MANIPAL ACADEMY OF HIGHER EDUCATION, MANIPAL

(Established under Section 3 of UGC Act, 1956)

Annual Quality Assurance Report (AQAR)

2015-16

Submitted to

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

Bangalore - 560 072 India

Part – A

AQAR for the year *(for example 2013-14)* | 2015-16

1. Details of the Institution

1.1 Name of the Institution | MANIPAL ACADEMY OF HIGHER EDUCATION (MAHE), MANIPAL

1.2 Address Line 1 | "manipal.edu"

Address Line 2 | MADHAV NAGAR

City/Town | MANIPAL, UDUPI

State | KARNATAKA

Pin Code | 576104

Institution e-mail address | registrar@manipal.edu

Contact Nos. | 0820-2922323

Name of the Head of the Institution: | DR. H. VINOD BHAT

Tel. No. with STD Code: | 0820-2922615

Mobile: | 98450 69081

Name of the IQAC Co-ordinator: | Dr. Sandeep S Shenoy

Mobile: | 9880368390

IQAC e-mail address: | iqac@manipal.edu

1.3 NAAC Track ID | KAUNGN10065

(For ex. MHCOGN 18879)

OR

1.4 NAAC Executive Committee No. & Date:

(For Example EC/32/A&A/143 dated 3-5-2004.
This EC no. is available in the right corner- bottom
of your institution's Accreditation Certificate)

EC(SC)/16/A&A/1.2 dated 11/07/2016

1.5 Website address:

www.manipal.edu

Web-link of the AQAR:

http://manipal.edu/mu/about-us/naac/iqac-mahe/aqar-2015-16.html

1.6 Accreditation Details

Sl. No.	Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1	1st Cycle	B+		2002	5 yrs
2	2nd Cycle	A	3.30	2016	5 yrs (valid up to 10/7/2021)

1.7 Date of Establishment of IQAC :   DD/MM/YYYY   **03/06/2013**

1.8 Details of the previous year's AQAR submitted to NAAC after the latest Assessment and Accreditation by NAAC (*(for example AQAR 2010-11submitted to NAAC on 12-10-2011)*

   i. AQAR 2013-14 submitted NAAC on 21/05/2016
   ii. AQAR 2014-15submitted NAAC on 21/05/2016
   iii. AQAR 2015 -16 submitted NAAC on 20/02/2017

1.9 Institutional Status

  University   State ☐ Central ☐ Deemed ✔ Private ☐

  Affiliated College   Yes ☐   No ☐

  Constituent College   Yes ☐   No ☐

  Autonomous college of UGC Yes ☐   No ☐

  Regulatory Agency approved Institution Yes ☐   No ☐
  (eg. AICTE, BCI, MCI, PCI, NCI)

  Type of Institution Co-education ✔ Men ☐ Women ☐

           Urban ✔ Rural ☐ Tribal ☐

Financial Status Grant-in-aid   UGC 2(f)   UGC 12B

Grant-in-aid + Self Financing ☐ Totally Self-financing ☑

1.10 Type of Faculty/Programme

Arts ☑   Science ☑ Commerce ☑ Law ☐   PEI (Phys Edu) ☐

TEI (Edu) ☐ Engineering ☑ Health Science ☑   Management ☑

Others (Specify) | **Allied Health, Communication, Regenerative Medicine, Architecture, Nursing, Hotel Management, Life science, Information Science, Natural Science, Humanities.**

1.11 Name of the Affiliating University *(for the Colleges)* | **Not applicable**

1.12 Special status conferred by Central/ State Government-- UGC/CSIR/DST/DBT/ICMR etc

Autonomy by State/Central Govt. / University | **As a Deemed University by Central Govt.**

University with Potential for Excellence	--	UGC-CPE	--
DST Star Scheme	--	UGC-CE	--
UGC-Special Assistance Programme	--	DST-FIST	☑
UGC-Innovative PG programmes	--	Any other (*Specify*)	TIFAC-CORE
UGC-COP Programmes	--		

2. IQAC Composition and Activities

2.1 No. of Teachers	15
2.2 No. of Administrative/Technical staff	5
2.3 No. of students	3
2.4 No. of Management representatives	1
2.5 No. of Alumni	1
2.6 No. of any other stakeholder and Community representatives	-
2.7 No. of Employers/ Industrialists	1
	-

2.8 No. of other External Experts

2.9 Total No. of members | 26 |

2.10 No. of IQAC meetings held | Bi- annual |

2.11 No. of meetings with various stakeholders: No. | 2 | Faculty | 2 |

Non-Teaching Staff Students | 2 | Alumni | 2 | Others | 2 |

2.12 Has IQAC received any funding from UGC during the year? Yes [ ] No [✓]
   If yes, mention the amount | NIL |

2.13 Seminars and Conferences (only quality related)
   (i) No. of Seminars/Conferences/ Workshops/Symposia organized by the IQAC

Total Nos. | 66 | International | 1 | National | 5 | State | 3 | Institution Level | 58 |

   (ii) Themes

Sl. No.	Themes
1	Workshop on NAAC and NBA Assessment and Accreditation process- for the select faculty of Manipal Group Universities and institutions
2	Awareness program on Integrated Management System and Quality Objectives
3	Conducted ISO 50001 : 2011 Energy Management System internal auditors training in the month of February 2016
4	On VLSI, Embedded Systems and Healthcare IT
5	Growth modulation: Concepts and Applications
6	Bite of Crime: Forensic Dentistry
7	Basic Life Support
8	Fire safety measures
9	Pharmaceutical Sciences
10	Pedagogy improvement
11	Staff training
12	Orientation for Gem X
13	Assessments
14	Writing a publishable format
15	Orientation of medical students- Second , Third MBBS(Part 1 and Part 2)

16	Global Trends in Supply Chain innovation
17	Workshop on mock interview
18	Recent Marketing Trends in Banking Industry
19	Research Methodology and Challenges in the corporate sector
20	Workshop on Excel
21	Workshop on Rubik cube
22	Workshop on International Financial Reporting Standards
23	Workshop on MS Excel Level II
24	Health and Built Environment
25	Research paper writing
26	MCI recognised Basic Medical Education workshop
27	Investigators Training
28	Medical Audit

2.14 Significant Activities and contributions made by IQAC

➤ NAAC Reaccreditation with " A" grade and score of 3.30 CGPA in July 11th 2016 & valid upto 2021.

➤ Compiled data for QS University Ranking ASIA 2015 and Ranked No. 14 in India and No. 201-250 in Asia

➤ Compiled data for QS University Ranking BRICS 2015 and Ranked No. 97

➤ Compiled award application of 9TH Assocham Higher Education Summit & National Excellence Awards – in Feb. 2016 - Won the Best University promoting research

➤ Compiled data for NIRF in 2016 & ranked 6th among private universities & 32nd in Overall.

➤ Compiled award application and won FICCI – Best University of the year & excellence in Employability in 2015

➤ Compiled data for THE WEEK – HANSA Survey 2015 and Ranked No. 1 Private Deemed University in India

➤ Compiled data for UI GreenMetric Ranking for Global Universities 2015 and Ranked No. 2 in India under the Sub Urban category

➤ Compiled data for Careers360 University Ranking 2016 and Ranked No. 2 among Top Private Universities in India and rated AAAA+ grade under Top Private Multi-disciplinary University

- Kasturba Hospital, Manipal an associated teaching hospital of Kasturba Medical College, Manipal is NABH Accredited hospital & regular internal audits are held.
- 10 Engineering, 1 Hotel Management & 1 B. Pharma courses are NBA Accredited courses.
- Conducted Workshop on NAAC and NBA Assessment and Accreditation process on January 27 & 28, 2016 at Manipal for the select faculty of Manipal Group Universities and institutions.
- Innovative practices in Student Assessment - Examination using e-Pad
- Evidence Based Practice in the curriculum
- Choice based curriculum implemented in few programmes.

  Promotion of Research

- Encourage constructive research & dissemination practices
  - Research Policy , intellectual property rights , Academic Dishonesty, Committee on publication Ethics
  - Subscription with indexing agencies like Thomson Reuters, JGate, Springer, Scopus(Elsevier), SciFinder
- Concentrate on productive research
  - Offer logistic, financial, academic and staff support
  - Research Incentives
  - PRAISE Policy for students, Amendment to the policy on conference facilities

HR Training

1. SMILE (Synergic Manipal Integrated Leadership Engagement), a leadership programme – 2nd batch started in the month of Feb. 2016.
2. Conducted *'Saksham'* for 23 - Teaching staff in 7 sessions of 8 hours duration during April 11-16, 2016.

MCODS Mangalore
1. Introduction of CBL (Case Based Learning)
2. Facilitate Research Relevant to Community needs (Tobacco Cessation Centre and Oral Cancer Screening Centre)
3. Student Exchange to Partner Universities
4. Professional Development programme
5. Alumni registration with Professional details
6. Preparation of Curriculum Based on **OBE**

MCODS Manipal

1. A training program on the manipulation of dental materials was organized by the department of dental materials for Dental Surgery Assistants. The program involved demonstration and hands-on manipulation of various materials used in dentistry

2.15 Plan of Action by IQAC/Outcome

The plan of action chalked out by the IQAC in the beginning of the year towards quality Enhancement and the outcome achieved by the end of the year

QMS objectives

Excellence in education, health care and research leading to a place in the top 100 Universities in Asian Rankings

I. **Enhancing Academic Reputation**:

I. Quality of intake

#	Quality Objective	Target	Achievement Status
1	Cut off ranking at admission level	Better as compared to previous year	Cut off ranking for almost all the branches in BTech (except for ICE, Civil & PMT) was better as compared to previous year For MBBS, BDS since the admissions were based on NEET All India Rank this year and last year it was based on MUOET, the same cannot be compared.
2	Diversity of students	Better representation as compared to previous year	Better representation in 2016 as compared to 2015 (No. of Indian States/UT: 2015 - 35 2016 - 36) (No. of Countries: 2015 – 29 2016 - 29)
3	Increase in number of applications, National and International	Higher as compared to previous year	Achieved National 2015 -1,36,884 ; 2016 – 1,43,399 International 2015 – 2204; 2016 – 2591
4	Student Ratio UG: PG: PhD benchmarked with top Universities in the world		Currently MU ratio is **22:10:1**

2. - Academic

#	Quality Objective	Target	Achievement Status
1	Declaration of results on time	Within a month of conduct of exams	Results are declared on time

2	Conduct of exams as per academic calendar	As per calendar	Conducted as per calendar
3	Student attrition rate	Reduce as compared to previous benchmark	2015: Lowest: **0%**; Highest: 5.32**%**; Avg: **2.12%**
4	Enhance Student Progression		
i.	Percentage of eligible students progressing to higher levels	Improve compared to previous benchmark	2015: **84.23%** **2016 : 84.46% (Achieved)**
ii.	Percentage of eligible Students placed.	5 % increase every year over the previous 3 years average	2013**: 78%** 2014**: 82%** 2015**: 89%**
5	Number of students involved in social responsibility projects and extension activities	Improve on previous benchmark	All constituent units have achieved the target.
6	Graduation rate	% of students completing the programme on time, target can be 1% better than average of previous three batches	All constituent units have achieved the target 2015: Avg.: **88.09%**
7	Introduction of new programmes	At least 20 new programmes compared to previous year	2015: Technical : 9 + Health Science: 10 (Total 19) 2016: Technical: 11 + Health Science: 19 (Total **30**) - Achieved

3. Service delivery Process:

#	Quality Objective	Target	Achievement Status
1	Student feedback of faculty	Minimum of 3 on a scale of 5	Achieved
2	Student feedback on infrastructure	Minimum of 3 on a scale of 5	Parameter < 2.5, discussed in the St. Affairs committee meeting
3	Student feedback on academic program	Minimum of 3 on a scale of 5	Achieved
4	Patient feedback on services	Minimum of 3 on a scale of 5	Kasturba Hospital Manipal –OP- 4.36, IP – 4.23 KMCH – Mangalore – 4.75 Dr. TMAP H Udupi- OP – 4.3, IP – 3.6 Dr. TMAP H Karkala – OP – 4.52, IP 4.47

| 5 | Faculty student ratio as per statutory and regulatory requirements | As applicable | Maintained |

II. Enhancing Research Output:

#	Quality Objective	Target	Achievement Status
1	Number of publications in National and International, Indexed journals with impact factor per faculty (indexed by Scopus)	Minimum 5% increase every year	2015: 0.46 2016: 0.62
2	Enhance Quality of Publication		
a	Increase in Average Journal Impact factor by 0.2 every year.	By 0.2 every year	2015: 0.4 2016: 0.85 (Achieved)
b	Increase in Average H index by 2.0 per author every year.	By 2.0 per author every year.	2015: 74 2016: 77 (Achieved)
4	Amount of research grants received	5% increase every year	2015: Rs. 2665.35 Lakhs 2016: Rs. 2362.33 Lakhs (Apr- to Aug 2016 – increased by 171.32%)
5	No of patents applied for	At least one patent more than the previous year	2015: 3 2016 : 9 (achieved)
6	Number of Ph D registrations	At least 5% increase every year	2015: Technical: **78**+ Health Science: **103** = (Total – **181**) 2016 : Technical: 81+ Health Science : 91 = (Total –172)
7	Number of faculty with Terminal degrees.	Increase by 5 % every year	1363 (Calender Year) 1381 (Achieved)

III. Increasing focus on Internationalisation

#	Quality Objective	Target	Achievement Status
1	Number of International students in UG and PG programmes	5% increase	2015**:** UG – 1869; PG –54 2016 : 1846 (UG + PG)
2	Number of incoming and outgoing exchange students in UG and PG programmes (includes IAESTE, AIESEC, Study Abroad programmes, interns etc.)	10% increase	2015: Inbound: UG: 214, PG:31 (Total: **245**) Outbound: UG:**107; PG: 1 (Total: 108**) 2016 :Inbound : UG &PG : 477 Outbound : UG & PG : 161 (Achieved)
3	Number of Collaborations with Foreign Universities	At least 10 per year	2015: 55 2016 : 59

| 4 | Number of International faculty | Increase by at least two per year | 2015: 08
2016: 07 |
| 5 | Transnational mobility of faculty | At least 10 per year | 2015: 07
2016 :08 |

IV. Enhancing Employer Reputation

#	Quality Objective	Target	Achievement Status
1	Number of companies participated in campus placements	5 % more than previous year	2015: 190 2016: 201
2	Number of Fortune 500 companies participating in campus placements	5 % more than previous year	2015: 32 (Forbes listed 51) 2016 : 35
3	Percentage of Alumni Registered with University	From existing 8.3%to 50% by end of 2015	2015 : 16079 2016 : 22889
4	Number of Industry Collaborations	At least 5 per year	2015: 7 2016 : 12
5	Facilitating Alumni reunions	At least one by all institutions by end of 2015	Achieved

V. Training:

#	Quality Objective	Target	Achievement Status
1	Ensure continual enhancement of knowledge/skills of teaching faculty	Attend at least one professional development programme and a minimum of 10 hours of training every year	2015: 1411 (Apr. to Dec. 2015) 2016: 3285 (Jan. to Sep.2016)
2	Ensure continual enhancement of knowledge/skills of non-teaching staff	To be provided with at least 2 hours of training every year	2015: 4779 (Non – Teaching staff covered under Gender Sensitization Programme) 2016: 1466

EMS Objectives:

#	Quality Objective	Target	Achievement status
1	6% reduction in per capita electricity consumption year on year for the next 3 years	6% reduction for the next 3 years	Provided below (Fig. 1)
2	2% reduction in per capita potable water consumption year on year for the next 3 years	2% reduction for the next 3 years	Provided below (Fig. 2)

3	To be ranked within the top 20 Universities globally under the suburban category in the UI Green metric World University Ranking by 2017	--	--

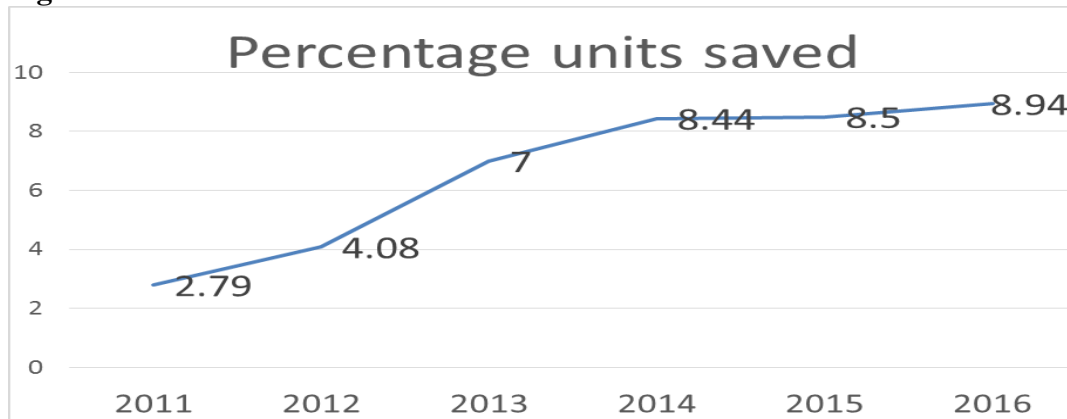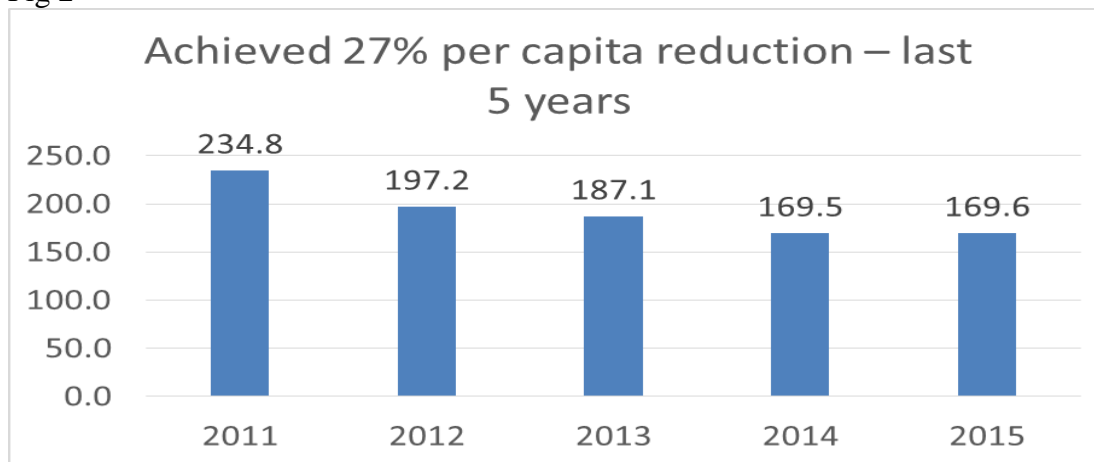**Projected electrical units saved due to adoption of energy saving methods**

Fig. 1

Percentage units saved

Fig 2

Achieved 27% per capita reduction – last 5 years

2.15 Whether the AQAR was placed in statutory body   Yes ✔   No ☐

Management ✔   Syndicate ☐   Any other body ☐

Provide the details of the action taken
- HR Head and staff members to attend conference / workshops yearly to keep abreast with the latest developments in HR related activities – Planned for the year 2016
- Hosting a workshop at Manipal for all the Universities on the topic "Human resource practices in Universities"
- Recruitment of foreign faculty: DD-HR submitted the stringent govt. rules that are hindering in recruiting foreign faculty, especially young faculty members.

However, VC suggested to go for recruiting senior professors who are aged above 55 years.

- To identify some good Foreign Universities as Strategic partners for the star programs of our University. University of South Florida has already identified as strategic partner for Dept. of Public Health Courses. Accordingly, KMC is close to have a strategic partner for its programs. Have to find some 6-10 strategic partners for other programs also
- Adverse feedback on food at KMC Food court – Suggested to discuss with KMC Food court
- Online reporting to the Dist. Administration of foreign students while joining and leaving the institution: MIT Chief Warden is already doing this. In Health Science hostels, Dist. Administration has insisted to register Chancellor as reporter. Hence, it is in a discussion stage to make Chief Warden as the reporting person, as done in MIT campus

New Initiatives:
Admission (National & International):
- Coordinated School Contact programs initiated
- Exclusive MAHE Edu Fest

HR:
- Proposed to issue uniform identity cards for all the employees – waiting for clearance on University logo
- Enrollment to National Pension Systems of University Employees is in progress

Directorate of Research:
- Research Data Management System (RMS), Training Programs conducted: 3 for 150members
- Research Brochure 2016
- Research Advisory Council (RAC): 5, Interdisciplinary Research Advisory Group (IRAG): 26
- Student Research Forum (SRF): 2
- Three centers operating under Directorate of Research: TTO, CCO and CIMR
- Researchers Visibility Framework (RVF) workshops conducted: 7, 450 faculty members have been sensitized
- 5 new journals added to the existing 3 MAHE journals
- International Conference on Health Care and Technical Research (Dec 22-24, 2015): 550 participants
- Manipal Research Colloquium 2016: April 4 – 6, 2016
- Centre for Excellence in Avionics (CoEA)

Student Affairs:
- Portal for online submission of Teacher Guardian reports
- Learning Assistance Centre (LAC) – a Single portal for all student related activities
- Launch of Student Club – Philately & Numismatic Club was launched on 6.12.2015
- Student Workshops - Gender Sensitization program for Student leaders in March 2016 & Student leadership workshop in February 2016
- Advanced Workshop on Counselling Skills for Teachers on January 8, 9 and 10, 2016

- Road Safety Awareness Survey among students
- Survey of satisfaction levels of student clinic services

Student finance:
- Introduction of additional online academic fee payment solution- through Atom Technologies –Target period: January 31, 2016
- Bring in the other fee such as exam/internal improvement fee , casual term fee ,swimming pool payment into online payment system-Target period February 2016
- Online view of Student Mess Dues through Student Portal-Target period: February 2016
- Start sending annual fee notification to all General Category Students through their registered email id's – Target date 30thth June 2016.

