	Male
Gender Sensitization programme organized by Ayurveda Dept, MAHE, manipal	10/11/2018	10/11/2018	5	3
Gender sensitization for hospitality students by Ms serina D'Silva, VP Khanna hospitality, Mumbai	08/01/2019	08/01/2019	120	0
'Gender Sensitization' Workshop- Lecture cum interactive session at Faculty of Architecture, MAHE, Manipal	14/03/2019	14/03/2019	3	2
Gender Championship photography competition on 9th May 2019, on theme "gender equality" for the students of Manipal College Health Professions, Manipal	09/05/2019	09/05/2019	3	1
Health Awareness Program on "Adolescent -	21/09/2018	21/09/2018	50	0

Issues & Concerns" by Child Health Nursing in collaboration with Bharathiya Vikas Trust (BVT)				
International womens' day "Health Resources for Adolescents, Early Pregnancy and Family Planning Methods and 'Stress management and health issues in adolescence" at Dr. G. Shankar First Degree Women's College Ajjarkad Udupi	06/03/2019	08/03/2019	100	0
Gender Champion s-gender sensitization programs at Manipal Institute of Communication, Manipal	01/02/2019	01/02/2019	185	215
Collage competition on gender equity at Manipal School of Information Sciences, Manipal	01/03/2019	01/03/2019	14	8
Gender Sensitization programme (Part of Orientation course) at Kasturba Medical College, Manipal	01/08/2018	01/08/2018	128	122

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

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

Power requirement met by renewable energy sources - 341.90 Lakh Units - Green Energy Through Open Access and 16.94 Lakh Units - Solar Roof Top PV System

Total Power requirement - 686.19 Lakh Units Renewable energy source - Solar
Renewable energy generated and used - 16.94 Lakh Units - Solar Roof Top PV
System

7.1.3 – Differently abled (Divyangjan) friendliness

Item facilities	Yes/No	Number of beneficiaries
Physical facilities	Yes	10
Provision for lift	Yes	10
Ramp/Rails	Yes	10
Braille Software/facilities	Yes	10
Scribes for examination	Yes	13
Special skill development for differently abled students	Yes	10

7.1.4 – Inclusion and Situatedness

Year	Number of initiatives to address locational advantages and disadvantages	Number of initiatives taken to engage with and contribute to local community	Date	Duration	Name of initiative	Issues addressed	Number of participating students and staff
2018	1	0	03/10/2018	1	Daan Utsav: Save a tooth	Raising awareness on avulsion and teeth reimplantation	20
2019	0	1	19/01/2019	1	MCODS Donation Drive	To collect and donate to nearby old age home or orphanage	20

[View File](#)

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

Title	Date of publication	Follow up(max 100 words)
Student handbook	01/08/2018	All the students are provided with the rules, regulations that are followed after their admission to the institution. The handbook provides information to the students on various facilities available at

		the institute and rules and regulations to be followed to utilize these facilities. In addition, it also emphasizes the code of conduct to be followed within the college premises.
Code of Conduct for Faculty, Students Staff	01/09/2018	Updated based on the Employees need and prevailing law of the land

7.1.6 – Activities conducted for promotion of universal Values and Ethics

Activity	Duration From	Duration To	Number of participants
Panel discussion on Oral health in immuno-compromised patients	25/03/2019	25/03/2019	25
Rashtriya Ekta Diwas	31/10/2018	31/10/2018	1385
View File			

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

1. Rainwater Harvesting 2. Air Quality Monitoring 3. Solar Water Heaters Pv Systems 4. Green Transportation 5. Energy Conservation

7.2 – Best Practices

7.2.1 – Describe at least two institutional best practices

1. Best Practices in International Collaborations/Engagement Objectives: International exchange programs through Memorandum of Understanding (MOUs) result in knowledge sharing regarding best practices in hospitality and culinary education, skill development, research, teaching and learning experience, and understanding business practices between the countries. The dynamic map view provides direction to live up to data globally, showcasing the positions and locations of students around the world The context: Currently, WGSHA has partnership with the following premier hotel management and skill development organizations. 1. International Sommelier Guild (ISG) : Faculty member from ISG, USA 2. The SAGES Institute, International, Surabaya, Indonesia 3. George Brown College of Applied Arts Technology, Ontario, Canada 4. Alain Ducasse, Paris, France 5. Campus Etiole Academy by Rossano Boscolo Tuscania - Italy 6. City and Guilds, UK - India-UK joint venture founded by Manipal Global Education and City Guilds, London The Practice: These international partnerships have a student and faculty exchange component where students spend an academic term with the partner institution, under mutually agreed terms. Alongside, they are a platform to enhance skills, wide range of subject areas, recognitions, and to embrace a global culture. The distinguishing feature of these engagements is the emphasis laid on the combination of academic rigor with industry interaction and exposure to choices with a focus on education in a global scenario to strengthen the quality of academic degree. Evidence of Success: These partnerships have contributed to academic, and research success globally to WGSHA. The faculty and student teams working together provided opportunities to gain international exposure and experiences which contributed in curriculum development and international recognitions along with successful professional relationships. WGSHA is the only hotel management college in India

to offer wine fundamentals certifications levels I and II, from the International Sommelier Guild (ISG) USA. International faculty representing ISG, train the students in this global certification which adds value to our students learning.