ISD:
- Convocation portal with online payment gateway – implemented
- Research Management System Portal – implemented jointly with CSD
- e-journal portal for online paper submission - WIP
- Online Swimming Pool Membership with payment gateway – implemented
- Online Transport Management System – WIP
- Online General service Helpdesk Portal – WIP
- E-mail Server – Self Service Password reset Portal – WIP
- FDP Management Portal - WIP
- Land Management Portal – WIP
- Class Room Management System for KMC - WIP
- Mentorship Portal for Student Affairs – WIP

Alumni
- New version of the Alumni portal launched, perceived as more user friendly with much more social media features
- Personalized batch specific goodies and Car Stickers liked by Alumni
- Alumni Lounge facility is a great hit
- Photo walls adored by alumni
- Live streaming of Convocation, Alumni Reunions popular
- Mobile App testing completed (Android and IOS versions), waiting for suitable dates for launch
- Launch of newer campaigns(To name a few… Nostalgia Campaign, Convocation Welcome Campaign, New year campaign, Batch Ambassadors, Referral campaign etc.
- Awaiting approval for Manipal Alumni Card loaded benefits and also loyalty benefits

Examination
- Office Automation is in Progress
- Examination on e-Pad (Paperless exam)

Part – B

Criterion – I

1. Curricular Aspects

1.1 Details about Academic Programmes

Level of the Programme	Number of existing Programmes	Number of programmes added during the year	Number of self-financing programmes	Number of value added / Career Oriented programmes
PhD	13		13	13
PG	159	8	167	167
UG	47	9	56	56
PG Diploma	16	2	18	18
Advanced Diploma	-	-	-	-
Diploma	2	-	2	2
Certificate	17	-	17	17
Integrated PhD	1	-	1	1
Others	12	-	12	12
Total	**267**	**19**	**286**	**286**
Interdisciplinary				
Innovative				

1.2 (i) Flexibility of the Curriculum: CBCS/Core/Elective option / Open options

Programs governed by regulatory bodies follow the curriculum as prescribed by them and incorporate flexibility by offering elective / open options within the limits as permissible by the regulatory bodies. Credit system is introduced for 100 percentage of the Technology, Management and Communication programs and 15 percentage of the health sciences programs. Most of the programs which are in the credit system are gradually progressing towards incorporating the requirements of the Choice based credit system.

(ii) Pattern of programmes:

Pattern	Number of programmes
Semester	134
Trimester	2
Annual	126

1.3 Feedback from stakeholders* Alumni ✔ Parents ☐ Employers ✔ Students ✔
(On all aspects)

Mode of feedback: Online ✔ Manual ✔ Co-operating schools (for PEI) ☐

1.4 Whether there is any revision/update of regulation or syllabi, if yes, mention their salient aspects.

Kasturba Medical College, Manipal
- Incorporating soft skills, gender sensitivity, medico-legal and ethical issues in the curriculum
- Incorporating environmental studies module
- A curriculum book with exact topics and syllabus to be given in the beginning at the time of admission.
- Syllabus is reviewed in board of studies meeting held every 6 months . Introducing latest teaching modules. Periodic Assessment and mock examination

Kasturba Medical College, Mangalore
The syllabi is as per the regulatory body. In 2014, horizontal integration was started in the preclinical and para clinical subjects. Also innovative methods of learning like PBL, CBL, Vertical Integration and handouts was introduced.

School of Allied Helath Sciences, Manipal
Following syllabus revisions were rectified in the Academic Senate meeting during the year 2015-16.
1. Syllabus of new programme Master of Science – M.Sc. (Perfusion Technology)
2. Syllabus of Post graduate diploma in Drug Analysis from 2015-16
3. Change of program title B.Sc. (Health Information Administration) to B.Sc (Health Information Management) as per recommendations from MoH and FW from 2016 admissions
4. Change of program duration from 3 years to 4 years for B.Sc (Health Information Management)
5. Implementation of semester and credit system across all Under Graduate programs of SOAHS and the revised regulations
6. Inclusion of following courses as common to all UG programs
   a. Communication Skills
   b. Environmental Sciences and Indian Constitution
7. Option of complete internal evaluation of end semester exam for courses found as appropriate for all UG programs
8. Starting of M.Sc. (Clinical Psychology) programme at Mangalore campus.

Manipal College of Pharmaceutical Sciences, Manipal
Uniform regulations to govern the programs, Introduction of credit based system, and evaluation, Revised curriculum with inputs from experts

Faculty of Architecture, Manipal
MA (ID) syllabus revised ; Based on Current requirement syllabus was formulated

School of Management, Manipal
All courses updated incorporating feedback from Alumni and Employers. Incorporated Environmental studies module in BBM

School of Communication, Manipal
Additional electives plus new specialisation subjects has been added to the B.A Media & Communication syllabus

School of Information Sciences, Manipal

Three BoS meeting were held during this academic year. The following updates in the syllabus and rules and regulations were approved:

Following syllabus revisions & new programmes were approved in the Academic Senate meeting during the year 2015-16.

1. Starting of new Master of Engineering Program ME (Automotive Embedded Systems) in collaboration with ESIGELEC, France from August 2015 onwards.
2. Modification of credits in the existing ME (Embedded Systems and Instrumentation) program to 25 credits in semester -1, 25 credits in semester-2 and 25 credits in semesters 3 & 4 from 30 credits in semester -1, 30 credits in semester-2 and 15 credits in semesters 3 & 4 to the total credit of 75.
3. Starting of new Master of Engineering Program ME (Big Data and Data Analytics) from August 2016 onwards
4. Modification of syllabus in:
   (a) ME (Embedded Systems)
   (b) ME (Embedded & Wireless Technology)
   (c) ME (Computing Technologies & Virtualization) from August 2016 admission Batch onwards.
   Semester Examination & Evaluation: Standard Operating Procedure (SOP) for conducting semester Examination & Evaluation at School of Information sciences.

Welcomgroup Graduate School of Hotel Administration, Manipal

Modifications in the following Course Structures passed through the Senate during 2015-16.

- M.Sc. Diatetics & Applied Nutrition, M.Sc. Hospitality & Tourism & Bachelor of Hotel Management Programmes

Manipal Center for Philosophy & Humanities, Manipal

Regular update of syllabi of MA in Philosophy, English & Sociology, through annual BOS meetings.

1.5 Any new Department/Centre introduced during the year. If yes, give details.

Sl. #	Name of the Center	Objectives/ Aims
1	Public Health Evidence South Asia [PHESA]	a. Mentor researchers from LMICs, and provide support in evidence-building to enable public health interventions and maximise their effectiveness in LMICs. (low- and middle-income countries b. Develop and maintain strategies that assist policy-makers and practitioners in the process of effective and informed decision-making c. Disseminate evidence to the general population through various methods of public engagement, including both media and events

2	Manipal Health Literacy Unit	a. To Carry out Practice & Policy – focused, Multi – disciplinary research & development activities in the health literacy b. To collaborate with national & international institutes to generate evidence in the area of health literacy
3	Clinical Epidemiology Unit	a. To incorporate the faculty members of various specialties from Manipal university *(both Manipal and Mangalore campuses)*. All faculty members of CEU to take up at least one clinical epidemiology project (PhD Scholars, PG and interns will be assigned to the project, under the guidance of respective faculty members). All such projects will be well monitored by the CEU b. To conduct various training programs, to train the researchers in clinical setting, to do research and increase the interest in concept of clinical epidemiology c. To apply funding for various national and international agencies d. To emphasis on frugal research and development within applied clinical epidemiology
4	Centre for Bioethics	a. A hub of learning in bioethics in India and the neighbouring region for multidisciplinary researchers and practitioners of medical and allied health sciences
5	Centre for Software Development (CSD)	a. Develop software solutions to felt needs of Manipal University and health systems b. Provide internship opportunities for students to work on live projects and train faculty on project management skills c. Market the product outside Manipal University system if such a potential exists d. Work with Technology Transfer Office to explore possibilities of outright sale of products
6	Centre for Social Entrepreneurship (CSE)	a. Create small and medium scale enterprises in Udupi district b. Provide consultancy services to startups, businesses in transition on products, markets, feasibility etc c. Connect with state and central government agencies to seek funding for training and incubation
7	Technology Transfer Office (TTO)	a. Evaluate research ideas for Intellectual

		Property, and assist in patenting such inventions; managing patents and royalties and be an important part of the research ecosystem, including the incubator
8	North East Studies Centre (NESC)	a. Encourage preservation of local dialects, culture, tradition and performing arts. b. Organize regular seminars, workshops, training programs, symposia etc. to understand the region better and disseminate the knowledge to the rest of the country. c. Facilitate mobility of scholar for field studies and to encourage publication of scholarly works. d. Provide meaningful inputs to policy makers on the issues concerning the North East
9	Centre for Community Oncology (CCO)	a. Provide effective cancer control through primary, secondary and tertiary prevention activities in the community b. Establish professional training programs for general practitioners, nurses, allied health professionals and other health professionals involved in cancer management c. Provide consultancy services for establishing Preventive Oncology activities d. Establish specialty registries such as breast cancer family registry e. Facilitate cancer research and obtain research grants
10	Centre for Consultancy, Training and Corporate Interface (CCTCI)	a. Provide consultancy services to business enterprises in manufacturing and service sector in India and abroad b. Provide technical and behavioral training to business enterprises and academic institutions in India and abroad c. Partner with corporates on various social initiatives that contribute to the social and economic welfare of the society.
11	Centre for Fertility Preservation (CFP)	a. Provide clinical services to childhood cancer survivors and adults commencing cancer treatment

		b. Serve as a national resource for fertility preservation
		c. Act as a resource centre for knowledge dissemination and training of specialists in fertility preservation.
		d. Facilitate international collaborations for research and training
		e. Undertake cutting edge research and obtain extramural research grants from national and international funding agencies
12	Centre for Integrative Medicine and Research (CIMR)	a. Increase awareness of Integrative Medicine (IM) and create a collaborative environment among practitioners of conventional and alternative medicines.
		b. Make IM available to clients initially for male infertility and urolithiasis, and then to other medical conditions.
		c. Establish a research environment to investigate medical pluralism and drug interactions to support evidence based practice of IM.
		d. Establish a centre for excellence (regional centre for clinical Trial) for AYUSH and IM
		e. Establish short-term and long term training courses on IM
		f. Obtain national and international grants for research activities
		g. Set up an ADR reporting centre for AYUSH and IM
13	International Centre for Business Studies (ICBS)	a. Tap this market and aims to promote multi-cultural learning in the field of business and to impart holistic education matching and meeting global requirements and standards
		b. Enable an easy transfer for students to undertake graduation in the field of business at reputed international universities
		c. increase the number of international collaborations, thus enhancing the global presence of Manipal University

14	Advanced learning in finance & accounting	a. To conduct certificate programs in areas of Finance, Accounting, Insurance and Risk Management in collaboration with reputed universities. b. Experiential learning and training for students and faculty. c. To collaborate with foreign universities and International agencies. d. To integrate teaching, training and research.
15	Centre for Avionics (CA)	a. To develop technologies and incubation capacities to design, develop, manufacture and deploy indigenous and customized drones. b. To train skilled workforce and critical mass of researchers through continuous and tailored short term programs and research projects. **c.** To transmute the Centre as an active nodal research Centre for avionics and support national security and development
16	Centre for Creative & Cultural studies (CCCS)	a. To develop a holistic understanding of broader area of creativity, culture and society. b. Endeavour to bring about a sense of national cultural integration, peace and awareness in the society **c.** To analyse and understand the challenges and dimensions of culture, creative expressions and challenges of global and local societies
17	Centre for Foreign Languages (CFL)	a. To train young graduates with both linguistic competences and professional skillsets for career in industry, academia, cultural organizations, and entrepreneurship. b. To create specialized services in translation and interpretation and foreign language teaching
18	Centre for Intercultural studies& Dialogue (CISD)	a. To offer intercultural and diversity sensitivity training activities at Manipal University. b. To equip the University students for study abroad programs. c. To provide orientation to international students on being in India.

		d. To develop a team of resource persons on intercultural communication. e. To establish a resource centre on intercultural communication in India
19	Centre for Managing Family Business (CMFB)	a. To support family-owned firms through educational opportunities and consulting services for business leaders and successors
20	Centre for Supply Chain Education and Research (CSCER)	a. To develop and deliver focused education programs across specific areas of SCM. b. To bridge the gap between academia and research. c. To encourage research
21	Manipal-McGill Centre for Infectious Diseases (MAC-ID)	**1. Research** To foster research collaborations between the faculty of Manipal and McGill University in the area of infectious/tropical diseases, and increase the output of collaborative publications and research grants. **2. Capacity building, training and mentorship** a. Identify promising ID researchers and trainees at Manipal and support them via the MAC-ID program to attend the McGill Summer Institute in Infectious Diseases and Global Health and other training programs and workshops of relevance at McGill. b. Identify promising ID researchers and trainees at McGill, and support them, via the MAC-ID program, to conduct their thesis research at MU under the mentorship of MU faculty. **c.** Organizing conferences, short courses and workshops at Manipal University, jointly taught by MU and McGill faculty.
22	Centre for Excellence in Inborn Errors of Metabolism (CE - IEM)	a. Initiate the newborn screening program to detect IEM at Kasturba Hospital, Manipal and its peripheral centres so as to reduce the mortality and morbidity in newborns b. Document the incidence of IEM and congenital disorders in Karnataka c. Analyse the cost effectiveness of Newborn Screening Program so that it can be

		extended to the whole state
		d. Create awareness among the public about the disease
		e. Provide genetic counselling for the parents of children suffering from IEM disorders
		f. Create IEM experts
		g. Design and execute projects in IEM.
		h. Develop cost effective novel analytical methods to detect these disorders and to identify novel biomarkers.
23	MIT-KEF R & D Centre	a. To enrich the curriculum of its civil engineering and architecture programme by introducing in-depth modules on offsite and modular construction, drawing from its veritable experience in the field of smart construction
		b. To provide budding engineers with practical know-how about offsite construction – the future of global infrastructure and construction industry.
24	KK Hebbar Gallery & Art Centre	a. To promote Art thru Hebbar's paintings which will be open for public viewing
		b. To organize workshops and seminars on Art/KK Hebbar's works
		c. To foster and facilitate scholarly research on various facets of Art in general and KK Hebbar's contributions in particular
25	Centre for Applied Nanosciences	a. Development of upconversion / downconversion nanoparticles for *in vivo* bio-imaging
		b. Development of optofluidic technologies for lab-on-a-chip systems
		c. Fabrication of hierarchical structures for digital microfluidic and wettability control
		d. Sensing applications utilizing the energy transfer between a donor and an acceptor
26	Centre for Cultural History	a. To invite and explore conversations amongst different disciplines in humanities in order to develop a holistic approach for studying cultural history in the country
		b. To facilitate the specific expertise required to engage with pre-modern cultural material, such as literary texts, especially as this material is particularly vulnerable
		c. To document rare cultural forms such as oral or performance traditions

		d. To incorporate the studies, perspectives and cultural articulations of alternate and marginalized groups in Indian intellectual traditions e. To encourage new understanding and methods of archiving cultural history to innovative scholarship and pedagogy f. To create a dynamic and productive network of scholars and researchers working in the field of cultural history in India and to facilitate a dialogue with the community at large
27	Centre for Religious Studies	a. To encourage and study interfaith dialogue between different intellectual, cultural, and literary formulations, both ancient and modern. b. To facilitate crucial conversations and engagements with the development of religious thoughts over different historical periods and contexts as well as showcasing the changing relevance of these insights in contemporary society. **c.** To build Manipal University's reputation as a platform for innovative pedagogy in religious studies
28	Centre for Women's Studies	a. To focus on equality and ethical issues related to gender and sexuality b. To document, study and advocate for women's issues in different spheres such as education, employment, health, legal system and policy c. To sensitize, educate and encourage different target groups and stakeholders to address the complex changing demands/issues in a developing country like India d. To build Manipal University's reputation as a gender-sensitive organization and collaborate amongst different institutions within Manipal University
29	Centre for Bio-photonics	a. Development of a miniature spectroscopy system for the screening and diagnostic applications. b. Development of ultra-sensitive fluorescence, SERS and PAS systems for screening and early diagnosis of diseases by breath analysis. c. Fabrication of bio-chip-type devices for blood tests

30	Centre for Vaccine Studies	a. To carry out community and hospital based vaccine studies and research that would help in decision making at the national level b. To carry out vaccine trials to test the safety and efficacy of vaccines. c. To emerge as one of the resource centres providing training to clinical vaccine sites d. To provide onsite mentoring and sponsor consulting services for the clinical sites e. To emerge as one of the centres for vaccine manufacture
31	"Dvaita Philosophy Resource Centre	a. To preserve the rich philosophical, spiritual and cultural heritage of India b. To open the doors of Indian philosophy to the scholars of the world c. To intensify philosophical discussions worldwide based on scientific temperament d. To identify and offer solutions to contemporary problems based on spiritual knowledge
32	Centre for Regional Development	a. To identify research projects that are of significance to this region in the fields of healthcare, education, industrial, rural banking, transport, and governance. b. To empower the administrators and the educationists of this region. c. To motivate the students of School of Management to be socially responsible and contribute towards the growth of this region. d. To enhance the knowledge base of the faculty and students of Manipal University
33	Transdisciplinary Centre for Qualitative Research	a. To promote inter-disciplinary research in public health. b. To provide impetus to researchers from across disciplines to share expertise and collaborate. c. To create awareness about qualitative research in public health in South Asia. d. To build capacities of young scholars in teaching and conducting qualitative research. e. To establish a regional hub for qualitative research in South Asia through transdisciplinary approach that involves researchers, practitioners and civil society

		organizations
34	Academy Public Library *	To revive Academy Public Library by bringing it under the aegis of Manipal University to benefit the students, employees, and the people of Manipal
35	Centre for Hospitality and Tourism Research	a. To conduct research, formulate plans and strategies, and implement projects b. To conduct market research and identify places and activities of tourist interest c. To inculcate sustainable approach in tourism development d. To enable local communities, government bodies, tourism organizations, and private sector to develop and promote responsible and community-based tourism to maximize positive impacts e. To foster the development of community-based tourism products through training, mentoring, marketing and financial support f. To generate employment and self-employment opportunities for the poor and disadvantaged section of the community g. To encourage proactive participation and involvement of all stakeholders at all stages of tourism life cycle. h. To undertake continuing professional development
36	Centre for Artificial and Machine Intelligence"	a. To provide a common platform for students of MIT to pursue research work in the areas of Neural Networks, Fuzzy Logic, Evolutionary Computing, Machine Learning, and Artificial Intelligence b. To become a nodal Centre within MU to provide AI based solutions for its constituent institutions c. To provide consultancy services to industrial partners
37	Centre for Sports Science Medicine and Research	a. To offer educational program that improves the competency of the existing support staff and produce sports science/medicine professionals who have competency on par with global standard b. To pursue research that would enhance

		health, quality of life and sports performance **c.** To convince policy makers involved in health ministry and sports ministry to rethink about the strategy to prevent NCDs and improve sport performance
38	Centre for Full Mouth Implant Rehabilitation	a. To provide complete surgical and prosthetic solution for patients seeking treatment for complete edentulism b. To initiate Dental Tourism and make it viable for patients from India and abroad **c.** To make MCODS, Manipal as the preferred destination for full mouth rehabilitation
39	Centre for Advanced Research in Financial Inclusion	a. To develop new knowledge and insights within the field of inclusive growth related to financial inclusion, and the challenges for inclusive finance (credit, insurance, savings and pension products) b. To generate awareness towards financial products and impart financial literacy among the youth, marginalized section of the society and rural as well as semi urban population in the Coastal region c. To work towards strengthening of microfinance institutions, business facilitators and business correspondents that can give easy access to banking services especially for rural population d. To undertake curricular development and work towards a course to enable management students to understand and carry out projects in inclusive finance in an interdisciplinary framework
40	Centre for Forensic Odontology	a. To develop a database for identification of features and traits among the Indian subpopulations b. To sensitize medical and dental personnel to various techniques of forensic odontology c. To undertake training and conduct studies pertaining to forensic odontology d. To start a course in forensic odontology after sufficient data and experience are attained
41	Centre for Marketing Advances	a. To serve as an interface between industry and academia, and function for mutual benefit b. To develop a strong industry linkage to source sponsored projects

		c. To identify emerging research issues in the field of marketing and provide focus for such funded research d. To facilitate knowledge dissemination among practitioners, educators and students
42	Manipal – AIST Advanced Research and Training Centre in Biomedical Sciences	a. To integrate programs on Bio imaging, Drug Discovery, Cancer Research, Molecular Neurophysiology, Nanomedicine and Molecular and Cellular Mechanisms of Neuronal Diseases between BMRI, DAILAB and SLS, MU b. To initiate Joint PhD programs in identified areas of human health - leading to joint research publications, patents and processes c. To facilitate faculty and research scholar visits across two Institutes
43	Rashtrakavi Govinda Pai Samshodhana Kendra *	a. To promote research in the disciplines of language, literature & tradition b. To promote Dasa literature through seminars, musical concerts & training classes
44	Regional Resources Centre for Folk Performing Arts	a. To document, disseminate & promote preservation of folk performing arts, rituals, folk games & other cultural aspects of Karnataka
45	Yaksha Gurukulashikshana Trust *	a. To promote the art of Yakshagana by education, research and publications b. To preserve other traditional arts of India
46	Centre for Urban Studies	a. To conduct research works on urban issues, such as growth, management, governance, health, safety, environment, urban resources, urban services, community development, etc. b. To focus on inclusive development and on issues related to economically weaker sections, particularly with respect to affordable housing and provision of basic infrastructure and services c. To start new interdisciplinary graduate courses – certificate and degree d. To continually engage with government bodies and other stakeholders
47	Centre for Drug Delivery Technologies	a. Convergence of Industry and Academia in Research and Development activities b. Creation of a single platform to conduct

		research activities in the area of drug delivery and related areas c. Value addition to the ongoing research
48	Centre of Excellence in Drug Regulatory Affairs	a. Convergence of Industry and Academia. b. Becoming a think tank on Drug Regulatory Affairs
49	Centre for Comprehensive Stroke Rehabilitation and Research	a. To provide health services for maximizing the recovery of stroke survivors and achieve best possible outcome through an inter-professional practice b. To foster innovation, and to train and mentor students, researchers and health care providers. c. To conduct short term training courses and workshops d. To expand the rehabilitation services to community living stroke survivors e. To establish international collaborations for research f. To conduct certificate program in stroke rehabilitation
50	Centre for Drug Testing	a. To undertake the job works of Drug Analysis and Development Centre for academic/research purpose. b. To establish an approved Drug Testing Lab for analytical quality control testing of raw materials, excipients and finished products specific for industry and commercial needs. c. Skill development/training.
51	Centre for Business Analytics	a. Provide consultancy and advisory services to Industry to help them generate business intelligence (BI) using data analytics across various sectors and management disciplines b. As part of training profile organize Faculty Development Programs (FDP) for other institutions both within and outside Manipal University using certified faculty trainers. c. Enhance research capability of research scholars within and outside MU by providing them the platform and training in the use of contemporary software applications through short duration programs. d. Use contemporary Business Analytics Applications to help students develop

		competencies in the use of quantitative tools and techniques as applied in the various business applications related to management disciplines. e. Enhance employability of students by enabling them for business analytics job profiles across banking, logistics & supply chain, marketing etc. through certification programs
52	Centre for Toxicovigilance and Drug Safety	a. Development of a training centre which helps in training healthcare professionals and professionals from industry. b. Development of patient registry and identification of potential hazards of chemicals/ drugs c. Providing the information regarding the management of acute and chronic poisoning (drugs/ chemicals) through poison information centre. d. Identifying the potential areas of industry and academic collaboration and thereby applying for national and international funds for the society relevant project.
53	MU-Robert Bosch – Centre for Health, Applied Research and Technology	a. To enhance Industry-Institution partnership in health and technology innovations. b. To jointly and/or contractually develop technologies for medical screening and diagnostics. c. To conduct applied research and development of technology with an eye on the healthcare needs of emerging markets and solutions thereof. d. To create evidence and help advocacy that will enable the policy makers to make informed choices about application of appropriate technology in Healthcare delivery. e. To create a platform for mutual exchange of personnel for training and development at both RBEI and MAHE
54	Centre for Continuing Professional Education	a. To create a database of all events happening on campus through institutional coordinators b. To establish a database of all participants in such events c. To encourage international conferences in

		Manipal and Mangalore
55	Centre for Engineering Design Consultancy and Skill Development	a. To provide design consultancy in various fields of civil engineering. b. To provide skill development training through certificate courses for Practicing engineers/ Graduate engineers
56	Centre for Congenital Hand Differences	a. Promote awareness of local, regional and national data to create global impact in line with the vision of our University b. Set up a Centre of repute in learning and teaching the management of congenital hand differences and develop a template for holistic patient management with a team based approach c. Spearhead high quality original and innovative research and development related to hand malformations in India and publish them. d. Establish bilateral partnerships with high volume regional centres to enhance potential for international partnerships and grants to achieve academic and innovative prowess. e. Community participation along with involvement of policy makers to further our services to remote areas
57	Bharathiya Vikas Trust *	a. To promote education and training in socio economic changes in India. b. To promote and conduct research in matters relating to applied socio economic life in India for furthering such education c. To encourage authors and publishers in furthering the education and training in relation to socio economic changes in India d. To establish homes and sheltered workshops for handicapped both physical and mental destitute. e. To undertake all other works which are incidental to the above objectives

***Administration taken over by MAHE**

Criterion – II

2. Teaching, Learning and Evaluation

2.1 Total No. of permanent faculty

Total	Asst. Professors	Associate Professors	Professors	Others
2168	1010	566	460	132

2.2 No. of permanent faculty with Ph.D.

477

2.3 No. of Faculty Positions Recruited (R) and Vacant (V) during the year

Asst. Professors		Associate Professors		Professors		Others		Total	
R	V	R	V	R	V	R	V	R	V
221	99	15	31	4	13	77	26	317	169

2.4 No. of Guest and Visiting faculty and Temporary faculty

103		221		0

2.5 Faculty participation in conferences and symposia:

No. of Faculty	International level	National level	State level
Attended	284	705	907
Presented	518	530	197
Resource Persons	60	314	307

2.6 Innovative processes adopted by the institution in Teaching and Learning:

Sl. No.	Institution	Innovative Process
1	Kasturba Medical College, Manipal	Small group teaching was emphasized. Various small group teaching methods like seminar, tutorial, case based learning, problem based learning and team based learning was introduced. e-learning platform where all study material, references, videos are uploaded for students. Videography of lectures are also done so that students can refer them later ,Small group teaching, tutorials, seminars, Self directed learning at weekends has been introduced
2	Kasturba Medical College, Mangalore	Integrated classes, Problem based learning, Competency Based learning, Case Based learning and Broken classes have been adopted. Small group teaching has been introduced in Pre and Paraclinical subjects. Both Vertical and horizontal teaching classes are being conducted in pre and para clinical subjects

3	School of Allied Health Sciences, Manipal	• Digital pedagogic approaches such as webinars • Beyond syllabus scholarly activities such as street play, collage
4	School of Life Sciences, Manipal	• Teacher guardian for first year students • Coaching for slow learners
5	Manipal College of Nursing, Manipal	• Innovative teaching learning method are adopted, e.g: Team based learning, concept mapping. • Evidence Based Practice in M.Phil Nursing speciality subject is introduced for M.Phil Nursing students
6	Manipal College of Pharmaceutical Sciences, Manipal	• E-Pad examination system, Macro and micro academic management system • Student information systems – Online attendance/ marks • Strict adherence to examination schedules, • Good teacher awards
7	Manipal College of Dental Sciences, Mangalore	• OSPE and OSCE • Case Based Learning • Teacher Guardian mentorship
8	Manipal College of Dental Sciences, Manipal	• Case based learning is an educational strategy employed for enhancing student centred learning, clinical applications and correlation which is an important facet in dental curriculum. It is conducted at the undergraduate level. In this program, the students are given a clinical case / scenario with all the details like chief complaint, clinical features and investigation reports. Based on all the above findings differential diagnosis will be written. After this by correlating with report and clinical features a final diagnosis will be made. A detailed stepwise treatment plan will be charted/written & pros and cons of various treatment options are also discussed in detail. • Table clinics are organized for the undergraduate students wherein a group of students are given topics which will be presented to the class as a group activity.
9	Manipal Institute of Technology, Manipal	• Remedial classes for academically poor students. • Program electives/ open electives • AMS-Interactive tool for student performance and attendance analysis • Slot-wise timetable • Organizing Guest Lecture from Industry experts and site visits, Power point Presentation facility in each class, Continuous Evaluation with 5 assignments as self-learning exercise, QEEE program for students and faculty members • More courses added as Open Electives for IV & V semester students. • Industry initiated electives. • Black board teaching for subjects involving

		intensive mathematical analysis. • Power Point Presentations for subjects involving complex diagrams. Demonstration of Videos related to the subject. Modern amenities like LCD projection including animations, showing models • Innovative pedagogy like active involvement, role plays and audio visual equipment. • Assignments – All subjects of all semesters involves five assignments which will be evaluated at regular intervals to monitor students' performance. • Mini-projects and demonstrations – In theory subjects and labs, students have to work on a mini project and demonstrate its working. • Industrial visits- Faculty guided visits to nearby industries such as AIR Mangalore, BSNL, KarMic Manipal, MCF Hassan etc • Concept of academic counselling of under achievers was introduced where students with low attendance and marks are counselled and given assistance with improvement of performance
10	Faculty of Architecture, Manipal	• Integrated teaching methods • Live labs • Hands on training Workshops • Interaction with industry experts and alumni • guest lectures • group discussions & studies • study tours/case studies as course requirement
11	School of Management, Manipal	• Online course management software used by all faculty members. Online cases from Harvard Publishers purchased, Paraphrasing workshop conducted for all students. • Industry visits, Guest lectures, Mentoring through Teacher guardian
12	School of Communication, Manipal	• am plus students experimental newspaper, TV news production, documentary production video and audio, organising and managing events, class presentation, class seminars, RTI filing drive
13	School of Information Sciences, Manipal	• Industry Sponsored labs & State of the art teaching facilities • Industry standard hardware and software laboratories • Opportunities to work on industry defined mini-projects & Industry relevant • curriculum • Opportunity to study abroad • Fast-track training programs • All subjects with associated labs & seminar by all students in I & II semester
14	Welcomgroup graduate school of Hotel Administration, Manipal	• Faculty Exchange Programs through Academic collaboration agreements. • Student and Faculty Research and Research

		publications. • Skills training for unemployed youth from the local community through Manipal City & Guilds. • Sommelier program from the International Sommelier Guild (ISG) with its two levels of wine fundamentals certifications. • Community Outreach Programs. • Up-close and personal with industry experts. • Organization of Food Festivals. • Continuous internal evaluation process for culinary programs
15	Manipal Center for Philosophy & Humanities, Manipal	• Had deep engagement with public through diverse media, • Organized Summer schools for postgraduate students from around the country, • Organized Internship programmes for undergraduates from around the country, • Introduced Innovative practices in pedagogy and syllabi (which have already inspired similar programs at other reputed institutions), • Held workshops on specific themes such as Indian Philosophy, Film Appreciation, and organized international conferences on law and society, on philosophical discussions regarding science and nature • Outreach programmes to promote the Centre and its activities in colleges in Bangalore, at Mangalore University, at Delhi University (including St. Stephen's and Hindu College) • Regular film screenings for students and general public in Manipal and outside. Recently, organized film appreciation workshop was a major success.

2.7 Total No. of actual teaching days during this academic year

As per UGC Guidelines, depending upon the institutional requirements, the total no. of actual teaching days during the year 15-16 is **180 – 302**.

2.8 Examination/ Evaluation Reforms initiated by the Institution (for example: Open Book Examination, Bar Coding, Double Valuation, Photocopy, Online Multiple Choice Questions)

Following are the reforms initiated:
1. Double valuation system
2. Bar code on answer books
3. Multiple choice questions for few courses
4. Examination automation through Student information system (SIS)
5. On Screen Marking (OSM) for evaluation
6. Digital examination/evaluation using e-Pad devices
7. Open book examination

Sl. No.	Institution	Examination/ Evaluation Reforms
1	Kasturba Medical College, Mangalore	• MCQs are conducted on OMR sheets.r value is also captured. Student feedback on Assessment is also taken. OSPE has been introduced in University exams for all Pre and Paraclinical subjects.
2	Manipal College of Nursing, Manipal	• The candidates if failed in more than one/two subjects in any nursing programme they can be promoted to next year. Only two attempts were allowed upto 2012. • Now as per INC new resolutions, a candidate can take any number of attempts with a condition that maximum period allowed is as prescribed for each nursing programme. That is, M.Sc. (N) – 4 years, PB BSc Nursing – 4 years , B.Sc. (N) – 8 years. However, all papers need to be cleared before appearing for the final University Examinations.
3	Manipal College of Dental Sciences, Manipal	• OSCE & OSPE
4	Manipal College of Dental Sciences, Mangalore	• OMR enabled MCQ
5	Manipal Institute of Technology, Manipal	• Assessment techniques comprise of tests, assignments, quizzes and exams. Semester exam questions are set to target different course objectives. Student performance is then mapped to different course outcomes and an analysis of the same reveals the extent to which course outcomes are met. Necessary changes are then implemented accordingly. • Tests are the preparations for the end semester examination and are conducted in the same manner, except for the duration, which is one hour against that of three hours for the examinations. Two tests will be conducted in each semester and the contents will be announced in the beginning of the semester while course plan is distributed to the students. • Continuous Evaluation, inclusion of MCQ in the Sessional Question paper
6	Manipal Center for Philosophy & Humanities, Manipal	• Term Paper & Thesis Writing

2.9   No. of faculty members involved in curriculum restructuring/revision/syllabus development as member of Board of Study/Faculty/Curriculum Development workshop

Total no. of faculty members involved in curriculum restructuring/revision/syllabus development as member of Board of Study/Faculty/Curriculum Development workshop are **524**

2.10 Average percentage of attendance of students – 85-90%

2.11 Course/Programme wise distribution of pass percentage:

#	COURSE	Appeared	Distinction %	First %	Second / Pass Class %	Total Pass %
1	M.Sc. Nanoscience and Technology	3	0.00	0.00	100.00	100.00
2	M.Sc. Photonics	2	0.00	0.00	100.00	100.00
3	M.Sc. Bio-Physics	2	0.00	0.00	100.00	100.00
4	MSc (Dietetics and Applied Nutrition)	2	0.00	0.00	100.00	100.00
5	Bachelor in Hotel Mangt., Travel and Tourism	1	0.00	0.00	100.00	100.00
6	Master of Library & Information Science	10	0.00	0.00	100.00	100.00
7	M.Sc. Biostatistics	17	0.00	0.00	100.00	100.00
8	M.Com (Logistics and Supply Chain)	52	0.00	0.00	96.15	96.15
9	PG Diploma in Logistics and Supply Chain	4	0.00	0.00	75.00	75.00
10	BBM e-Banking & Finance	66	0.00	0.00	65.15	65.15
11	BBM -Financial Market	26	0.00	0.00	53.85	53.85
12	BBM -Professional	37	0.00	0.00	78.38	78.38
13	BBM -Logistics	21	0.00	0.00	57.14	57.14
14	MSc-Chemistry	20	0.00	0.00	95.00	95.00
15	MSc-Mathematics	29	0.00	0.00	100.00	100.00
16	MSc-Physics	29	0.00	0.00	100.00	100.00
17	MHA (Masters in Hospital Administration)	61	4.92	37.70	50.82	93.44

18	MPH (Master of Public Health)	42	30.95	66.67	2.38	100.00
19	E-M. Arch. (Advanced Design)	2	0.00	0.00	100.00	100.00
20	B. A (ID)	1	0.00	0.00	0.00	0.00
21	MA (Geopolitics and International Relations)	14	0.00	0.00	92.86	92.86
22	DM / M.Ch.	11	0.00	0.00	100.00	100.00
23	M.Sc. (Medical)	57	0.00	17.54	59.65	77.19
24	M.Sc. Yoga Therapy	3	0.00	0.00	100.00	100.00
25	M.Sc. Clinical Embryolog	6	0.00	50.00	50.00	100.00
26	PG Diploma in Panchakarma	4	0.00	100.00	0.00	100.00
27	MD / MS / DIPLOMA	306	0.00	0.00	92.48	92.48
28	MBBS	595	1.01	31.26	46.22	78.49
29	M.Sc.Tech.(Computing Technologies and Virtualization)	5	0.00	0.00	100.00	100.00
30	M.Sc.Tech. Dual (Embedded System & Instrumentation)	25	0.00	0.00	100.00	100.00
31	M.Sc.Tech. (Embedded Systems)	63	0.00	0.00	100.00	100.00
32	M.Sc.Tech. (Embedded and Wireless Technology)	9	0.00	0.00	100.00	100.00
33	M.Sc.Tech. (Medical Software)	12	0.00	0.00	100.00	100.00
34	M.Sc.Tech. (VLSI-design)	38	0.00	0.00	100.00	100.00
35	M.Sc.Tech. (VLSI-System Design & Verification)	4	0.00	0.00	100.00	100.00
36	M.Sc. Information Science	4	0.00	0.00	100.00	100.00
37	MDS	68	0.00	0.00	100.00	100.00
38	BDS	207	2.90	50.72	38.16	91.79

39	M.Phil. Nursing	5	0.00	0.00	100.00	100.00
40	M.Sc. Nursing	22	59.09	40.91	0.00	100.00
41	B.Sc Nursing	105	5.71	39.05	41.90	86.67
42	PB B.Sc. Nursing	22	22.73	50.00	27.27	100.00
43	M. Pharm	105	92.38	7.62	0.00	100.00
44	B. Pharm	115	0.00	0.00	56.52	56.52
45	Pharm D. - Post Baccalaureate	35	0.00	0.00	97.14	97.14
46	MA Communicatoon	45	0.00	0.00	93.33	93.33
47	PG Diploma in Corporate Communication	3	0.00	0.00	100.00	100.00
48	BAJC	108	0.00	0.00	68.52	68.52
49	BBA JDM	3	0.00	0.00	100.00	100.00
50	MBA	142	0.00	0.00	85.92	85.92
51	MBA-Healthcare Management	26	0.00	0.00	88.46	88.46
52	M.Phil-Regenerative Medicine	2	0.00	0.00	100.00	100.00
53	MSc-Regenerative Medicine	15	13.33	73.33	13.33	100.00
54	MSc-Medical Biotechnology	1	0.00	0.00	100.00	100.00
55	Post Graduate Diploma Programme in Cellular and Molecular Diagnostics	16	50.00	50.00	0.00	100.00
56	BSc Biotechnology	20	35.00	5.00	60.00	100.00
57	Execuative MArch	4	0.00	100.00	0.00	100.00
58	MArch-UDD	4	0.00	0.00	50.00	50.00
59	BAID	2	0.00	0.00	100.00	100.00
60	BArch	128	0.00	0.00	75.00	75.00
61	BArch ID	1	0.00	0.00	100.00	100.00

62	MASLP	37	0.00	10.81	81.08	91.89
63	MHHIA	5	0.00	0.00	100.00	100.00
64	MMLT	13	23.08	53.85	7.69	84.62
65	MMRP	2	100.00	0.00	0.00	100.00
66	MNMT	10	0.00	0.00	30.00	30.00
67	MOT	14	7.14	57.14	28.57	92.86
68	M.Phil-Clinical Psychology	12	0.00	0.00	91.67	91.67
69	MPT	44	13.64	54.55	31.82	100.00
70	MRT	2	50.00	0.00	50.00	100.00
71	MSc Clinical Psychology	17	0.00	0.00	82.35	82.35
72	MSc Echo Cardiography	2	0.00	0.00	100.00	100.00
73	MSc HI (Healthcare IT Mgt)	3	0.00	0.00	100.00	100.00
74	MSc HI (Software Mgt & Development)	1	0.00	0.00	100.00	100.00
75	MSc MIT	14	0.00	7.14	28.57	35.71
76	MSc Optometry	7	14.29	28.57	57.14	100.00
77	MSc RRT & DT	2	0.00	100.00	0.00	100.00
78	BPT Bridge Program	1	0.00	0.00	100.00	100.00
79	BASLP	33	6.06	48.48	36.36	90.91
80	BHIA	7	0.00	0.00	85.71	85.71
81	BMIT	14	0.00	14.29	42.86	57.14
82	BMLT	16	6.25	43.75	31.25	81.25
83	PGDNMT	9	0.00	22.22	44.44	66.67
84	BOT	17	0.00	17.65	35.29	52.94
85	BPT	50	2.00	22.00	50.00	74.00
86	BSc CVT	21	4.76	28.57	42.86	76.19

87	BSc MRT	7	0.00	42.86	28.57	71.43
88	BSc PFT	15	0.00	0.00	93.33	93.33
89	BSc RRT & DT	9	0.00	44.44	55.56	100.00
90	BSc RT	25	0.00	48.00	48.00	96.00
91	M.Sc. Bioinformatics	5	0.00	0.00	100.00	100.00
92	M.Sc. Medical Biotechnology	10	0.00	0.00	100.00	100.00
93	M.Sc. Molecular Biology & Human Genetics	9	0.00	0.00	100.00	100.00
94	BA (Culinary Arts)	31	0.00	0.00	93.55	93.55
95	BHM	46	0.00	0.00	63.04	63.04

Engineering programs: **Undergraduate**

Title of the Programme	Total no. of students appeared	Division				
		Distinction	I %	II %	III %	Pass %
Bio-Medical Engineering	31	41.94%	32.26%	3.23%	0.00%	67.74%
Chemical Engineering	70	50.00%	30.00%	12.86%	0.99%	78.57%
Civil Engineering	203	51.72%	32.51%	10.34%	1.64%	84.73%
Computer Science and Engineering	244	65.57%	18.85%	6.15%	1.03%	86.07%
Electrical and Electronics Engineering	195	51.79%	30.26%	12.31%	0.84%	83.59%
Electronics and Communication Engineering	238	73.53%	23.11%	3.78%	0.00%	95.80%
Industrial and Production Engineering	72	51.39%	40.28%	13.89%	1.51%	86.11%
Mechanical Engineering	265	68.30%	23.02%	8.30%	0.00%	87.17%
Printing Technology	20	60.00%	25.00%	25.00%	3.01%	65.00%
Information Technology	133	58.65%	33.83%	12.03%	0.00%	90.23%
Instrumentation and Control Engineering	93	33.33%	33.33%	20.43%	0.00%	72.04%
Biotechnology	34	38.24%	29.41%	2.94%	1.19%	64.71%
Mechatronics	84	51.19%	34.52%	8.33%	1.75%	77.38%
Aeronautical Engineering	57	47.37%	38.60%	7.02%	1.27%	78.95%
Automobile Engineering	79	58.23%	29.11%	7.59%	0.00%	81.01%

Postgraduate- MTech & MCA

Title of the Programme	Total no. of students appeared	Division				
		Distinction %	I %	II %	III %	Pass %
Bio-Medical Engineering	25	76.00%	16.00%	0.00%	0.00%	92.00%
Computer Science and Engineering	25	100.00%	0.00%	0.00%	0.00%	100.00%
Construction Engg. and Management	18	94.44%	0.00%	0.00%	0.00%	94.44%
Digital Electronics and Advanced Communication	25	88.00%	4.00%	0.00%	0.00%	92.00%
Energy Management, Auditing and Lighting	18	100.00%	0.00%	0.00%	0.00%	100.00%
Engineering Management	18	83.33%	0.00%	0.00%	0.00%	83.33%
Structural Engineering	25	84.00%	12.00%	0.00%	0.00%	96.00%
Computer Aided Mechanical Design and Analysis	18	94.44%	5.56%	0.00%	0.00%	100.00%
Control Systems	18	83.33%	5.56%	0.00%	0.00%	88.89%
Manufacturing Engineering and Technology	18	94.44%	0.00%	0.00%	0.00%	94.44%
Network Engineering	18	88.89%	5.56%	0.00%	0.00%	94.44%
Software Engineering	18	77.78%	16.67%	0.00%	0.00%	94.44%
Printing and Media Technology	13	46.15%	0.00%	0.00%	0.00%	46.15%
Microelectronics	18	94.44%	5.56%	0.00%	0.00%	100.00%
Power Electronic Systems and Control	18	94.44%	5.56%	0.00%	0.00%	100.00%
Astronomy and Space Engineering	18	72.22%	11.11%	0.00%	0.00%	83.33%
Industrial Bio –Technology	17	94.12%	0.00%	0.00%	0.00%	94.12%
Computer Science and Information Security	16	100.00%	0.00%	0.00%	0.00%	100.00%
Chemical Engineering	14	114.29%	0.00%	0.00%	0.00%	114.29%
Environmental Engineering	18	83.33%	16.67%	0.00%	0.00%	100.00%
Biochemical Engineering	3	100.00%	0.00%	0.00%	0.00%	100.00%
Industrial Pollution Control	3	100.00%	0.00%	0.00%	0.00%	100.00%
Advanced Thermal Power and Energy System	17	100.00%	0.00%	0.00%	0.00%	100.00%
Master of Computer Application (MCA)	59	52.54%	37.29%	5.08%	0.00%	94.92%

2.12 How does IQAC Contribute/Monitor/Evaluate the Teaching & Learning processes:

Individual college IQAC's discussed the teaching & learning process improvements & the same is documented as follows.