2. Diagnostic services of Manipal Institute of Virology

1. Practice based learning
2. Hands on training in practical virology on a routine basis
3. Provides opportunity for real time outbreak investigations supporting public health virology
4. One of the Premier Virology research Centre in India with a capacity to diagnose more than 50 viral diseases
5. World class equipment and high standard biosafety measures in place.
6. India's second Bio-resource center supported by American Society for Microbiology.
7. One among India's best public health virology department.
8. Rapid diagnostic services: Turn-around time is 24-48 hours

Objectives:

1. Increase academic and research visibility by improving diagnostic services, by providing academic courses at par with competing institutions and by enhancing collaboration and partnership
2. To provide expertise and training on latest diagnostic technologies to students, faculties and researchers

The context:

1. Global excellence in Virology

The Practice:

1. Updated laboratory infrastructure to provide par excellence diagnostics, training and research services
2. Manpower development through post graduate, PhD, workshop and training programmes.
3. Facilitate research publications

Evidence of Success:

1. The visibility of our students from recruitment data suggesting more than 90 placement in various health and research organizations.
2. Rapid diagnostic services: Turn-around time is 24-48 hours
3. Publication in web of science indexed, Scopus indexed, good quality journals.

Upload details of two best practices successfully implemented by the institution as per NAAC format in your institution website, provide the link

<https://manipal.edu/content/dam/manipal/mu/documents/IOAC/BEST%20PRACTICES.pdf>

7.3 – Institutional Distinctiveness

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

The Manipal Academy of Higher Education (MAHE), Manipal entered into a landmark strategic partnership during 2018-2019 with the University of New South Wales (UNSW), Australia to promote academic and educational exchanges, and develop research collaborations. Delegations comprising management and faculty members of both universities had reciprocal visits and substantive interactions at various levels through the year, resulting in the signing of the MoU during April 2019 between Dr. Vinod Bhat, Vice-Chancellor, MAHE and Dr Laurie Pearcey, Pro Vice-Chancellor (International), UNSW, facilitating two-way mobility of students and also seed funding for joint research proposals by researchers in the two universities. Accounting to an equal commitment up to AUD 5 million by the two universities over 5 years, the partnership envisages student and faculty exchanges, and research collaborations in areas including engineering, photovoltaic and renewable energy, smart transport, built environment and smart cities, public health, humanities and social sciences, and management and business studies. In October 2019, the first 10 seed grants for joint proposals were finalized and announced by Dr Vinod Bhat and Dr Ian Jacobs (Vice-Chancellor, UNSW).

Provide the weblink of the institution

<https://manipal.edu/mu/directorate-of-research/collaborations/mahe-unsw-seed-grant.html>

8.Future Plans of Actions for Next Academic Year

MAHE plans to

- add 5 New Courses over the next one year
- add 500 students next year to the existing number
- increase the proportion of students in top 10

percentile from 34 to 42 percent over the next 3 years • increase the bursary amount to Rs. 40 Cr in the next three years • increase the number of programs accredited to 30 in three years • have 100 percent of the theory examinations using e-pads and online marking • provide accommodation for additional 500 students over next one year • add ? 1 Cr to the new bursary to support socially under-privileged meritorious students • add ? 1 Cr to the new bursary to support economically deprived meritorious students • add 2 more interdisciplinary courses in the next one year • add 250 institutions collaborating with MAHE for research publications over next one year • add 900 co-authored publications with international collaborators by next one year • add 15 specialized centers encompassing all faculties over next one year • create 01 Centre of Excellence next year • increase the research spend from current level by 2 percent over the next one year • have 530 new doctoral enrolments next year • increase the no. of PhD scholars to 1500 • increase PhD guides by 3 percent • have 4000 publications by next one year • improve the score for citation by 0.5 • achieve an increase in Field Weighted Citation Impact score by 0.1 in next one year • add 3 new ventures next year • have graduation of additional 2 ventures next year • increase the no. of new patent applications to 50 next year • commercialize additional one technology in next one year • add 100 more international partnerships over the next one year • increase research publications with international co-authorship by 2 percent • support an additional 2 percent of faculty to attend international scientific meet in next year • add 2 more structured courses by year 2020 • increase in interns for traineeship and leadership development by 20 year-on-year • Increase the international undergraduate admissions by 0.5 percent of the total undergraduate students next year • Increase the international postgraduate admissions by 2 percent of the total postgraduate students next year • enable an additional 2 courses to have the option of offering joint degrees in the next year • offer one additional twinning programme next year • have at least an additional 2 percent of the programs to facilitate Semester Abroad option next year • have an additional 20 students opt for outbound Semester Abroad programme in 2020 • have an additional 10 students opt for inbound Semester Abroad programme in 2020 • increase in international faculty by 1 percent of total faculty by 2020 • have international exposure for additional 0.5 percent of total domestic faculty in next one year • increase alumni registrations by 5,000 in alumni portal by 2020