Sl. #	Institution	Evaluative Process
1	Kasturba Medical College, Manipal	• Student feedback on teachers and infrastructure obtained periodically. • Seminars and conferences for teaching faculty to inspire their quality of teaching. • Medical education unit through which IQAC periodically conducts sessions to explore avenues to enhance teacher effectiveness through professional skill development training programmes. • Department audit by trained Auditors twice a year. • Analysis of Results, Research output, Performance of students, and teachers analysed in Core committee meeting and board of studies
2	Kasturba Medical College, Mangalore	• The departmental coordinators monitor the adherence to classes, innovative teaching learning methods, lesson plan. Student feedback on curriculum is also taken so that any suggestions which can be acted upon are deliberated and implemented. Faculty feedback on facilities is also taken.
3	School of Allied Health Sciences, Manipal	• Biannual audit • Discussion in IQAC meetings • IQAC members report to top management about the processes in monthly meetings
4	School of Life Sciences, Manipal	• Every subject has a teaching schedule drawn. Every class is registered through an online attendance. • Students provide feedback on faculty and services. Every student is monitored and evaluated via internal assessment examinations, seminar presentations and assignments.
5	Manipal College of Nursing, Manipal	• Every month departmental meeting are conducted and the progress of teaching and learning is discussed. Any deviation from regular planned activity is rectified. Every month faculty meeting is held during which the progress and evaluation of the students are discussed. Feedback given by the students is communicated to the faculty during these meetings and need for improvement is stressed.
6	Manipal College of Dental	• IQAC conducts two periodic internal

	Sciences, Manipal	audits; one in the month of July and one in the month of January. During the audit each department and other locations are audited for the delivery of various services as per the stated departmental procedures. Any deviations in the processes are noted and brought to the notice of all concerned to take necessary action. Any processes and deviations requiring intervention or in puts are discussed in the management review meeting
7	Manipal College of Dental Sciences, Mangalore	• Online feedback by the students on teaching and the suggestions by IQAC • Audit of the department twice in ayear by the trained Auditors • Analysis of Results, Research output, Performance of students and Teachers analysed by the Core Committee • Faculty sent to Teaching learning workshop conducted by University
8	Manipal Institute of Technology, Manipal	• All the faculty members are asked to enter the day to day activities in the "Academic Management System-AMS" and the same is monitored. • Course coverage is monitored. • Audits are done to see all the activities are done on time. • Feedbacks are studied and improvements are suggested in IQAC meetings periodically.
9	Faculty of Architecture, Manipal	The conductance of classes as per the course plan/lesson plan are monitored by the class committee chairpersons (CCC) who report to the Academic Co-ordinator, and to the Director. • Improvement in academic quality • Monitoring academic process • Enhancing academic and industrial interaction • Initiatives of newer teaching methods • Interaction with alumni for academic purposes. • Hands on workshops • Total Quality Management practice to improve academic standards
10	School of Management , manipal	• Course Coordinator and Director monitor the teaching learning process, Teacher Guardian process
11	School of Information Sciences, Manipal	**Contributions:** • Conduction of workshops and guest lectures to students

		• Workshops for faculty members **Monitoring/ Evaluation:** • Conduction of periodic IMS internal audit twice in a year • Review of internal audit by Management Representative from Department of Quality, MAHE • External audit by TUV, Bengaluru
12	Welcomgroup Graduate School of Hotel Administration, Manipal	• IQAC conducts regular academic audits twice in a year to monitor the teaching and learning processes

2.13 Initiatives undertaken towards faculty development

Faculty / Staff Development Programmes	*Number of faculty benefitted*
Refresher courses	297
UGC – Faculty Improvement Programme	24
HRD programmes	427
Orientation programmes	115
Faculty exchange programme	15
Staff training conducted by the university	616
Staff training conducted by other institutions	179
Summer / Winter schools, Workshops, etc.	959
Others	141

2.14 Details of Administrative and Technical staff

Category	Number of Permanent Employees	Number of Vacant Positions	Number of permanent positions filled during the Year	Number of positions filled temporarily
Administrative Staff	761	15	8	0
Technical Staff	476	8	57	0

<div align="center">**Criterion – III**</div>

3. Research, Consultancy and Extension

3.1 Initiatives of the IQAC in Sensitizing/Promoting Research Climate in the institution

Research Initiative

i. Enhancing Interdisciplinary Research Collaborations

    a. Half yearly meeting with the Research Advisory Council

    b. Networking through Interdisciplinary Research Advisory Group

    c. Prepare a calendar for need based training modules

    d. Facilitate research for community

ii. Increase the quantum of grants and quality of publications

    a. Enhance collaborative research proposal submission

    b. Encourage the PhD faculty to apply for joint research

    c. Target research publications in Scopus and Web of Science Journals

    d. Aim for targeted research grants

iii. Activities to promote excellence in research

    a. Creation of Student Research Forum

    b. Encourage the faculty and students to participate in Conferences and Workshops

    c. Incentivise researchers based on the quality of research papers

    d. Recognize and reward the top researchers of MAHE.

iv. Facilitate Innovation, Technology Transfer and Commercialization

    a. Support Innovation and Entrepreneurship

    b. Initiate patent filing and technology transfer

    c. Establish reward mechanism for granted patents

    d. Raise awareness about prior art search and scout patentable IPs

Research Outcomes:

i. As per the recommendation of the Research Advisory Council Cataloguing of young researchers below the age of 40 years is under way.

ii. To concentrate on research of national importance, an internal survey on priority research areas is complete.

iii. Networking through Inter Disciplinary Research Advisory Group has resulted in nearly 30 collaborations

iv. Two centres, namely, The Centre for Vaccine Studies and Transdisciplinary Centre for Qualitative Research were commissioned to support research for community

v. A number of workshops including Bibliometric and Scientometric analysis, Grant writing and Utilization of Library Resources have been organized by the Directorate of Research

vi. In terms of the quantum of research grants, the University was successful in getting external research funding close to 45 crores in the last 6 months

vii. Out of 12 grants applied, which were more than crore, three have so far received funding more than a crore within a financial year

viii. The publication in Scopus Journals have increased from 1082 in the year 2015 to 1360 in the year 2016.

ix. There are 7 publications, which has an impact factor of more than 10

x. The publications in top citation percentiles has gone up from 7.2% to 10.5%

xi. To enhance student research, Summer School was organized by MU-SRF and there are about 23 students who have availed publication research award incentive for students to excel (PRAISE) certificates

xii. The 2nd International Conference for Health Science and Technical Research organized by MU-SRF was well received with nearly 50 of the presented papers being accepted for publication in Advanced Science Letters journal

xiii. The University H Index has gone up from 74 – 80

xiv. To recognize top researchers of MAHE, 6 new Dr. TMA Pai Endowment Chair was awarded and 6 renewed.

xv. Featured publication of the month and impact grant of the month is being displayed on the notice board of both the HS and TS library.

xvi. To support innovation and entrepreneurship, a new faculty entrepreneurship policy is rolled out.

xvii. From the Technology Transfer Office, there are about 11 patents filed this year.

Research Activities

i. Student Research Forum of various constitutive institutions organized events like CREST (Collaborative Research Engagement for Students with Talent) and RISE (Research and Innovation for Students to Excel

ii. World Intellectual Property (IP) Day was organized on on April 26. This year the theme of World IP day was Digital Creativity.

iii. Manipal Research Colloquium was organized on April 04-06, 2016 with nearly 350 whom participating in this annual research event. A total of 13 Speakers were also invited during the meet.

iv. A Summer Training program was conducted between June 15 and July 04, 2015.

v.   1st International Conference on Healthcare and Technical Research (ICHTR 2015); from December 22-24, 2015 with over 250 presentations.

vi.   Innovation day held at the Innovation Centre on December 19, 2015   allowed the faculty and students to showcase their talent and innovations with outstanding innovations suitably rewarded.

Workshops and CME organized

Sl No	CME / Workshop	Resource Persons	Date , Place	Participants
1	Summer Training – 2015	Team DoR	15/6/2016 – 4/7/2016 Interact, Manipal	125
2	Web of science(Thomson Reuter)	Mr. Alok Poundrik and Mr. Basha Kodidela	13/9/2015 Interact Hall	130
3	Writing Effective Research Proposals for Women Scientists	Dr Rekha Shenoy Dr Nandineni Ramadevi Dr Vidhu Shankar Babu	07/09/2015, FAIMER, MU	55
4	Turnitin User Meet	Mr. Surendra Nayak, Systems executive, ISD	08/9/2015 CCF, 3rd floor, Innovation Centre, MIT	45
5	Research Policy Patents/Tech. Transfer Grant Writing Quality of Publications	Dr. N Udupa Dr. Manthan D Janodia Dr. Rekha R. Shenoy Dr. Yogendra Nayak	14/09/2015 – 15/09/2015, Interact Hall	90
6	RMS (Research Data Management System) for Research Coordinators	Prof. Sudhakar Upadhya, CSD	21/09/2015, CCF, 3rd floor, Innovation Centre, MIT	48
7	Interaction of Mr. Daniel Calto, Scopus Elsevier, New York with RC	Mr. Daniel Calto and Mr. Vijay Sekhar Reddy	04/11/2015, FAIMER, 5th Floor, Health Science Library	30
8	RMS (Research Data Management System) 2nd level for Faculty members, administrative offices	Prof. Sudhakar Upadhya, CSD	14/11/2015, CCF, 3rd floor, Innovation Centre, MIT	78
9	RVF (Researchers Visibility Framework	Prof. Sanjay Singh, IT, MIT	16/11/2015, CAD Lab, Aeronautical Deprt. MIT	46
10	RVF (Researchers Visibility Framework) 2nd level	Prof. Sanjay Singh, IT, MIT	26/11/2015, CAD Lab, Aeronautical Deprt. MIT	35
11	RVF (Researchers Visibility Framework) 2nd level	Prof. Sanjay Singh, IT, MIT	5/12/2015, Interact Hall	33
12	RVF (Researchers Visibility Framework) 2nd level	Prof. Sanjay Singh, IT, Mangalore	7/12/2015, KMC Mangalore	79
13	Research Fellowships and	Prof. Stepheno Greco	7/12/2015,	44

	Grants in Europe		Dept. of European Studies	
14	Planning, Executing and Publishing research Projects	Dr. G Jagadeesh, Adjunct Prof, MCOPS, Manipal	14/12/2015, Interact Hall, Manipal	99
15	Planning, Executing and Publishing research Projects	Dr. G Jagadeesh, Adjunct Prof, MCOPS, Manipal	14/12/2015, KMC, Mangalore	31
16	Manuscripts submission and processing Demo to Editors and Managing Editors of Manipal University Journals	Mr. Satish Kamath	15/12/2015, MIT	14
17	1st International Conference on Healthcare and Technical Research (ICHTR 2015)	Team DoR and MUSRF	22/12/2015 – 24/12/2015, Interact, Manipal	500
18	RMS for Librarians	Mr. Surendra Nayak, Systems executive, ISD	24/12/2015, MIT	20
19	IPR and Technology Management	Ms. Bindu Sharma, Origin IP	11/01/2016, FAIMER, MU	34
20	Researchers' Visibility Framework IPR and Technology Transfer Funding opportunities for grant writing Researcher's Visibility & Quality of Publications	Dr Sanjay Singh Dr. Manthan Janodia Dr Rekha Shenoy Dr Yogendra Nayak	23/01/2016, SOM, Manipal	48
21	Patent Filing and IPR	Dr. Manthan Janodia	20/02/2016, FAIMER, MU	42
22	Patent Filing and IPR	Dr. Manthan Janodia	22/02/2016, FAIMER, MU	35
23	Patent Filing and IPR	Dr. Manthan Janodia	24/02/2016, FAIMER, MU	40
24	Interaction with researchers on Intellectual Property Rights	Formulate IP Team, Bangalore	07/03/2016, FAIMER, MU	21
25	Online Quiz on IP to celebrate World IP Day	Dr. Manthan Janodia	26/03/2016, FAIMER, MU	43
26	Manipal Research Colloquium -2016	Team DoR	04/06/2016 – 06/06/2016, Interact, Manipal	350
27	Student Research Poster Competition (SRPC 2014)	Team DoR and MUSRF	04/06/2016 – 06/06/2016, Interact, Manipal	
28	Demonstration on Online manuscript submission	Dr Sathish Kamath and IT Team, MU	07/04/2016, CCF, 3rd floor, Innovation Centre, MIT	40

29	Architecture Research: A Bibliometric & Scientometric Study	Dr. Yogendra Nayak	01/06/2016, FOA	62
30	Awaeness program on RMS,IPR,GRANTS	Dr. N. Udupa Dr. Manthan Janodia Dr. Sudhakar Upadya Dr. Raghu A. R Mrs. Sunanda	09/06/2016, KMC Mangalore-MEDICAL EDUCATION UNIT	65
31	Regarding Research Orientation Workshop at Public Health	Dr. Yogendra Nayak	27/06/2016, Dept. of Public Health	30

3.2 Details regarding major projects

	Completed	Ongoing	Sanctioned	Submitted
Number	14	86	25	137
Outlay in Rs. Lakhs	584.85	12633.32	1443.93	8513.34

3.3 Details regarding minor projects

	Completed	Ongoing	Sanctioned	Submitted
Number	99	321	60	281
Outlay in Rs. Lakhs	536.03	2721.17	442.37	1876.03

3.4 Details on research publications

	International	National	Others
Peer Review Journals	894	448	01
Non-Peer Review Journals	-	-	-
e-Journals	01	-	-
Conference proceedings	76	16	-

3.5 Details on Impact factor of publications:

Range	0.108 - 59.558		Average	2.358
h-index	80		Nos. in SCOPUS	1360

3.6 Research funds sanctioned and received from various funding agencies, industry and other organisations

Nature of the Project	Duration Year	Name of the funding Agency	Total grant sanctioned	Received
Major projects	2015-16	**Annexure 1**	14,034.31	1,951.59
Minor Projects	2015-16		1,933.81	765.57
Interdisciplinary Projects	-		-	-
Industry sponsored	2015-16		5.51	5.51
Projects sponsored by the University/ College	2015-16		132.05	132.05
Students research projects *(other than compulsory by the University)*	2015-16		96.26	96.26
Any other(Specify)			-	-

Total	2015-16		16,201.94	2,950.98

3.7 No. of books published i) With ISBN No. `22`   Chapters in Edited Books `107`

ii) Without ISBN No. `7`

3.8 No. of University Departments receiving funds from

UGC-SAP `3`   CAS `-`   DST-FIST `2`

DPE `-`   DBT Scheme/funds `4`

DST `-`   UGC `-`

3.9 For colleges   Autonomy `-`   CPE `-`   DBT Star Scheme `-`

INSPIRE `1`   CE `-`   Any Other (specify `-`

3.10 Revenue generated through consultancy   Rs. 2,00,82,000.00

3.11 No. of conferences   organized by the Institution

Level	International	National	State	University	College
Number	151	85	-	-	-
Sponsoring agencies	ICMR, DBT, MU	SBC(I)	-	-	-

3.12 No. of faculty served as experts, chairpersons or resource persons `538`

3.13 No. of collaborations   International `25`   National `45`   Any other `4`

3.14 No. of linkages created during this year `41`

3.15 Total budget for research for current year in lakhs :

From Funding agency `2722.67`   From Management of University/College `3867.5`

Total `6590.17`

3.16 No. of patents received this year

Type of Patent		Number
National	Applied	09
	Granted	-
International	Applied	-
	Granted	1
Commercialised	Applied	-
	Granted	-

3.17 No. of research awards/ recognitions   received by faculty and research fellows Of the institute in the year

Total	International	National	State	University	Dist	College
309	129	100	12	20	30	18

3.18 No. of faculty from the Institution

who are Ph. D. Guides   128

and students registered under them   172

3.19 No. of Ph.D. awarded by faculty from the Institution   91

3.20 No. of Research scholars receiving the Fellowships (Newly enrolled + existing ones)

JRF   125   SRF   43   Project Fellows   15   Any other   50

3.21 No. of students Participated in NSS events:

University level	-
National level	-

State level	-
International level	-

3.22 No. of students participated in NCC events:

University level	41
National level	-

State level	-
International level	-

3.23 No. of Awards won in NSS:

University level	-
National level	-

State level	-
International level	-

3.24 No. of Awards won in NCC:

University level	-
National level	-

State level	8
International level	-

3.25 No. of Extension activities organized

University forum   4   College forum   182

NCC   2   NSS   -   Any other   VSO

3.26 Major Activities during the year in the sphere of extension activities and Institutional Social Responsibility

Sl. No	Institution	Extension Activities & Institutional Social Responsibility
1	Kasturba Medical College, Manipal	• Participation in national health programmes of the government • Conducting camps at various places involving various departments of the hospital • Conducting and participating in blood donation camps

		• VSO organized camps for patients and activities for fund raising for poor students
2	Kasturba Medical College, Mangalore	• Visit to old age homes, orphanages and HIV/AIDS homes. • VSO activities –visit to orphanage, celebrated children's day at HIV/AIDS home • Organisation of blood donation camps through Helpline
3	School of Allied Health Sciences, Manipal	• Hearing screening for traffic policemen of Udupi district • Organ donation awareness program by Department of Renal Replacement Therapy and Dialysis Technology • ASHA (awareness program for Learning Disability) by Dept. of Occupational Therapy • School vision screening camp by Department of Optometry • Free physiotherapy camp by Department of Physiotherapy
4	School of Life Sciences, Manipal	• INSPIRE science internship for school students (May 2016) • Science Day residential program for a week, culminating in a science exhibition for public,including school students (Feb 2016) • Student forum organised lectures on a range of topics by external experts • Student Council visited and donated essentials to old age home and orphanage • Workshops and demonstrations arranged for students from schools and colleges in the state
5	Manipal College of Nursing, Manipal	• Students have a health and social welfare committee through which social service activities are organized regularly. • Nursing students and faculty members are members of Voluntary Service Organization of MAHE. • Each department organizes an average of 4 to 5 outreach programme as a part of their curriculum; which includes special camps, school health programmes, awareness programmes, and national day celebrations every year. • Faculty and students are actively involved in conducting regular health education in the clinical setting, community and school like, lactation counselling, psychoeducation, breast feeding, diabetes clinic, hemophilia etc. • Faculty and students are actively involved in Blood donation camps, Eye Camp, Dental camp etc. • Monthly two Morbidity clinics are conducted by Community Health Nursing department at Athrady and Marne Villages
6	Manipal College of Dental Sciences, Manipal	• The AMCHI program. The aim of this program was to take primary dental care to the remote corners of Ladakh and to focus public attention on the problem of lack of even basic facilities of dental care, poor oral health status, unmet dental needs and dental fluorosis in some

areas. the program has benefited around 1000 needy people living in the remote corners of Ladakh. The 'Amchi training project' was set up to teach the local nuns to provide basic dental treatment to the people of Ladakh. The AMCHI team, regardless of the geographical boundaries is inclined to reach greater possibilities with diffusing knowledge and vision. The term 'Amchi' literally means community medical service in Ladakhi, for those who are selflessly dedicated to support humanitarian

- Minor and major dental camps in and around Manipal throughout the year
- Awareness programs on AIDS and Cancer among the general public
- School Dental Health Program, oral hygiene day, No tobacco day, Swaach Bharat program are organized
- Varambally village was adopted to make it Tobacco free village
- Conducting free dental screening and tobacco cessation awareness camp for the Auto rickshaw drivers of Manipal. The dental checkup was done for around 200 auto rickshaw drivers of Manipal and oral prophylaxis was done for free in the mobile dental van
- Oral hygiene awareness camp was organized for the retired policemen in the department of Public Health Dentistry where, the oral screening was done, oral prophylaxis was done and oral hygiene awareness talk was given by Dr Ramprasad, Associate Professor, Department of Public Health Dentistry.
- National Science Day was celebrated by providing oral health check up to school children and giving them free health cards for treatment. The event in which 174 children and 24 teachers from 11 schools in and around Udupi and Manipal took part. The students were educated on the scope of dentistry as a career opportunity. They were also told about tobacco abuse, awareness on child abuse, oral habits and health care delivered by pedodontists in Pediatric and Preventive dentistry using posters.

7	Manipal College of Dental Sciences, Mangalore	• Treatment of patients through satellite clinics • School camps • Active participation in Social Activities (Visit to Snehasadan, Prashanth Nivas, Cheshire Home)
8	Manipal College of Pharmaceutical Sciences, Manipal	• Blood Donation • Daan Utsav
9	Manipal Institute of Technology, Manipal	• Swatch Bharath was organized on Oct 2015 • Blood Donation camp was organised on NCC week in JAN 2016 • Start-up India programme was organised on 14th Jan 2016

- Night camp was organised in MIT near NCC unit on March 19th 2016
- NCC unit organized Cultural evening and Badhakhana on 20th April 2106
- International day of Yoga was organised on 20th June 2016
- Seminar on Disaster Management & Mitigation April 2, 2016

Student Major Projects, Technical & Cultural Clubs
Participation in extension activities such as

- IEEE student chapter - Technical workshops, seminars, guest lectures
- IE (E & C) student chapter - Technical workshops, seminars, guest lectures
- ISTE student chapter – Technical workshops, seminars, guest lectures
- IAESTE , AIESEC- Student Exchange Programme
- Major interdisciplinary student Projects such as; PARIKSHIT,FORMULA MANIPAL, SOLAR MOBILE, ROBO MANIPAL, MANIPAL RACING - Opportunity for the students to work in a large group, execute tasks with tight deadlines, develop leadership qualities and team spirit
- FDP, Guest talks, conferences and Workshops organized within and outside - Faculty and students have participated
- "Tech Tatva" and "REVELS" - Technical paper presentations,competitions and cultural events.
- Department of Sports for students- Sports & Games
- Faculty club - Sports, games, social work and cultural events

Other Activities

- Inspire program for 10+2 class students.
- IE-Biotech – student chapter organized a conference.
- Angel Hack & Microsoft Hackathon.
- Basic Computer awareness program to the children of Govt. School. Initiated discussion with industries regarding collaborations.
- Students are encouraged to learn foreign languages such as French, German, etc. Student projects such as Road projects, Pavement design, Traffic Density assessment, Water Supply and Water Quality projects addressing the needs of the surrounding community were taken up both at UG and PG levels.

10	Faculty of Architecture, Manipal	- Sensitivity towards the society by extending hands special children in & around Manipal. - Social re-union for the specially abled and mentally challenged children. - Local community interaction through live studio projects based in the neighbourhood.

11	School of Management , Manipal	• Lakeside cleaning • Fire emergency Training • School children's education on hygiene, • Onam Celebration • Consendo- International Level Management fest • 4th Dimension: National Level Management Fest • Yakshagana Event • Dan Utsav • Vanamahotsav – Sapling distribution
12	School of Communication, Manipal	• Namma Angadi • Blood drive
13	School of Information Sciences, Manipal	• As a part of DaanUtsav 2015, October, SOIS along with students celebrated Smriiti Daan - Lunch distribution for gardeners and GCC workers of MU campus. • Under MTHRA Association (Institutional Community Service organization), we sponsored 2 students in terms of tuition fees for the purpose of their education. One student for 1st PUC and other for 2nd PUC. Both students were much needed for scholarship to continue their education.
14	Welcomgroup Graduate School of Hotel Administration, Manipal	• Manipal City & Guilds Skills Training for local community development • Activities by Volunteer Service Organisation (VSO), MAHE • Blood Donation Camps by WANASS Club, WGSHA • Beach Cleaning Activities by WANASS Club, WGSHA • Orphanage Visits by Students, Birthday Cakes contributions • Community Outreach Services and Growth Monitoring at Anganwadis by students of M. Sc Dietetics and Nitrition • Nutrition Education Exhibition cum Stall at the World Diabetes Day Awareness and Screening Expo. Conducted by the Dept. of Medicine at Kasturba Hospital, Manipal.
15	Manipal Center for Philosophy & Humanities, Manipal	• Broken tiles: social initiative by MCPH faculty and students towards laid off tile factory workers, an awareness program, documentary and initiative to provide them with health insurance.

Criterion – IV

4. Infrastructure and Learning Resources

4.1 Details of increase in infrastructure facilities:

Facilities	Existing	Newly created	Source of Fund	Total
Campus area	684.876 acres	--	--	684.876 acres
Class rooms	398	13	Own funds	411
Laboratories	316	3	Own funds	319
Seminar Halls	152	4	Own funds	156
No. of important equipments purchased ($\geq$ 1-0 lakh) during the current year.	7511	633	Own funds	8144
Value of the equipment purchased during the year (Rs. in Lakhs)	61924.48	5744.32	Own funds	67668.80
Others	-	-	-	-

4.2 Computerization of administration and library

Faculty, staff and students have access to computer, internet and Wi-Fi facility throughout the premises. Library resources are easily accessible through intranet as well as internet, providing access to thousands of online journals, books, databases and other resources. Online attendance record is available for every student via secure login. Student feedback on faculty and services is administered online at the end of every term

- Library is fully automated using Easylib Software.
- All documents are barcoded
- E-prints software is used for digital library
- Installed Patient Management System
- University website
- Purchase and Inventor
- ESP – HR
- Employee Self Service
- RMS Portal
- Student Information System
- E learning
- Library portal
- Telephone Directory
- KH info Hospital Intranet
- Event Management System
- DOC-Synergy Event Calendar
- Employee management software
- Online journals and catalogue
- Research management system
- E-PAC & O-PAC packages are available to the students for library catalogues.
- EZProxy was introduced thus enabling faculty and post graduates to access the libraray's digital resources from any part of the world (not necessarily only from the institution's network)

4.3 Library services:

Kasturba Medical College, Manipal

	Existing		Newly added		Total	
	No.	Value (in Lakhs.)	No.	Value (in Lakhs.)	No.	Value (in Lakhs)
Text Books & Reference Books	65532	526.00	2012	57.00	67544	583.00
e-Books	-	4.13	52	7.41	9126	11.54
Journals (Print)	321	227.00	1160	200.00	1481	427.00
e-Journals (Online)						
Journals (Print+Online)						
Digital Database	-	54.00	-	93.63	12	147.63
CD & Video	790	-	38	-	828	-
Others (specify)	-	-	-	-	-	-

Manipal Institute of Technology, Manipal

	Existing		Newly added (2015-16)		Total	
	No.	Value (In Lakhs)	No.	Value (In lakhs)	No.	Value (In lakhs)
Text Books	93121	409.00	1404	21.50	94525	430.50
Reference Books	12355	26.00	104	0.33	12459	26.33
e-Books	28273	42.20	4211	17.68	32484	59.88
Journals		414.17	310	52.84	310	467.01
e-Journals	2450	518.43		116.57	2450	635.00
Digital Database	5	22.66	1	3.00	6	25.66
CD & Video	CD 5500 Video 764	3.12	CD 400	-	5900	3.12
Others (specify) NPTEL Lectures	-	1.5	-	-	-	1.5

Kasturba Medical College, Mangalore

	Existing		Newly added		Total	
	No.	Value	No.	Value	No.	Value
Text Books	29999	189.20	680	35.40	30738	224.60
Reference Books			59			
Journals	193	50.04	139	10.66	332	60.70
e-Books	1565		53,210		54775	
e-Journals	2035		3135		5170	
Digital Database	5	86.11	6	76.12	11	162.23
CD & Video	62	-	70	-	-	-
Others (specify)	-	-	-	-	-	-

Manipal Center for Philosophy & Humanities, Manipal

	Existing		Newly added		Total	
	No.	Value(in lakhs)	No.	Value(in lakhs)	No.	Value(in lakhs)
Text Books	1022	6.13	609	4.33	1631	10.46
Reference Books	-	-	-	-	-	-
e-Books	-	-	-	-	-	-
Journals(Jan-Dec)	17	2.20	3	2.30	20	4.50
e-Journals	-	-	-	-	-	-
Digital Database	1	$2025.00	-	$2352.94	1	$4377.94
CD & Video	12	0.07	12	0.04	24	0.11
Others (specify)	-	-	-	-	-	-

School of Management, Manipal

	Existing(2013-Jun2015)		Newly added (2015-16)		Total	
	No.	Value(In lakhs)	No.	Value(in lakhs)	No.	Value(In lakhs)
Text Books	2461	15.91	1990	8.00	4451	23.91
Reference Books	25	-	22	-	47	-
e-Books	-	-	-	-	-	-
Journals (Jan-Dec)	17	0.39	-	0.46	17	0.85
e-Journals	-	-	-	-	-	-
Digital Database	6	25.29	-	28.63		53.92
CD & Video	-	-	-	-	-	-

Welcomgroup Graduate School of Hotel administration, Manipal

	Existing		Newly added		Total	
	No.	Value(In Lakhs)	No.	Value(In Lakhs)	No.	Value(In Lakhs)
Text Books	10337	52.64	678	4.61	11015	57.25
Reference Books	779	-	8	-	787	-
e-Books	-	-	-	-	-	-
Journals	60	3.18	-	-	60	3.18
e-Journals	2248	-	-	-	2248	-
Digital Database	3	3.86	-	-	3	3.86
CD & Video	595	5.09	72	0.05	667	5.14
Others (specify)	-	-	-	-	-	-

Manipal Center for Natural Sciences, Manipal

	Existing		Newly added		Total	
	No.	Value (In Lakhs)	No.	Value(In Lakhs)	No.	Value(In Lakhs)
Text Books	338	5.11	15	0.45	353	5.56
Reference Books	42	3.01	04	0.41	46	3.42
e-Books	16	Complementary	--	--	16	--
Journals	13	1.56	-	-	13	1.56
e-Journals	22	33.62	-	-	22	33.62
Digital Database	1	44.81	2		03	44.81
CD & Video	18	0.13	-	-	18	0.13
Others (specify)	19 (Project report), 3 News Papers	--	--	--	--	--

School of Communication, Manipal

	Existing		Newly added		Total	
	No.	Value(In lakhs)	No.	Value(In lakhs)	No.	Value(In lakhs)
Text Books	11556	25.00	712	2.00	12268	27.00
Reference Books	265	-	10	-	275	-
e-Books	25	-	6	-	31	-
Journals	56	2.95			56	3.00
e-Journals	6	-	0	-	6	-
Digital Database	2	3.5	2	Have access	4	3.5
CD & Video	643	5.35	1	0	644	5.35
News papers	13	0.50	0	-	13	0.50
Thesis	670	-	45	-	715	-
Back volume of journals and magazines	600	----	42	----	642	

Dept. of Geopolitics & International Relations

	Existing		Newly added		Total	
	No.	Value(In lakhs)	No.	Value(In lakhs)	No.	Value(In lakhs)
Text Books	1571	-	529	411196	2100	-
Reference Books	---	----	-	-	-	-
e-Books	-	-	-	-	-	-
Journals	11	0.79	1	0.01	12	0.80
e-Journals	6(P+O)	----	----	0	6	----
Digital Database	4	-	-	-	4	2.58
CD & Video						
Others (specify)						

School of Regenerative Medicine, Bangalore

	Existing		Newly added		Total	
	No.	**Value**	**No.**	**Value**	**No.**	**Value**
Text Books	489	21.07	4	0.35	493	21.42
Reference Books	Nil	Nil	Nil	Nil	Nil	Nil
e-Books	Nil	Nil	Nil	Nil	Nil	Nil
Journals	Nil	Nil	Nil	Nil	Nil	Nil
e-Journals	4	Nil	Nil	Nil	Nil	4
Digital Database	Nil	Nil	Nil	Nil	Nil	Nil
CD & Video	Nil	Nil	Nil	Nil	Nil	Nil
Others (specify)	Nil	Nil	Nil	Nil	Nil	Nil

4.4 Technology up gradation (overall)

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Depart-ments	Others
Existing	11801	2812	All desktops are having internet connectivity		168	854	7851	116
Added	831	181			13	42	587	8
Total	12632	2993			181	896	8438	124

4.5 Computer, Internet access, training to teachers and students and any other programme for technology up gradation (Networking, e-Governance etc.)

1. Migration of all University email ids to Microsoft Office365 Cloud – Completed
2. Virtual Class Room Project at MIT – In Progress
3. Lecture Capture Solutions at 10 Class Rooms at KMC, Manipal - Completed
4. Student Life Cycle Management on Microsoft Dynamics ERP Platform - Initiated

4.6 Amount spent on maintenance in lakhs:

i) ICT   Rs. 1297.25 lacs

ii) Campus Infrastructure and facilities   Rs. 6602.04 lacs

iii) Equipment's   Rs. 2715.16 lacs

iv) Others   Rs. 2767.54 lacs

Total: Rs. 13381.98 lacs

Criterion – V

5. Student Support and Progression

5.1 Contribution of IQAC in enhancing awareness about Student Support Services

Sl. No.	Contribution of IQAC in enhancing awareness
1	Student Orientation programme at the beginning of the academic programme
2	The institution publishes its updated prospectus and handbooks annually. The information content is disseminated to students at the beginning of every academic year.
3	Timely announcements of upcoming events, projects, and notices are displaced in notice board kept at vantage points.
4	Groups emails are sent to students and parents wherever necessary
5	Teacher guardians create awareness for newly joined students
6	Reviewing and ATR on the feedback
7	Counselling to the students those who are weak academic performers
8	Class Coordinator and co-coordinator for monitoring the day to day curricular activities of the class
9	Subject coordinator for coordinating each subject
10	Clinical supervision in each of the clinical area
11	Alumni meeting
12	Orientation to Ethical Issues and Guidelines on Research
13	The institution facilitates students to avail scholarship & other financial assistance from state government, central government and other authorities
14	Enrichment of library by adding new books and journals.
15	Builds a culture of social responsibility through extension activities by students.
16	Grievance Redressal Cell is working for student support
17	Provides latest information and communication tools like Wi-Fi Campus, Internet Facility etc.
18	Keeps updating the information on the website on regular basis.
19	Various committee for students – Anti-ragging, condemnation, disciplinary & grievances and redressal committee
20	Student feedback
21	Complaint/Suggestion box
22	Student Information System for maintaining student records
23	Training and placement of final year Students in reputed companies for practical training
24	Guest lecture by alumni and experts from industry
25	Educational tours
26	Providing guidance for Dissertation and providing guidance for projects
27	Seminar in each semester for all the students
28	Conduction of bridge courses for the first semester students on industry standard and industry standard hardware & software
29	Industry defined mini-projects

5.2 Efforts made by the institution for tracking the progression

Sl. No.	Institution	Efforts made by the institution for tracking the progression
1	Kasturba Medical College, Manipal	• All the department maintain document, compare and discuss the performance and progress of the students in their exams and other academic activities. • Every department maintains a register for recording the progress of students. • Each student is allotted a mentor and the mentor maintain a mentoring booklet in which he/she updates details of academic performance and curricular progress. Mentors offer academic counselling to students, recommend them for remedial coaching, if necessary, and also meet/communicate with parents of their mentees to update them on their progress. • Attendance by biometrics to monitor students attending classes closely • SIS for tracking the students progress in academics, attendance and other related issues
2	Kasturba Medical College, Mangalore	• The teacher guardian assists in tracking the progress made by the students. Parents are informed if the students are not performing optimally and special classes are held if required to help the poor performers. The parents are also informed by email at periodic intervals, if a student is lacking attendance in any subjects
3	School of Allied Health Sciences, Manipal	• Teacher guardian system, mentoring / counselling • Student Information System portal to communicate the progress of the students
4	School of Life Sciences, Manipal	• Teacher-guardian for every student, Regular feedback to students and parents (during the program) • Faculty in touch with students regarding their progression • Alumni cell and coordinator, contact via emails (after graduation)
5	Manipal College of Dental Sciences, Manipal	• Each department monitors students attendance on a monthly basis • Students with shortage of attendance and slow learners are counselled • Online attendance of lectures, practicals and clinicals on a daily basis with an access to students and parents • End posting exams, day to day assessment of clinical work of students, seminars, etc
	Manipal College of Dental Sciences, Mangalore	• Teacher Guardian mentoring system • Test and Sessional Exams • Minor Research projects to advanced learners • Online attendance marking with access to students and parents • Financial support to present reseach papers in conferences

		• Student exchange program with International Universities • Counselling service • Academic, Sport and Cultural competitions at College, University, and National level
6	Manipal College of Nursing, Manipal	• Through the Alumni Cell graduates are contacted for tracking of their achievements • Every year alumni meet is conducted and alumni are invited to participate
7	Manipal Institute of Technology, Manipal	• Through AMS-Academic Management System by checking attendance and student performance in Internal and External assessments. • Through continual assessment of curriculum delivery throughout the semester vide assignments, internal class tests, in semester examinations etc. • Interim reviews for Projects and Seminars
8	Faculty of Architecture, Manipal	• Student Information System • Class committee meetings • BOS, Employer feedback of training batch
9	School of Communication, Manipal	• Through Alumni cell
10	School of Information Sciences, Manipal	• Continuous internal assessment and evaluation system includes theory tests, lab tests, theory assignments and lab assignments. • Seminars, mini-projects and internship projects.
11	Welcomgroup Graduate School of Hotel Administration, Manipal	• Class Committee meetings are held at regular intervals • Elected student council empowered with monitoring of student progression • Online attendance and progress reports • Qualitative feedback about students' progress • Awards and Recognitions including Gold medal for meritorious students • Different scholarships (ITC & Endowment) based on CGPA of students
12	Manipal Center for Philosophy & Humanities, Manipal	• Regular meeting held with Student Affairs coordinator and Student Council.

5.3 (a) Total Number of students

UG	PG	Ph. D.	Others
15524	4479	175	692

(b) No. of students outside the state   13671

(c) No. of international students   1846

	No	%			No	%
Men	12213	59		Women	8657	41

Last Year						This Year			
General	SC	ST	OBC	Physically Challenged	Total	General	SC/ST/OBC	Physically Challenged	Total
22198					**22198**	**19114**	**1755**	**1**	**20870**

Demand ratio **1:18.2** (Average of all courses)

Dropout % : Lowest: **0%**; Highest: 5.32**%**; Avg: **2.12%**

5.4 Details of student support mechanism for coaching for competitive examinations (If any)

Sl. No.	Institution	Student Support Mechanism	No. of students benefited
1	School of Life Sciences, Manipal	Special coaching classes held for students and research scholars preparing for the CSIR-NET examinations	30
2	Manipal College of Pharmaceutical Sciences, Manipal	GPAT, GRE, TOEFL training programme (Ref Academic Dairy and calendar. Also training on Soft skills/Communication, Study materials for competitive examinations in the library. Through tutorial classes. Interactions with coaching agencies	230
3	Manipal College of Dental Sciences, Mangalore	All Sessional exams are conducted by including the component of Multiple Choice Questions in line with National Competitive exam pattern	400
4	Kasturba Medical College, Mangalore	The examination pattern has MCQ and students are trained to answer the MCQ. Moreover, students are taught in the course itself as to how answer the competitive exams	
5	School of Management, Manipal	Courses offered for preparing students for competitive exams	400

| 6 | Manipal Institute of Technology, Manipal | Done at the institution level, with the support of Education Technology cell and placement cell
• **Education Technology cell:**
  o organizes special classes in personality development skills
  o Organizes various foreign language classes, and lectures in soft skills.
  o Arranges training on facing the interviews and group discussions
• **Placement cell:** to carry out the placement
  o Arranges collaboration between industry and academic and thereby promotes industry institute partnerships.
  o Consistently high quality of placements have been achieved through the cell.
  o Established a long lasting and fruitful relationship with industries
  o Arranges workshops on how to face the interviews and choice of campus
  o Wide publicity is given for the competitive exams and skill development is provided through the Guest lecturers in core and allied chemical engineering subjects by academic and industrial experts
  o Conduct Placement Training Class for UG and PG students in the department
  o Aptitude (Logical Reasoning) and soft skills | 240 |
| 7 | School of Communication, Manipal | The support system exist within curriculum | |

5.5 No. of students qualified in these examinations

NET	3	SET/SLET	NA	GATE	303	CAT	12
IAS/IPS etc	1	State PSC	-	UPSC	-	Others	101

5.6 Details of student counselling ~~and career guidance~~

Counselling

1	No students Counselled by Director Student Affairs	71
2	No students Counselled by Deputy Director Student Affairs	120
3	No of students counselled by Student Counsellor	1093
Total		**1284**

No. of students benefitted   **1178**

Career Guidance

No. of Students benefited   **245**

5.7 Details of campus placement

Institution	On campus			Off Campus
	Number of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Students Placed
KMC, Manipal	8	41	15	14
MCON, Manipal	3	185	55	40
SOAHS, Manipal	9	96	41	143
MCOPS, Manipal	12	88	18	66
SOIS, Manipal	68	135	126	26
SOM, Manipal	18	93	47	-
SOC	30	77	70	7
WGSHA	12	52	50	02
MIT, Manipal	133	1091	993	10+
FOA	NIL	NIL	NIL	4
SOLS	0	0	0	24
STATISTICS	4	13	13	1
COMMERCE	9	68	44	25
PUBLIC HEALTH	6	80	12	88
TOTAL	**312**	**2019**	**1484**	**450**

5.8 Details of gender sensitization programmes

A Total of 96 sessions have been conducted by an external expert from Bangalore, in which, 6009 employees (Faculty, officials, non-teaching staff and outsourced staff) were covered and benefitted

For Students - Scheduled as an annual event from January 2017

5.9 Students Activities
5.9.1 No. of students participated in Sports, Games and other events

State/ University level 761   National level 148   International level 6

No. of students participated in cultural events

State/ University level 1052   National level 1083   International level 25

5.9.2 No. of medals /awards won by students in Sports, Games and other events

Sports: State/ University level 169   National level 43   International level 7

Cultural: State/ University level 144   National level 58   International level 2

5.10 Scholarships and Financial Support

#	TYPE OF SCHOLARSHIP	2014-15 # Students	Amount (In Rs)
1	AGE SCHOLARSHIP	141	17,06,985
2	AGE SCHOLARSHIP (For B.ech Lateral Students)	92	63,49,375
3	AICTE SCHOLARSHIP	314	4,95,29,000
4	G SHANKAR FAMILY TRUST	10	2,35,000
5	KONKANI SCHOLARSHIP	829	1,79,91,340
6	KUNDAPUR MOHAN & LATA BHANDARKAR SCHOLARSHIP	10	3,25,000
7	SAGES	371	7,69,43,875
8	M-C-M SCHOLARSHIP (for BSc Nursing students)	66	30,55,000
9	M-C-M SCHOLARSHIP (for General Nursing students)	30	3,60,000
10	SCHOLARSHIP FOR MERITORIUS STUDENT (SOIS students)	16	8,44,500
11	SCHOLARSHIP FOR MERITORIUS STUDENT (BDS students)	7	45,19,412
12	FREESHIP/MCM SCHOLARSHIP	172	4,13,75,750
	Total (A)	**2,058**	**20,32,35,237**
	From Manipal Foundation		
1	STAFF CHILD/SPOUSE SCHOLARSHIP	309	5,05,89,370
	Total (B)	**309**	**5,05,89,370**
	Grand Total (A+B)	**2,367**	**25,38,24,607**

Financial support from government

Scholarship for SC/ST Category		13	7,65,600
Financial support from other sources		11	5184900

5.11   Student organised / initiatives

Fairs   : State/ University level | 35 | **National level** | 8 | **International level** | 4 |

Exhibition: State/ University level | 33 | **National level** | 2 | **International level** | NIL |

5.12   No. of social initiatives undertaken by the students | 85 |

5.13   Major grievances of students (if any) redressed: | 10 |

<div align="center">

Criterion – VI
</div>

6. Governance, Leadership and Management

6.1 State the Vision and Mission of the institution

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.

6.2 Does the Institution has a management Information System

Yes. We are having University Management Software

- Student Information System (SIS)
- HR Management System
- Financial Accounting System,
- Purchase and Inventory System,
- Hostel Management System,
- Library Management System
- Online attendance
- Online feedback
- Administrative procedures including finance, Student admission, Student records, Evaluation and examination procedures, Research administration, etc
- Patient Management System,
- Employee Self Service, Biometric attendance system for faculty etc..

6.3 Quality improvement strategies adopted by the institution for each of the following:

6.3.1 Curriculum Development

KMC Manipal

- Twice a year Board of Studies meeting to upgrade curriculum, Examination pattern, Teaching methodology
- Inclusion of Subject Expert in the BoS from other University
- Inclusion of Student Representative
- Separate Board of studies for Pre, Para and Clinical departments and for PG and Super specialty departments
- Feedback from students

KMC Mangalore

The Curriculum for the Medical UG and PG is determined by the MCI. Curricular reforms can be adopted only for Curriculum delivery. Curricular reforms are deliberated in the curriculum committee meetings and then discussed in Board of studies meetings. Each BOS (Preclinical, paraclinical and Clinical) meets regularly to the strategies for curricular improvement and approves it. The Institution has appointed Assoc Dean specific for Academics, Quality and compliance, who guides and oversees the implementation of the approved changes. Recently the Curriculum committee was reconstituted as per the specification of the regulatory body. In the year 2015, small group teaching was

introduced across the paraclinical subjects and continued in 2016. Also OSPE was conducted across the pre and paraclinical subjects. Feed back on curriculum is taken. Any difference in score of 0.2, the departments need to send the root cause analysis to the MEU and take corrective/ remedial measures

SOAHS Manipal
- Conduct of BOS meetings
- Discussion in department meetings
- Student and faculty feedback
- Inputs from stakeholders

SOLS Manipal
- Identify current areas of relevance and update the curriculum periodically
- Move towards Choice-based credit system

MCOPS Manipal
Curriculum Development Cell activities

MCON Manipal
- Introduction of geriatric nursing as a subject to third year BSc Nursing and II year PBBSc Nursing
- Introduction of Evidence Based Practice as part of Nursing Research in IV year BSc Nursing and II year PBBSc Nursing
- Interchange of subjects Nursing Research and Statistics and Midwifery and Obstetrical Nursing between third year and fourth year BSc Nursing as per INC instruction

MCODS Mangalore
- Yearly twice Board of Studies meeting to upgrade curriculum, Examination pattern, Teaching methodology
- Inclusion of Subject Expert in the BoS from other University
- Inclusion of Student Representative
- Separate Board for each subject/year
- Feedback from students and experts

MCODS Manipal
Regular Board of studies meetings are held at university level to review the academic progress of the student, curriculum delivery and student feedback on various aspects of the academic program

MIT Manipal
- Maintained course plan / lecture plan and respective faculty will follow the same lecture in the class.
- Started conducting class committee meetings to know about the problems from the students in the respective subject in the presence of faculty and solution will be recommended by the department committee headed by the HOD and other members and the corrective measures will be communicated to the students.
- Each member of the faculty entitles for updating of the curriculum as and when required and report it to the course coordinator

- It is further recommended to Department Curriculum Committee (DCC) and forwarded to the Board of Studies (BOS), for suggestions/revisions and later approved by BOS/Academic Senate.

  Class Committee:
  - ➢ Separate class committees are constituted by the Head of the department for III to VIII semester of B.Tech programme and for every semester of M.Tech programme. Members: A senior faculty of the department as Chairman, Course Coordinators/Course Instructors of all courses and student representatives.
  - ➢ Functions of the Class Committee: The class committee will meet thrice in a semester. The first meeting will be held within two weeks from the commencement of the semester in which the course plan, evaluation plan etc. are discussed. The second meeting will be held two weeks after the first test to collect feedback and improve the effectiveness of the teaching learning process. Performance of the students in the tests may also be analyzed. The chairman of the class committee should send the minutes of the class committee meeting to the Associate Director (Academic) through the Head of the Department after each class committee meeting.
  - ➢ The third meeting is to be held to analyze the performance of the students in all courses of study and grade finalization. The Head of the department will declare the result of III to VIII semester B.Tech programme and I to III semester M.Tech programme.

  Department Curriculum Committee (DCC)
  - ➢ DCC consists of Program Coordinator Course Coordinator and faculty representatives.
  - ➢ Chaired by Program Coordinator, the committee monitors the attainment of program objectives.
  - ➢ Evaluates program effectiveness and proposes necessary changes.
  - ➢ Prepares periodic reports, records on program activities, progress, status or other special reports for management key stake holders.
  - ➢ Motivates the faculty and students towards attending workshops, developing projects, working models, paper publications and research.
  - ➢ Interact with students, faculty, Program Coordinators, Module Coordinator and outside/community agencies (through their representation) in facilitating program educational objectives.
  - ➢ DCC meets at least once in a Semester to review the program and submits report to BOS at the Institute level.
  - ➢ Feed-back collected from experts from industry, R & D, alumni and students
  - ➢ Through industry initiated electives
  - ➢ Department Curriculum Committee looks after the curriculum and takes inputs from the faculty members and if any minor change in the curriculum is required, the same will be put forth in the DCC meetings and if approved will be put forth in the BOS meeting for approval
  - ➢ The department, being a part of MIT, which is a constituent Institute of MAHE, enjoys academic freedom. There are regular minor and major course revisions to the programmes. Minor revisions are being carried out at every semester and major revision is carried out once in four years. All faculty members are involved in the curriculum revision at the entry level. The syllabus and the revision will be framed by the senior faculty and discussed at the department meeting attended by all the faculty members. Department Curriculum Committee (DCC) at the entry level should approve the programme revision.

The DCC constitutes of department experts, student representatives as-well-as representatives from industries and academic institutions of repute.

➢ The curriculum approved by the DCC at the Institute level passes through the BOS, which also consists of student representatives as-well-as experts from industries and academic institutions of repute. Final approval is given by the Academic Senate.

➢ The last major revision of syllabus was implemented from the academic year 2014-2015.

➢ Semester scheme with 10-point Credit System.

➢ To appreciate the importance of knowledge existing in other domains, there is a provision of open electives wherein students can opt a set of subjects offered by different

➢ Departments / Institutions under MU. Some such courses offered by our department are:
  ❖ Consumer Electronics
  ❖ MEMs Technology
  ❖ Neural Networks and Fuzzy Logic etc.

➢ Consulted the students, industry personnel and member from academia during the framing of syllabus

➢ Proposed Curriculum revision, Reduction of credit, and introduction of Minor specialization for 2014 syllabus onwards

➢ BTech curriculum revised

➢ Constant Revision of the Curriculum every few years with due inputs from industry experts and academicians (DCC Meetings, BOS meetings)

➢ Industry experts have been included

➢ Academicians from other Institute and Departments have been included

➢ Industry experts have been included

➢ Academicians from other Institute and Departments have been included

➢ Syllabus has been revised

➢ The academic committee is in contact with the alumni and employers consistently and takes feedback during curriculum development. The feedback is incorporated in offering of newer open electives and programme electives during the curriculum revision, introduction of courses, or invited lectures on multi-disciplinary areas.

➢ Keeping in mind the Graduate attributes: Engineering knowledge, Problem Analysis, Conducting investigations of complex problems

➢ Regular syllabus/curriculum review by DCC

FOA Manipal
• Feedback from Alumni, Industry and Employers in curriculum development.
• Board of Studies

SOM Manipal
Feedback from guests from Industry, Alumni, Board of Studies, and Employers

SOC Manipal
Established curriculum is revisited and restructured.

SOIS Manipal
Curriculum developed based on the industrial requirements (feedback from Alumni who are working in industry)

WGSHA Manipal

A systematic and regular review of the curriculum is conducted twice during the Academic year and changes are incorporated after due approval at the Board of Studies and the Academic Senate of the University..

6.3.2   Teaching and Learning

KMC Manipal
- ICT enabled teaching, didactic lectures, discussions, seminars, quiz contests, Case Based Learning
- Academic calendar prepared and given to students and strictly adhered
- Course outline and syllabus given to students in the form of Hand Book/Soft copy
- E-learning platform, impartus for capturing lectures, SDL and PBL and TBL have stated

KMC Mangalore

The institution has a Medical education unit which is very active and conducts a number of Faculty development programmes which benefit the faculty and help them improve their instructional methods. In the last year, institution has been successful in introducing newer teaching methodologies (integrated teaching, PBL, Flip classroom) and innovative methodologies (use of crossword, jumble, case scenario discussions). Small group teaching in the form of tutorials, seminars, table teaching, bedside clinics etc are implemented successfully. In present period, 11.9% of classes had innovation introduced up from 4.5% of classes in 2015. Learning outcome, Teaching method and content is specified in lesson plan which the faculty prepare before a scheduled class. At the end of each semester a teacher teaches, an anonymous student feedback is collected online and the findings are communicated to the faculty, for them to reflect and review their teaching methodologies. Slow learners are regularly monitored and counselled and helped to improve. To facilitate the MCI directive of small group teaching and Vertical Integration, MEU conducted workshop on SGT and Integrated teaching. MEU also facilitates the FAIMER Fellowship.

SOAHS Manipal
- Subject experts attend teaching-learning workshops. Use of advanced teaching methods such as problem based learning. Establishment of Inter professional Health education unit for training teachers in allied health sciences

MCODS Manipal
- Teaching and learning activities are planned at the beginning of the year and the process of timely delivery is evaluated through internal audits. Student learning is evaluated through planned internal assessment and the slow learners are counselled.

MCON Manipal
- Innovative teaching learning method are adopted, e.g: Team based learning.

MCODS Mangalore
- ICT enabled teaching, didactic lectures, discussions, slide seminars, quiz contests, Objective Structured Practical Examination (OSPE), Objective Structured Clinical Examinations (OSCE), Objective & descriptive type theory exams, Case Based Learning and Viva-voce
- Academic calendar prepared and given to students and strictly adhered
- Course outline and syllabus given to students in the form of Hand Book/Soft copy

MCPH Manipal
- Regular internal assessment of courses, modules and teaching
- Semester-based term papers that are evaluated on quality of research and writing
- Development of syllabi by faculty individually and in conversation
- Courses taught in modules
- Thematic pedagogic standards
- Class presentations on themes, research and prescribed readings list

MIT Manipal
- Mentor is appointed by the department and by Identifying weaker students and counselling them to improve their academics in the successive class.
- Learning is never ending process and faculty have been encouraged to attend faculty development programs, attending conferences, presenting papers, carry out research in their interested engineering field
- Regular black-board teaching supported by power-point presentations, assignments, quizzes, Peer-learning (through Tutors), and Tutorial Sessions. Setting appropriate question papers is also a part of the teaching-learning process
  - ❖ Tutorial based learning
  - ❖ Remedial classes conducted for identified week students
  - ❖ Mentoring system:
    - o Faculty advisor to help at individual level at the department
    - o Faculty advisor for professional activities (BMESI)
    - o Subject coordinators
    - o Placement coordinator for career guidance
  - ❖ Class committee meetings to address student issues pertaining to academics and others
  - ❖ Provision for psychiatric counseling for students if necessary by experts from KMC
- Induction programme will be conducted for newly joined faculty through Technology & Development cell in the Institute.
- A senior faculty will be a mentor the newly joined faculty in the department.
- Class Committees are formed for each semester comprising faculty members as well as student representatives, which meet to discuss the teaching-learning process and also the result analysis of the sessional and the end semester examinations. Based on the inputs given by the faculty members the counselling of weaker students is taken up.
- We have faculty advisor scheme (for higher semester students), where each faculty member monitors a set of students. The students can approach the faculty advisor regarding their academic problems. Faculty advisor forms an interface between his /her students and the faculty members/administrators concerned in solving students' problems.
- We have class committees represented by both teachers and students. The committee meets twice /thrice a semester to discuss and solve academic problems and other issues. There are section coordinators and lab- in- charges to try and resolve issues related to students in classes and laboratories. We have a process to address/counsel academically weak students. As per the process, an academically weak student needs to be identified and effort is made to see that they are going to be one in the mainstream.
- Inputs from the above are utilized for counselling teachers as-well-as students by the HOD / senior faculty. With the support of teaching assistants and faculty, additional classes are conducted for academically poor students.

- At the end of the course work, feedback on teaching- learning is collected from the students for further improvement of academic process.
- The newly inducted faculty members are trained on teaching skills. Learning is achieved on attending various workshops within and outside the university.
- Surprise test, Open elective from other institutes, Remedial classes, Introduction of mini project along with Lab.
- Concept of continuous evaluation is adopted where evaluation of student performance takes place throughout the semester in for of assignments, sessional exams, and end semester examinations. Class committee meetings take place at regular intervals every semester where students and faculty members discuss learning objectives and their compliance, matters related to academics. Counseling of under achievers is done.
- Maintaining Course plan
- Conducting Tutorials, assignment and sessional exams
- Counselling of weak students
- Academic committee has been constituted in the department to discuss matters pertaining to curriculum development and teaching - learning process.
- Illustrative teaching (simulations & animations where ever possible), power point presentations, problem based learning, quizzes, seminars, projects and tutorials
- Focus on slow learners through additional classes, use of innovative methods like GD, active learning and soft skill development.

FOA Manipal
Industry-academia interface for practical knowledge, Integrated learning system, innovative teaching methods, hands on workshops, field trips, case studies, study tours, interaction with alumni, guest lectures.

SOM Manipal
Learning Management System adopted
Online quizzes, Skype guest talks, industry academia interface for practical knowledge, feedback of IQAC incorporated in teaching

SOC Manipal
Incorporating ICT methods, group seminars and interactive teaching and field visits, film festival and workshops

SOIS Manipal
Faculty members updating knowledge in the latest technologies by organizing and attending workshops, seminars and conferences

WGSHA Manipal
Teaching/Learning Methodologies: Lectures, Power point presentations, Discussion, Case studies, Student Presentations, Individual tasks/Group work, Videos, Hands on Training, etc.
Apart from these, the students are encouraged to involve in other research areas of their interest, participate in symposiums and conferences both inside and outside the university, and thereby help build the personal development and the university at large.
The Institution strives towards Continuous Innovation and updation of the teaching learning process to incorporate best practices of the Industry as well as the Academics

6.3.3 Examination and Evaluation

> 1. Adopted On Screen Marking System (OSM) for valuation of all the answer papers of University examinations
> 2. Initialized the process for digital examination/evaluation through e-pad devices.

KMC Manipal
Most departments follow
- Objective Structured Practical Examination (OSPE)
- Objective Structured Clinical Examinations (OSCE)
- Objective and Descriptive type of Theory questions
- Problem solving type of questions
- Multiple choice questions
- Viva-voce examination
- On screen marking and introduction of e-pads for students to write exams

KMC Mangalore
Sessional examinations both theory and viva are conducted in the same format as that of university examinations, at frequent intervals and the results are communicated to the students. Students are also permitted to see their answer script and discuss with the faculty on areas of improvement. In addition frequent formative evaluations such as table test, end posting viva, PBL presentation evaluations, integrated case scenario solving, logbook evaluations, seminar evaluations and are done to assess the learning outcomes and give feedback to the students. It also helps us to evaluate the teaching methodologies. A percentage of the sessional performance is added to the university results as internal assessment which as calculated as per the standard procedure for internal assessment. The r value for 3015 was 0.740 (In 2014 it was 0.68). University examinations are conducted and results announced within 10 days of last day of examination. Students who fail to score the minimum required marks will attend improvement classes and reappear for the university exams after 6 weeks and hence have a second chance to clear the exams.

SOAHS Manipal
- E-pads (Digital examinations)
- Faculty Squad – for random checks
- Online Screen Marking system

SOLS Manipal
- Plans of examination via e-pads and online evaluation of answer scripts
- To enhance student graduation rate (target: 1% better than average of three previous batches)

MCODS Manipal
E-pad examination will be introduced to the first year students. In this regard, an orientation program on the e-pad examination was organized to the students

MCON Manipal
Examination: Sessional examination
- Three sessional exams are conducted per subject
- Question paper pattern – Same as university examination

- Question paper preparation – Prepared by the subject coordinator, scrutinized by the faculty from other department and approved by the HoD and Dean.
- One week prior to the examination question paper will be prepared and handed over to the HoD.
- Invigilation – One invigilator for every twenty five students and exam chief superintendent for each day will be planned and the exam schedule will be prepared one month prior to the examination.

Evaluation: Sessional examination
Evaluation is done by the faculty within two weeks after the examination and answer papers will be distributed to the student.
University examination: One internal and one external examiner will be evaluating the paper.
Practical examination – feedback is taken from the external examiners.

MCODS Mangalore
1. Examination dates are strictly adhered to as given in the Academic calendar.
2. Continuous assessment of the students through regular sessional exams with 10% weightage as internal assessment in both Theory and Practicals/Clinicals for each subject
3. Students with minimum 75% Attendance and 30% Internal assessment only eligible to write University Exam
4. Evaluation is done in most transparent way with Double evaluation by coding the paper
5. On Screen Marking (OSM) evaluation

MIT Manipal
- Periodic assignments were given to the students where it is required to be submitted by the students with in the stipulated time, subsequently corrections were carried out and evaluated assignments were given back to the students
- Internal assessment test (sessional) were conducted as per institution timetable twice a semester.
- Final exam (end semester) conducted as per centralized timetable from institution.
  - ❖ Assignment evaluation: out of 10 marks
  - ❖ Sessional Test: 20 + 20= 40 marks
  - ❖ Final exam: out of 50 marks
- Through continuous evaluation of students through in-semester tests(two sessional tests, quizzes, assignments and end semester examination
- Periodic class committee meetings are also conducted to get feedback/suggestions from faculty members as well as students. Feedback from alumni is also taken.
- Result-analysis after examinations
- Counselling of poor-performers after each examination.
- Continuous evaluations of students will be done through assignments, tests and end semester examination.
- Students are evaluated relatively on a grade scale of 10. Every theory subject will have 50% of in-semester marks (continuous evaluation) and 50% of end semester marks. A minimum of 18 marks out of 50 is necessary in the end semester exam to obtain the credit for the course.
- Students have the provision to see their answer script and apply for re-evaluation as per university norms.
- The academic performance of a student is assessed by the course instructor /s concerned.

- The student performance in each theory course is evaluated out of 100 marks, of which 50 marks are for in semester assessments and 50 marks are for end semester assessments. In semester assessment in theory courses is based on periodic tests, assignments, quizzes, case presentations, seminars etc, which shall be defined by the course instructor.
- The student performance in the laboratory courses is also evaluated out of 100 marks and is based on in semester assessment out of 60 marks and end semester examination for 40 marks.
- Course instructors are to give the complete course plan approved by the HOD, at the beginning of the semester. Course plan included lesson plan and evaluation plan of the course offered.
- The performance of the student in a course is reflected in the Letter Grade awarded Continuous evaluation adopted reducing the strain on the students. Questions are framed so that the range of result forms a Gaussian curve
- Assignment weightage increased from 10 to 20, increase in credit of Lab. All question made compulsory for end semester exams.
- Assessment techniques comprise of tests, assignments, quizzes and exams. Semester exam questions are set to target different course objectives. Student performance is then mapped to different course outcomes and an analysis of the same reveals the extent to which course outcomes are met. Necessary changes are then implemented accordingly.
- Scrutiny of Tutorial, Sessional and Semester Question paper
- Maintaining the schemes of Tutorial, Sessional and Semester Question paper
- Evaluating and processing the results as per Institute norms
- Tests are the preparations for the end semester examination and are conducted in the same manner, except for the duration, which is one hour against that of three hours for the examinations. Two tests will be conducted in each semester and the contents will be announced in the beginning of the semester while course plan is distributed to the students.
- Periodic Assignments and sessional examinations.
- Continuous Evaluation, inclusion of MCQ in the Sessional Question paper.

FOA Manipal
- Progressive evaluation
- Evaluation Systems by employers/industry experts/alumni to measure the overall effectiveness of the students work
- Double Valuation of End Semester Examination

SOM Manipal
Initialized process of examination through e-pad for BBM

SOC Manipal
Passing marks in internal assessment made compulsory to appear in external examination. Extra classes for students in need of special attention continuation of dual evaluation process.

SOIS Manipal
- Modification of credits in the existing ME (Embedded Systems and Instrumentation) program to 25 credits in semester -1, 25 credits in semester-2 and 25 credits in semesters 3 & 4 from 30 credits in semester -1, 30 credits in semester-2 and 15 credits in semesters 3 & 4 to the total credit of 75.

- Standard Operating Procedure for conducting semester Examination, Evaluation and publishing the result at School of Information sciences for implementation from August 2016 onwards

WGSHA Manipal

The institution has a process of examination and evaluation with a lot of stress on Continuous Internal Assessment with a smaller component of the End term examination. This enables a timely and regular feedback to the students enhancing their Academic performance. Additionally, we follow autonomous system of examination wherein the Institute is responsible for conducting and as well as declaration of results

6.3.4 Research and Development

Research Promotion

i.   Implementation of uniform research policy including intellectual property rights, ethics, academic dishonesty, and plagiarism.
ii.   An annual budget of more than INR 33 crores is earmarked for 2017 –'18
iii.   Provision to utilize matching grants, seed money, publication charges and other research promotional activities
iv.   Concerted efforts to share specialized equipment, and establish a central instrumentation facility, library, and innovation hub etc.
v.   Facilitate Academic – Corporate partnerships through tie-up with industry and premier institutions within India and overseas
vi.   Encourage researchers for international training, mobility and career progression through awareness programmes
vii.   Identify potential research groups for capacity building in higher education.
viii. Integrate the publication incentive points with the Employee Self Service, to enable participation in an international conference.
ix.   Subscription to databases like Scopus, Web of Science and access to publishers like Springer-Nature, Elsevier etc. to access e-books and Journals.
x.   Introduction of bursary schemes for deserving undergraduate and postgraduate students and research scholars.
xi.   Invitation to researchers to showcase their research achievements in the Manipal Research Review and MAHE Research E-Bulletin
xii.   Benefaction of specialty journals in Medicine, Dentistry, Nursing, Allied Health, Pharmacy, Technology, Management and Engineering
xiii. Institute Dr. T M A Pai endowment chair with worth of Rs. 10 lakhs
xiv.   Initiate newer policies to promote student research
xv.   Establish newer centres to promote independent research

6.3.5 Library, ICT and physical infrastructure / instrumentation

- On Campus and Off Campus access to Online Journals and online databases have been provided. Library has a computer lab with Internet access.
- User feedback (online) mechanism is introduced
- Ezproxy technology is used for remote access of e-resources of the library
- Staff members are deputed for training programs
- Computer, scanner kiosk, printer, Photocopying Machine.

MAHE has an excellent Health Sciences Library, perhaps the best among all Health Sciences Libraries in India. The state of the art library stretching over 1.5 lakh square feet,

on five levels is a domain for information seekers; be it students, faculty or researchers. 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 such as e-learning, access to internet and web resources including online journals and e-books. Library is providing a growing range of databases on the campus network. Access to e-resources subscribed by the library has also been provided for off-campus users. All the library services have been automated on modern line. The library has fully computerized its collection, which could be accessible through OPAC. The library is enabled with Wi-Fi technology and security systems with Closed Circuit Television System (CCTV). There is a separate audio-visual room, computer lab, group study area and private study area in the library. The library has excellent computing infrastructure including 103 PCs, 14 printers, 1 color laser printer and 8 scanners. The library has all the facilities for the students to learn. The Health Sciences Library is committed to provide a world-class information support to its users.

- Access to online books
- State of the art instruments and labs
- Centralized classrooms with LCD facilities.

6.3.6 Human Resource Management

- Introducing a new software for talent banking & recruitment
- Upgrading to a new ERP module for HR-IS & payroll
- Recruitment through new technologies (telephonic & video conferencing)
- Reduction of paper consumption by adopting electronic means of communication
- Interview call letters through emails/telephonic calls
- Training & Development programs
- Providing ample opportunity for conducting research
- Support for participating in national and international conferences/ workshops
- Performance incentives are given based on the appraisal.

6.3.7 Faculty and Staff recruitment

- Recruitment through new technologies (telephonic & video conferencing)
- Recruitment through new technologies (telephonic & video conferencing)
- Reduction of paper consumption by using computers
- Interview call letters through emails/telephonic calls
- Introducing a new software for talent banking & recruitment
- MAHE has been a pioneer in attracting and acquiring the best in class academic staff from all over the country without any prejudice with regard to Religion, Region, Sex, Caste etc.
- Every recruitment is through Selection Committee chaired by the Vice Chancellor/Registrar along with other members viz. Pro VC, HOI, HOD and Deputy Director – HR

6.3.8 Industry Interaction / Collaboration

Sl. No	Institution	Industry interaction/Collaboration
1	Kasturba Medical College, Manipal	• Post graduate Students are sent to industry for internship for 1-2 months
2	Kasturba Medical College, Mangalore	• The Faculty participate in clinical trials conducted by industry. In 2016, 5 such trials were completed and 12 were ongoing. Besides this, industry collaborated research projects are also encouraged and Department of Microbiology, participated and completed 2 such projects and one project is on goin projects
3	School of Allied Health Sciences, Manipa	• Low cost Diagnostic equipment prototype development in collaboration with industries, training for students during internship in the industries
4	School of Life Sciences, Manipal	• Seek and promote industry collaborations
5	Manipal College of Dental Sciences, Manipal	• The college is actively involved in industry collaboration with Nobel Biocare Ltd and is organizing a certificate course in Oral Implantology. This year a total of two post graduate dissertation projects are funded by Nobel Biocare. Similarly, Biogaia, Sweden provided materials for the postgraduate dissertation research at the department of Pedodontics and Preventive Dentistry
6	Manipal College of Dental Sciences, Mangalore	• MOU with International University • Student exchange programme
7	Manipal College of Nursing, Manipal	• Industry representatives address the students prior to campus interview and selection. • Students get direct exposure to the industries during their clinical postings. • External clinical postings. • Informal career guidance by the subject teachers and Class coordinators.

		• Student participation in Research activities/conferences enhance collaboration
8	Manipal College of Pharmaceutical Sciences, Manipal	• Interaction with industries through IIPC/CDC activities
9	Manipal Institute of Technology, Manipal	• Continuous Increase in internship and placement for UG and PG programmes. • Continuous Improvement in quality of companies visiting for internship and placement
10	Faculty of Architecture, Manipal	• Guest Lectures conducted by eminent industry experts. **Details in Annexure -II**
11	School of Information Sciences, Manipal	• All courses are started with inputs from industry for curriculum development. • Industry supported labs for teaching and learning. • Industries defined and guided mini-projects and internships. • Visit of industry experts to train faculty and students in the latest technologies on need basis. • Participation of industry experts in curriculum updation
12	School of Management, Manipal	• Guest talks by industry experts and Skype lectures by experts in different subjects, Campus visit by industry experts/international universities
13	Welcomgroup Garduate School of Hotel Administration, Manipal	• Faculty undergo refresher training in various hotels during the vacation period. Industry experts like the General Managers and Chefs are invited for Symposiums to give talks to our students. They are also invited as judges for various competitions. Our Placement Cell interacts with various Hotel Managers for campus recruitment and Industrial training. • The college has a professional collaboration with ITC Limited. It's a industry partnership between ITC and MAHE, Manipal
14	Department of Statistics, KMC - Manipal	• The Department conducts Executive Education Program in Biostatistics for associates of Novartis Healthcare Pvt Ltd., Hyderabad • GSK, Bangalore give cash awards and medals to the two best outgoing students of M.Sc Biostatistics

6.3.9 Admission of Students

- Publicity drives through Television, radio and Newspaper advertisements.
- Media campaigns
- School contact programs
- Career guidance fairs, educational exhibitions in India & abroad
- "Teenovators" program – a successful nationwide quiz competition for a younger age (8th – 10th Grade) Group from 400 schools, arranged through independent entities with a aim to encourage & develop innovative minds.
- Introduced for the first time fully online Common Counseling for B.Tech programs along with Sikkim Manipal University and Manipal University Jaipur.

6.4 Welfare schemes for

Teaching	National Pension Scheme
	Provident Fund & EDLI Scheme
	Gratuity
	Employee State Insurance
	Medicare Facility to employees
	Medicare Facility to employee dependent parents
	Group Term Life Insurance for social security of family
	Scholarship on course fee of employees children/spouse studying in MAHE/constituent institutions
	Reimbursement of children educational expenses studying in Manipal Group schools/institutions
	Scholarship for Academy of General Education students studying in MAHE, Manipal
	SODEXO Meal/Gift vouchers
	MARENA Sports Facility
	Reimbursement of higher education fee of employees
	Incentives for excellence teaching & research
	Best Teacher Award
	Seed money for research
	Dr. TMA Pai Gold Medal for outstanding research
	Incentives for preparing e-learning materials
	Reimbursement of subscription fee (subject to limit) of one professional society
	Laptop facility to teaching staff
	Institutional accommodation facility
	Interest subsidy on housing / utility loans
	Valley Club/Faculty Club facility
	Leave Travel concession
	Conference Facility - financial assistance for attending conference / workshops
	Employee Grievance Redressal Committee
	Sports & Cultural activities

Non-Teaching	National Pension Scheme
	Provident Fund & EDLI Scheme
	Gratuity
	Employee State Insurance
	Medicare Facility to employees
	Medicare Facility to 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 schools/institutions
	Scholarship for Academy of General Education students studying in MAHE, Manipal
	SODEXO Meal/Gift vouchers
	MARENA Sports Facility
	Reimbursement of higher education fee of employees
	Institutional accommodation facility
	Employee Grievance Redressal Committee
	Sports & Cultural activities
Students	Student Health Clinic
	Teacher Guardian scheme
	Counselling Support System
	Student Grievance Cell
	Anti-ragging Committee
	Internal Complaints Committee
	Workshops & Awareness Programs
	Student Club Activities
	Yoga Classes

6.5 Total corpus fund generated   1066.09 Lakhs

6.6 Whether annual financial audit has been done   **Yes** ✔   **No** ☐

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

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	Yes	ISO Certification agency M/s TUV Rheinland Pvt. Ltd. B'lore	Yes	Internal Quality auditors certification
Administrative	Yes	-do-	Yes	-do-

6.8 Does the University/ Autonomous College declares results within 30 days?

For UG Programmes   Yes   [✓]   No   [ ]

For PG Programmes   Yes   [✓]   No   [ ]

6.9 What efforts are made by the University/ Autonomous College for Examination Reforms?

> **Evaluation Reforms**
> 1. Registration for the examination, Generating hall tickets and sessional mark entry through Student Information System (SIS)
> 2. Valuation through On Screen Marking System (OSM) for all the answer papers of University examinations
> 3. Initialized the process for digital examination/evaluation through e-pad devices.

6.10 What efforts are made by the University to promote autonomy in the affiliated/constituent colleges?

> 1. Autonomy status has been given to few institutions like Manipal Institute of Technology, WGSHA , SOIS etc.
> 2. Process has been started to provide autonomy status to other institutions wherever possible within a span of two years.

6.11 Activities and support from the Alumni Association

Sl. No.	Institution	Activities & Support
1	Kasturba Medical College, Manipal	• Annual alumni meeting is held • Alumni meets are conducted at the department level periodically • Alumni visit departments and deliver guest talks
2	Kasturba Medical College, Mangalore	• Coordinated KMC Mangalore senior and city alumni at the NAAC interactive sessions – May 24th 2016. Venue: TMA Pai convention center, Mangalore
3	School of Life Sciences, Manipal	• Alumni are updated about the activities and opportunities
4	Manipal College of Nursing, Manipal	• Alumni meet every year along with university alumni meet • Online registration of alumni for better networking • Recognition of alumnus for their contributions
5	Manipal College of Pharmaceutical Sciences, Manipal	• Alumni meet on February 14, 2016 in MCOPS • Alumni meet on December 20, 2015 Re union oof Alumni 1986 batch (BPharm) in MCOPS • Alumni Meet on December 21, 2015 during 67th IPC Endowment Award by Mr Ashok Chandak • Every year two alumni meets are being conducted, Three

		endowment awards were instituted by our Alumni, Alumni web portal for alumni registration
6	Manipal College of Dental Sciences, Manipal	• To celebrate the successful completion of 50 years, the college organized Golden Jubilee Alumni meet. The meet involved various academic activities in the form of scientific deliberations, talks and seminars along with interaction with current students.
7	Manipal College of Dental Sciences, Mangalore	• Alumni meetings conducted regularly • Guest lectures • Alumni awards for meritorious students • Alumni News letter
8	Manipal Institute of Technology, Manipal	• The institute is well supported by its alumni contributing as resource persons for technical talks, guest lectures, monetary assistance in building facilities etc
9	Faculty of Architecture, Manipal	Eminent and established practitioners in the field of architecture, interior design and fashion design from various parts of the country were invited to interact and have extensive individual discussions with students during various academic related activities (studio projects, thesis, dissertation, viva-voce examinations) conducted at various times in the academic year: • Ar. Srinath Adavni, Advani and associates, Bangalore • Ar. Prajosh Kumar, "Options", Mangalore • Ar. Mohammed Nissar, Abuilding Lab, Mangalore • Ar. Sunil Nayak, Sunil Nayak Architects, Mysore • Ar. Venkatesh Rao, Keystone Architects, Bangalore • Ar. Ajay Appachu, Synectics Partners, Bangalore • Ar. Vijay Upadhyay B, Bangalore • Ar. Sudhir Acharya, Hastha Constructions, Bangalore • Ar. Dhanprakash, Abuilding Lab, Mangalore • Ar. Sadanand Nayak, Architecture Plus, Mangalore • Ar. Kanchana Pai, Red Earth, Manipal • Ar. Arun Prasad, Arun Prasad and Associates, Architects and Planners, Coimbatore, Tamil Nadu • Ar. Amith Shenoy, Amith Associates, Udupi • Ar. Ashok L P Mendonca, Mendonca Associates, Mangalore The following Architectural firms headed by our alumni who have excelled in their professional practice have given our students the opportunity to do their internship with them: • Abuilding Lab Architects, Mangalore – Ar. Mohammed Nissar & Ar. Dhanprakash • Stapati Architecture, Planning and Interiors, Bangalore – Ar. Tony Joseph • Alex Jacob Architects, Bangalore – Ar. Alex Jacob • Guulshan Roy Architects, Mangalore – Ar. Guulshan Roy

		• Amith Associates, Udupi – Ar. Amith Shenoy • Ecumene Habitat Solutions Pvt. Ltd., Bangalore – Ar. Satish Desai & Ar. Vasudevan R Kadalayil • Space A.R.T Architecture, Calicut, Kerala – Ar. Vinod Cyriac • Mendonca Associates, Mangalore – Ar. Ashok Mendonca • Synectics Partners, Bangalore – Ar. Ajay Appachu • Gayathri & Namath Associates, Bangalore – Ar. Namith Varma • J & I Architects, Kochi, Kerala – Ar. Joseph John
10	School of Management, Manipal	• Alumni involved in admission process, curriculum revision and Placements
11	School of Communication, Manipal	• Annual meets held in Manipal in November 2015 and in Bangalore in June 2016. Illustrious alumni were invited as resource personnel. Further SOC has an active Alumni portal and actively networks on Facebook
12	School of Information Science, Manipal	• Alumni supports for the mini-projects, job and internship placement, guest lectures and training on latest technology
13	Welcomgroup Garduate School of Hotel Administration, Manipal	• Activities and support from the Alumni Association: WGSHA Alumni relations department is a constituent of MAHE Alumni Department. In the Institution an Alumni meet is organized every year after the Annual day. The Graduating batch and alumni from other years take part in the meet. MAHE organizes Annual Alumni meet in the month of December. Alumni are invited to give guest lectures to various courses they also are invited to judge various competitions. Every year we have a Distinguished Alumnus Award given to outstanding Alumnus selected by the top management of ITC and MAHE-Manipal

6.12 Activities and support from the Parent – Teacher Association

Sl. No.	Institution	Activities & Support
1	MCON, Manipal	• Teacher Guardian- communicate with the parents regularly • Sessional marks and attendance is sent to the parents
2	SOLS	• Inputs from parents, where applicable, are incorporated to monitor progress of student
3	MCODS-Mangalore	• Participate in college activities and give feedback for improvement in T-L and student support • Representation in IQAC
4	KMC, Mangalore	• Periodic inputs are taken from the parents and these are used to monitor the progress of the ward
5	SOC, Manipal	• Parent meet during orientation session and parent as resource person

6.13 Development programmes for support staff

1. Conduct Training & Development programs like workshops/seminars Fire Safety etc.
2. Awareness programs like Gender Sensitization are conducted
3. Microsoft office training through certified consultant
4. Communication Skills through professional language teacher
5. Support for Sports & Cultural Activities

6.14 Initiatives taken by the institution to make the campus eco-friendly

MAHE is a green campus with certification under ISO 14001: 2004 by TUV Rheinland. Continuous efforts are being put into monitoring and constant up gradation to meet the rapidly expanding infrastructure. Best practices and various initiatives have helped the University to develop an unparalleled ambience for students and residents from various countries.

Few areas where the University applies eco-friendly practices are

Waste Water Management: In order to treat waste water generated in the campus state of the art sewage treatment plants are installed with a capacity of 55 lakh liters per day. In addition, the distribution system for treated water has also been enhanced to ensure efficient reuse. Treated water is used for gardening and arboriculture reducing the burden on fresh water sources. Additionally grey water treatment plant treats feeds the flush system. Using recycled water lowers groundwater extraction costs and conserves on freshwater which can be used for domestic purposes. Sludge generated is dried and used as manure as soil remediation in the University gardens. Rain water harvesting is a continuous activity being carried out every monsoon. Due to these initiatives MU has been able to plant and develop green cover in the entire campus.

Raw Water Management: Keeping in mind the growing urbanization within the campus and increasing demand for water, two approaches have been adapted: Firstly, harvesting rain water from roof tops of buildings and using the same for domestic purposes. RWH units are affixed to down take pipes of roof drains which are in turn connected to underground sumps. Secondly, diverting storm water drains and from roof tops to bore wells. In the case of the first, rainwater is collected from roof tops from existing down takes, connected to a common header and led to a trickling sand filter having individual filtering capacity of 10000 liters /hour. The filtered water is then channeled to a nearby sump and used for domestic purposes. More recently the new version of rainy filters are used.

Solid Waste Management: which consists of domestic waste, a part of which is composted using earth worms and rest are recycled, food wastes are sent to piggeries. Biomedical Waste, hazardous waste and e- wastes are segregated and disposed in a scientific manner to minimize impact on the environment.

Lung spaces: are constantly created across the campus by planting trees wherever possible. 8000 trees were planted in the last three years on campus. World environment day is celebrated on June 5th every year. All the members of the management, students and faculty engaged in a march past with placards carrying messages on environmental conservation. This culminates in a tree planting session where all heads of institutions participate.

Air Quality: In order to minimize the air emissions with in the campus, restricted entry of vehicles is in place. Emission testing center has been set up for staff and public which delivers services at subsidized rates. Ambient air quality is monitored in the campus, stack emission tests are also conducted in house to keep track of emission from all sources.

Energy Management: Various initiatives in the areas of power efficient air conditioning systems are constantly being undertaken for all new projects in the campus. As per MU guidelines hot water requirement in all hostels is met with solar energy. Presently the installed capacity is 3.9 lakh liters per day. Replacement with energy efficient light fixtures, pumps, equipment's and appliances is a continuous process.

Criterion – VII

7. Innovations and Best Practices

7.1 Innovations introduced during this academic year which have created a positive impact on the functioning of the institution. Give details.

Sl. No.	Institution	Innovations Introduced
1	Kasturba Medical College, Manipal	• Onscreen marking of answer script was introduced. Elearning platform. Impartus for recoding lectures
2	School of Allied Helath Sciences, Manipal	• Addition of Alumni affairs committee increased the number of Alumni registrations and interaction of Alumni with Alma mater • Introduction of digital examinations
3	School of Life Sciences, Manipal	• Plans to introduce CBCS for BSc program, for which details have been worked out • Plans to opt for paperless digital examinations (e-pad) • Started with high-end molecular diagnostics using NGS, MS
4	Manipal College of Dental Sciences, Manipal	• A workshop on research ethics: Current perspectives was organized to bring about awareness on the ethical considerations for carrying out research activities at the college to all the faculty. • An interactive session with Dr. TMA Pai chair was organized to encourage faculty in developing innovative dental devices. • Scientific seminars, interactive sessions on funding opportunities was also organized for the faculty members
5	Manipal College of Dental Sciences, Mangalore	• Indigenous Patient Management System (PMS) and Orthodontic Patient Management System (OPMS) • Online student and staff feedback • Smart Identity Card for students and staff
6	Manipal College of Nursing, Manipal	• Evidence Based Practice in the curriculum • Geriatric Care research • Meeting with the General body of students every year minimum of three times
7	Manipal College of Pharmaceutical Sciences, Manipal	Macro and micro academic management system • Student information systems • Online attendance/ marks • Strict adherence to examination schedules • Good teacher awards • Award for audio visual aid for teaching
8	Manipal Institute of Technology, Manipal	• Revised Teacher Guardian Scheme

9	Faculty of Architecture, Manipal	Innovative approaches have been introduced & practiced in teaching, learning, evaluation and administration system: • Participatory learning process • Inter professional interaction • Factual situations • Transparency • Flexible academic scheduling • Mentoring faculty & Students • Decentralization • Holistic development
10	School of Management, Manipal	• New online database (Capital line) procured for research in economics and finance. • Learning Management System implemented for all courses, E Pad in exams, Inter-discipliniary course hospitality and tourism introduced
11	School of Communication, Manipal	• RTI filing drive continued
12	School of Information Science, Manipal	• Study Abroad Program (SAP) - Students from Efrei, France came to study four modules. • Opportunity to study/ internship abroad • The industry linkages and practical oriented curriculum • Industry Sponsored labs • Regular workshops and invited talks from faculty, engineers and researchers on current trends to improve skill sets. • The program and subjects are updated frequently based on industry feedbacks. • Internship support for getting 10-12 months internship in an industry for second year. • Fast track refresher courses for the first semester students • Opportunities to work on industry defined mini-projects. • Industry standard hardware and software • Alumni support for curriculum update, conducting workshops and internship placements

13	Welcomgroup Garduate School of Hotel Administration, Manipal	• Herb/ Spice garden projects • Chef Vikas Khanna, a distinguished alumnus of WGSHA, has contributed a Culinary Museum to WGSHA, where utensils and equipment worth \$4 million are being collected by him and his associates • Faculty and student Research publication
14	School of Regenerative Medicine, Manipal	• Demonstration of chick embryo culture within a shell and in shell less model to understand development. • Demonstration of beating cardimyocytes derived from mESCs

7.2 Provide the Action Taken Report (ATR) based on the plan of action decided upon at the beginning of the year

Please refer Q. no. 2.15 of Part A

7.3 Give two Best Practices of the institution *(please see the format in the NAAC Self-study Manuals)*

Best Practice # 1

1. Title of the Practice

Incentives for research – Student & Faculty
(PRAISE Policy for students, Amendment to the policy on conference facilities Incentive Awards for Faculty Research and Scientific Publications with CAP)

2. Objectives of the Practice

For Faculty:

- To improve the quality of research publication in MAHE.

- To encourage faculty of MU to publish their research works in reputed journals, which are indexed in Scopus or Web of Science.

- To offer additional incentive for research publications in top journal percentiles (publications in top 10% journals by SNIP/SJR) based on SciVal.

- To benchmark research output towards the most influential, highly cited publications within similar fields of disciplines.

Applicability:

- The faculty publications having Manipal Affiliation, which are indexed in Scopus or Web of Science published after 1 January, 2017 shall be considered under FAIR publications.

- The FAIR publication is only applicable to faculty who carry out research projects approved by the affiliated institutions of MU.

- Book chapter, short surveys, erratum, replies, conference abstracts and articles in press do not qualify for FAIR publication.

  Eligibility:
- Fulltime employees of MAHE who are on payrolls and faculty appointed on contract basis are eligible for FAIR Publication.
- Faculty of MAHE can either avail the award incentive under the (Publication Award Incentive for Faculty researchers to Excel) PRAISE or Faculty Award Incentive for Research (FAIR) publication policy but not both.

For Students:

- To inculcate research consciousness among the students
- To promote research among the students of MAHE
- To improve the quality of student research
- To encourage students to publish their research works in reputed journals, which are indexed in Scopus or Web of Science
- To institute incentive awards for student research publications

Applicability:

- The student research articles where student is the first author and on rolls with MAHE affiliation published after 1 July, 2016 shall be considered for PRAISE.
- The student research articles published after July 1, 2016 having MAHE affiliation, where the first author has finished the study period and not more than three years have elapsed since then completion shall also be considered for PRAISE.
- The PRAISE is only applicable to students who carry out research projects approved by the affiliated institutions of MU.

Eligibility:

- Fulltime PhD scholars of MAHE are eligible for Publications and Research Award Incentives for Students to Excel (PRAISE) after fulfilling their mandatory requirement of two publications in Scopus/Web of Science indexed journal.
- Students enrolled for Post-graduation (MD, MS, MDS) and Super-speciality courses (DM, MCh) of MAHE are eligible for PRAISE after fulfilling their mandatory requirement of one publication in Scopus/Web of Science indexed journal.
- All undergraduate students of MAHE are eligible for PRAISE for any research publication[§] in Scopus/ Web of Science indexed journals.

- All the other PG students, when the publication is desirable, are eligible for PRAISE for the second research publication onwards in Scopus/Web of Science indexed journals.

3. The Context

Improve the research visibility of the students and faculty researchers of MAHE. Quality publication should be published in peer reviewed journals and improve the ranking of the University.

4. The Practice

Describe the practice and its uniqueness in the context of India higher education. What were the constraints/limitations, if any, faced (in about 400 words)?

Incentive for students and faculty researchers' publications is awarded based on publication in quality journals and impact factor of the publications

5. Evidence of Success

Improvement in the number of student and faculty researchers' publications in indexed journals. Increase in the h - index, i 10, i 100 of MAHE

6. Problems Encountered and Resources Required

Publication of students' and facultys' good research works getting published in predatory journals because of less awareness. Limitations to incentivize only for publication which are in indexed journals

Best Practice # 2

1. Title of the Practice

Student Support Centre (SSC) – An exclusive centre to enable students cope with personal and professional challenges; one of a kind campus facility in the country

2. Objectives of the Practice

- Early identification of barriers to academic success and providing adequate corrective measures to help students realize their potential and develop self esteem
- To offer practical and constructive support in adjusting to a new environment as well as social or personal challenges that is specific to their age group and circumstances.
- To treat mental and physical disabilities as not merely a pathological problem but as a more complex situation that requires the care of specialists who offer constant support through long periods of treatment and recovery.

- To help combat the general social taboos associated with anxieties and depression on campus, and to foster a positive outlook among students.
- To establish the University campus as a student-friendly safe space that is sensitive to physical and mental disabilities

2. The Context

India is reported to be one of the most depressed nations in the world with an estimated 36% of its population reported to be suffering from mental illness. [1]A suicide is committed every five minutes and the highest mortality is reported among those aged 15 to 29 years , accounting for a third of all suicides in the country. [2] Manipal University has over 25,000 students in this age group on its campus. Suicides, drop outs, depression, anxieties have been routinely observed and recorded over the years

4. The Practice

Existing facilities at MU (Departments of psychiatry and clinical psychology) find it difficult to devote exclusive time to student issues. Moreover, these clinical spaces are not comfortable, or accessible to someone struggling with debilitating anxieties or depression. Very often, more harm than help is done by an untrained counsellor as MU students are high-performing individuals in need of specific intervention. Besides the obvious psychiatric morbidities, there are also students with learning disabilities, impaired mobility and other unseen causes.

There is therefore a felt need for a full-fledged unit on the campus that is devoted exclusively to supporting the mental and physical disabilities of its students. In other words a "Student Support Centre" that will help MU students develop vital life skills to cope with personal and professional challenges.

This will operate as an independent unit with dedicated counsellors, therapists and psychiatrists, not attached to the hospital and located in a separate building with friendly access, activities of which will be coordinated by the University department of Student Affairs. Consultation rooms will ensure privacy as well as confidential and meticulous record keeping.

Student Counsellors will carry out screening by making routine visits to the hostels, hospitals as well as through prior appointments. High risk students so identified will be referred to the therapists for further management and care. The therapists will collaborate with the department of psychiatry or the departments of physiotherapy, occupational therapy and speech therapy for optimal management and care as the situation warrants.

The centre could be contacted through phone, email or in person. All students coming to the Centre (if above 18 years of age) will have to sign a form of their assent, taking responsibility for the sessions. If students are minors, they will have to take written consent from their parents.

The SSC services would be advertised widely to make sure that students know about the facility and faculty will be told to encourage students to visit SSC for support and assistance. The centre will be a one-stop resource for students to know more about ways to cope with everyday life challenges and different skills they can apply for holistic growth. SSC will maintain a website that will clearly mention its services and different ways in which students in distress can reach them.

For any university to be truly thriving and of international reputation, it is imperative that it places the emotional and mental wellbeing of its students on par with high academic standards. Foreign students in particular will be much more attracted to being a part of Manipal University, if they can be assured of such services that help them adjust to a new culture.

This will be a pioneering venture in Indian higher education and can be considered as a value-add service to the university's clientele, but more importantly fulfill a key moral/ethical responsibility of any educational organisation. The SSC thus will not only provide crucial intervention and support to students experiencing mental health or other related difficulties, but will equally invest in the rhetoric of promoting a positive attitude and overall work-life balance in students.

5. **Evidence of Success**

The centre will start functioning from early March, 2017. Effectiveness will be assessed at least 6 months after the inception and initiation

6. **Problems Encountered and Resources Required**

There is an initial expense involved. Infrastructure in the form of an existing building was earmarked and the renovation is nearing completion. Besides the existing five student counsellors, a full time office personnel and two full time highly qualified therapists will manage the centre. Additionally two on call psychiatrists from Kasturba Hospital will also be a part of the team.

Luring established therapists to this University town to run the centre has proven to be a challenge. Deputing interested and motivated therapists from the department of clinical psychology seems to be a feasible alternative

Best Practice # 3

1. Title of the Practice -

Innovative practices in Student Assessment - Examination using e-Pad (Paperless exam)

2. Objectives of the Practice -

- Innovative, eco-friendly, technology driven
- Eliminates use of paper in examination system.
- Enhance quality and increase speed of valuation process
- Minimize scope for errors
- Reduce errors of tabulation and omissions
- Offers simple and easy to use interface

3.The Context

Examination:

University examinations were being conducted using conventional method i.e paper based examination. The Answer books and question papers were distributed to students during examination and students were writing answers using pen, pencils etc. OMR cards were provided to mark the answer in the case of multiple choice questions and after the examination OMR cards had to be scanned and processed to get the result. Students attendance were recorded in a dairy by obtaining signature from students.

EPad examination eliminated the use of physical answer papers and OMR cards. A writable device is supplied to all the candidates before the start of examination. Students are Authenticated and attendance is recorded by using the fingerprint facility available in the device**.** The question paper gets open on the device on exact starting time of examination and students can start writing the answer in the device using a stylus pen. Once the examination is completed, soft copy of answer papers is uploaded to cloud server. Immediately after uploading of the answer scripts evaluation can be started.

Evaluation:

MU has already adopted computer based evaluation system using OSM software before switching over to ePad examination. The written physical answer papers had to be scanned and uploaded to OSM server for evaluation.

Scanning of answer paper is completely discontinued in the ePad examination system since soft copy of the answer papers are produced directly form the ePad device. Epad examination eliminates most of the manual work involved in the examination process.

4. The Practice

Describe the practice and its uniqueness in the context of India's higher education. What were the constraints/limitations, if any, faced (in about 400 words)?

Epad Examination is a paperless examination. Every student is provided a writable tablet device called ExamPad (epWriter). Fingerprint facility available in the device is used for authentication and capturing the attendance. Question paper gets downloaded automatically before the examination and will open only at specified time i.e. exam start time. Students have to click on the questions which opens a blank sheet in the device and write the answers. During progress of the examination invigilator can monitor the device status like battery health, time remaining etc in a separate device called epProctor.

Once the examination duration is completed device locks automatically and not allows students to write the answers further. After completion of all the examinations of the session answers written by the students gets uploaded to epCloud. After answers papers (soft copy) are uploaded into the epCloud, paper evaluation can be started immediately. Each evaluator/examiner gets a username and password to login to cloud server and do evaluation. Evaluation interface is user friendly and easy to use. Examiners do the paper correction at central evaluation hall in person. The option of Question wise paper evaluation is also available for the examiner in the software.

Limitations: Adequate training to be provided to students to convince and update them for using the device to write the examination instead of paper. Additional training / mock test / practice sessions were conducted on request by institutions.

5. Evidence of Success

Epad examination system is initiated across all the institutions of Manipal University. Adequate training/mock test were provided for the students as well as faculty members. Class test / Sesional / University examinations and evaluations were conducted in some of the institutions successfully. Students and faculty have accepted the new system positively.

6. Problems Encountered and Resources Required

Training for using the system: since paper less examination is a new technology proper training in various stages is required for all the stakeholders.

7.4 Contribution to environmental awareness / protection

Awareness is given to staff and students on the need for conservation and measures undertaken. During World environment day students from nearby schools carry out the green march along with placards depicting current issues like global warming, Ozone depletion etc. The heads of Institutions along with the top management and students engage in a tree planting session. This culminates in a formal address by the Universities top management and Institutional Heads.

Trainings are given to all staff members on key aspects like Hazardous / Biomedical / other waste management, University objectives of reduction in paper, water and power consumption etc.

7.5 Whether environmental audit was conducted?   Yes ☑   No ☐

Yes. MAHE is ISO 14001:2004 certified institution and hence, regular Environment Management System internal audit is being conducted by in house certified internal auditors and once in a year an audit is conducted by the certifying agency - M/s TUV Rheinland Co. Pvt. Ltd. Bengaluru

7.6 Any other relevant information the institution wishes to add. (For example SWOT Analysis)

Strengths	Weakness
• Well-structured governance system • Transparent and Robust Admission & Evaluation Process • Long term and short term strategies • Self-financed programs delivered at optimal cost • Mentoring/counselling support (Director of Student Affairs) • Curriculum Design and Development Process • Diverse student profile • Promotion of Research • Ranked No. one among private universities for its research publications output by SCIMAGO • Scopus indexed publications and H index rating • Central Quality & Compliance (Q&C) cell –Quality and Compliance • Environmental Cell to monitor compliance to various legal and statutory requirements • Ranked 2nd among Universities as per UI Green metric ranking. • ExperiencedFaculty with Industry and Academic experience • Recognitionsand Rewards to Faculty - India and abroad •Academic processes with continual improvement • Periodic audits • State-of-the-art infrastructure • Well-equipped library • Extracurricular and co-curricular activities • Extend consultancy services • Involvement several social responsibility projects and extension activities • Several MoUs with industry / academic	• Limited translationof MoUs into products and processes • Inability to attract significant endowments • Varied examination/evaluation patterns impacts academic flexibility • Being a self-financed university, limited allotmentoflarge budgets for research • Inadequatecoordination between constituent units and hence reduced placements • Inadequate commercialization of patents

Opportunities	Threats
• More academic and industry collaborations • Implement Choice based Credit system • Multi-disciplinary Research • Publications in reputed indexed journals • Explore Consultancy • Move towards paperless administration • Capturing feedback from alumni is in the developmental stage. Efforts are in progress to implement their valuable inputs • Implement technology in core processes • Engage with different stakeholders • Share resources between campuses • Student publications • Cataloging of young researcher • Greater collaborative research • Commercialisation of patents • Compete in World/Subject rankings	• Increasing cost of education • Compliance to frequently changing regulations • Limitations to change curriculum - Regulated Courses • Competition from increasing number of Universities in India and abroad • Semi-Urban location to attract & retain faculty; Examiners and Industry Experts • Attitude of the funding agencies towards self-financing universities

Note: Above the Opportunities/Threats table the following strengths were listed:
- institutions -India and Abroad
- ISO 9001:2008 certified for Quality Management System (QMS) & 14001:2004 for Environmental Management System (EMS)
- Winner of Golden Peacock Award for Environmental Management System

8. Plans of institution for next year

1. **Academic Audit**
2. **Organizing workshop /conference in association with NAAC**
3. **Quality objectives**

To be in the top 200 in QS and THE World University Rankings by 2020

ACADEMIC REPUTATION
To enhance the Academic Reputation Score of MAHE in International Rankings

#	Objective	Measure/Target

1	To recruit and appoint distinguished international and national faculty	1. Number of Adjunct Faculty on rolls
		  a) National
		  b) International
		2. Number of Visiting Faculty
		  a) National
		  b) International

2	Fostering innovative pedagogy and technology enhanced learning	1. No of E-learning initiatives 2. No of innovative pedagogies introduced

3	Encourage and facilitate accreditation	1. No of academic programmes accredited by National agencies 2. No of academic programmes accredited by International Agencies

4	Increase academic and research visibility by enhancing collaboration and partnership	1. No of Academic Collaborations
		   a) National
		   b) International
		2. Faculty involvement in Board of Studies/ Examinership in top ranked Universities in India and Abroad (Top 200 in QS Asia, Top 800 in THE/QS World University Rankings)
		3. Short term faculty exchanges

5	Improve quality of faculty and maintain healthy faculty student ratio	1. Number of faculty with Terminal degrees 2. Faculty: Student Ratio 3. Faculty cadre ratio

RESEARCH

To enhance focus on research through funds, publications and intellectual property

#	Objective	Measure/Target
1	To facilitate research collaborations	10 National and 5 International collaborations
2	To facilitate good quality research programs with national and international grants and to meet the research grant targets set by the board of management	100 research grants proposals worth of Rs 40 Crores, Rs. 40 Crores
3	To provide expertise and training to investigators, researchers and PhD Guides	10 awareness and training programs
4	To facilitate research publications	1000 national and 500 international publications
5	To support patent filing activities and Technology Transfer	10 patents
6	To facilitate good quality research publications	Scopus Indexed with average (JCR) Impact factor more than 1 and an Increase in Average Journal impact factor at least by 0.2 every year

INTERNATIONALIZATION

To be a globally reputed university in the next five years

#	Objective	Measure/Target
1	Strengthen our collaborative activities both numerically and qualitatively	No. of partnerships to increase every year – culminating into 1000 institutional collaborations by 2020
2	Promote overseas destinations to our students for better exposure	An ambitious goal of 10% of enrolled students
3	Promote our self as a choice destination there by increasing foreign students on campus	Increase 10% every year culminating to 2000 students per year by 2020
4	Enhance overseas academic opportunities for faculty	10% of MU Faculty every year
5	Foreign faculty on-board on a regular basis	10% of total faculty to be international

EMPLOYER REPUTATION

To enhance employer reputation score of MAHE in World Rankings

By increasing

#	Objective	Measure/Target
1	Percentage of eligible Students to be placed (for the applicable disciplines).	92% by year 2020
2	Number of companies to participate in the campus placements	200 companies by 2020
3	Number of Fortune 500 companies to participate in campus placements	50 companies by year 2020
4	Average compensation	CTC 5 lacs per annum by 2020
5	Alumni Engagement through • Registrations on Alumni Portal • Setting of Alumni Chapters • Facilitating Reunions	50000 by 2020 12 chapters by 2020 At least 6 per year

4. **EMS Objectives:**

1. **Potable water consumption to be maintained at maximum of 170 litres Per capita /day**

   Role of Institutes: Awareness to student and staff community on conservation measures at institutes, set and monitor targets for consumption at hostels.

2. **To be ranked within the top 20 Universities globally under the suburban category in the UI Green metric World University Ranking by 2019**.

Name: **Dr. Sandeep S Shenoy**   *Name:* **Dr. H Vinod Bhat**

_____   _____

Signature of the Coordinator, IQAC   *Signature of the Chairperson, IQAC*

_____***_____

Annexure - I

		Manipal University Research Unit		
		Research funds sanctioned and received from various agencies, industry and others organisations (In Lakhs)		
		Major Projects		
Financial Year	**Institution**	**Name of the Funding agency**	**Sanc Total Amount**	**Received Amount**
2015-16	Kasturba Medical College	Novo Nordisk India Private Limited (NNIPL)	350.00	6.27
2015-16	Kasturba Medical College	Novartis Health Private Limited (NHPL)	132.64	3.15
2015-16	Kasturba Medical College	Department of Biotechnology (DBT)	90.20	13.50
2015-16	Kasturba Medical College	Indian Council of Medical Research (ICMR)	69.21	16.40
2015-16	Kasturba Medical College	Vision Group on Science & Technology (VGST)	60.00	20.00
2015-16	Kasturba Medical College	Novartis Health Private Limited (NHPL)	60.00	1.68
2015-16	Kasturba Medical College	Shantha Biotechnics Limited (SBL)	57.18	10.74
2015-16	Kasturba Medical College	National Institute of Epidemiology (ICMR)	56.30	5.06
2015-16	Kasturba Medical College	Science and Engineering Research Board (SERB)	51.48	7.00
2015-16	Kasturba Medical College	Indian Council of Medical Research (ICMR)	50.50	16.83
2015-16	Kasturba Medical College	Science and Engineering Research Board (SERB)	49.93	23.80
2015-16	Kasturba Medical College	Science and Engineering Research Board (SERB)	48.13	15.00
2015-16	Kasturba Medical College	Indian Council of Medical Research (ICMR)	44.80	22.40
2015-16	Kasturba Medical College	Indian Council of Medical Research (ICMR)	44.79	10.99
2015-16	Kasturba Medical College	Indian Council of Medical Research (ICMR)	40.06	13.47
2015-16	Kasturba Medical College	Science and Engineering Research Board (SERB)	39.98	17.65
2015-16	Kasturba Medical College	Indian Council of Medical Research (ICMR)	35.28	7.77
2015-16	Kasturba Medical College	Indian Council of Medical Research (ICMR)	30.15	5.90
2015-16	Kasturba Medical College	Indian Council of Medical Research (ICMR)	29.49	12.12
2015-16	Kasturba Medical College	Department of Biotechnology (DBT)	28.19	10.51
2015-16	Kasturba Medical College	Indian Council of Medical Research (ICMR)	25.67	4.66

2015-16	Kasturba Medical College	Program for Appropriate Technology in Health(PATH), State of Washington, Westlake Avenue, Suite 200, Seattle, WA 98121, USA	499.02	161.29
2015-16	Manipal Centre for Virus Research	Centre for Disease Control & Prevention, CDC/ATSDR, 2960 Brandywine Road MS.K98, Atlanta, ga30341.	8,161.70	813.76
2015-16	Manipal College of Nursing	Indian Nursing Council, New Delhi	38.44	38.44
2015-16	Manipal College of Pharmaceutical Sciences	Dept of Science & Technology (DST)	162.36	57.73
2015-16	Manipal College of Pharmaceutical Sciences	Sequent Research Ltd	72.28	6.50
2015-16	Manipal College of Pharmaceutical Sciences	Department of Biotechnology (DBT)	61.30	17.96
2015-16	Manipal College of Pharmaceutical Sciences	Department of Biotechnology (DBT)	42.32	6.96
2015-16	Manipal College of Pharmaceutical Sciences	Dept of Science & Technology (DST)	33.58	7.00
2015-16	Manipal College of Pharmaceutical Sciences	Department of Biotechnology (DBT)	31.02	0.52
2015-16	Manipal Institute of Technology	Dept of Science & Technology (DST)	77.35	9.00
2015-16	Manipal Institute of Technology	Science and Engineering Research Board (SERB)	40.94	5.00
2015-16	Manipal University	Indian Council of Medical Research (ICMR)	1,300.39	49.35
2015-16	Manipal University	Dept of Science & Technology (DST)	105.16	35.00
2015-16	Manipal University	United nations Children's Fund (UNICEF)	71.04	9.93
2015-16	Manipal University	IDSP, Nationl Institute of Communicable Diseases, Directrorate General of Health Service, Delhi	53.39	10.36
2015-16	Manipal University	Indian Council of Medical Research (ICMR)	36.75	6.01
2015-16	Manipal University	Board of Research in Nuclear Sciences (BRNS)	31.35	17.40
2015-16	Manipal University	Board of Research in Nuclear Sciences (BRNS)	27.51	2.04
2015-16	Manipal University	National Bank for Agriculture & Rural Development (NABARD)	27.18	3.15
2015-16	Manipal University	Board of Research in Nuclear Sciences (BRNS)	25.72	4.80
2015-16	Manipal University	Atomic Energy Regulatory Board (AERB)	25.27	20.97
2015-16	Manipal University	Board of Research in Nuclear Sciences (BRNS)	25.00	5.51
2015-16	Manipal University	Pricewaterhouse Coopers Pvt Ltd on behalf of Department for International Development(DFID), British High Commission, Shantipath, Chanakyapuri, Delhi-110021	46.73	7.41
2015-16	Melaka Manipal Medical College	Indian Council of Medical Research (ICMR)	29.12	0.53
2015-16	School of information science	Brigham & Women's Hospital & Massachusetts , General Hospital, Partner Research Management, 101 Huntington Avenue, Suite	32.89	16.34

		200, Boston, MA 02199.		
2015-16	School of Life Sciences	Department of Biotechnology (DBT)	147.40	23.83
2015-16	School of Life Sciences	Dept of Science & Technology (DST)	128.69	2.47
2015-16	School of Life Sciences	Indo-German Science & Technology Centre (UGSTC)	119.00	65.00
2015-16	School of Life Sciences	Dept of Science & Technology (DST)	99.63	15.93
2015-16	School of Life Sciences	Department of Biotechnology (DBT)	97.05	5.52
2015-16	School of Life Sciences	Department of Biotechnology (DBT)	77.35	13.59
2015-16	School of Life Sciences	Department of Biotechnology (DBT)	58.00	11.96
2015-16	School of Life Sciences	Department of Biotechnology (DBT)	33.21	9.87
2015-16	School of Life Sciences	Dept of Science & Technology (DST)	29.25	11.01
2015-16	School of Life Sciences	Indian Council of Medical Research (ICMR)	27.09	7.67
2015-16	School of Life Sciences	Science and Engineering Research Board (SERB)	26.25	10.00
2015-16	School of Life Sciences	Indian Council of Medical Research (ICMR)	25.81	8.60
2015-16	School of Regenerative Medicine	Department of Biotechnology (DBT)	120.00	20.50
2015-16	School of Regenerative Medicine	Department of Biotechnology (DBT)	88.64	25.03
2015-16	School of Regenerative Medicine	Daiichi Sankyo India Private Limited	50.82	17.61
2015-16	School of Regenerative Medicine	Department of Biotechnology (DBT)	45.70	13.55
2015-16	School of Regenerative Medicine	Science and Engineering Research Board (SERB)	45.56	12.00
2015-16	School of Regenerative Medicine	Department of Biotechnology (DBT)	39.88	8.22
2015-16	School of Regenerative Medicine	Dept of Science & Technology (DST)	32.23	11.10
2015-16	School of Regenerative Medicine	Indian Council of Medical Research (ICMR)	28.95	5.58
2015-16	Schoolof Allied Health Sciences	Dept of Science & Technology (DST)	50.90	11.85
2015-16	Schoolof Allied Health Sciences	Dept of Science & Technology (DST)	47.80	16.95
2015-16	Schoolof Allied Health Sciences	Icare Finland Oy, 01510 Vantaa, Finland	44.59	12.37
2015-16	Schoolof Allied Health Sciences	World Diabetes Foundation, Brogardsvej 70, DK-2820 Gentofte, Denmark	50.75	33.47
2015-16	Schoolof Allied Health Sciences	The Royal Institution for the Advancement of Learning/ McGill University, james Administration Building, 2nd Floor, 845 Sherbrooke Street West, Montreal, Quebec, H3A 0G4, Canada.	67.98	20.04
		Total	**14,034.31**	**1,951.59**

			Minor Projects		

Financial Year	Institution	Name of the Funding agency	Sanc Total Amount	Received Amount
2015-16	International Centre for Applied Sciences	Anjana Singh Strathclyde University-on behalf remitted by-Sannam S4 Consulting Pvt Ltd, 3rd Floor Devika Tower, Nehru Place, New Delhi 110019	0.16	0.16
2015-16	International Centre for Applied Sciences	Prof Tritt Charles,Milwaukee School of Engineering, 1025N, Broadway, Milwaukee, WI 53202	0.19	0.19
2015-16	International Centre for Applied Sciences	Dr Michele Luxon, Head of Overseas Programmes, International Office, University House, Lancaster University, LANCASTER, LAI 4YW	0.25	0.25
2015-16	International Centre for Applied Sciences	Mr Johan Arnberg, ANU College of Engineering & Computer Science, B168, RSISE Building 115, North Road, Australian national University, Canberra ACT 2601 Australia.	0.19	0.19
2015-16	International Centre for Applied Sciences	Anna, The University of Queensland, EAIT, ST LUCIA , Queensland 4072	0.16	0.16
2015-16	International Centre for Applied Sciences	Ms Jaspreet Kaur/Ms. Harriet Howse Queen Mary University of London, U K-on behalf remitted by-Sannam S4 Consulting Pvt Ltd, 3rd Floor ,Devika Tower, Nehru Place, New Delhi 110019	0.16	0.16
2015-16	International Centre for Applied Sciences	James G McLaughlin, Associate Director, International Undergraduate Admissions, Enrollment Management, Drexel University, 3141 Chestnut Street, Philadelphia, PA 19104	0.15	0.15
2015-16	International Centre for Applied Sciences	Faculty of Science and Technology, Federation University Australia, Mount Helen, Vic, Australia 3350	0.16	0.16
2015-16	International Centre for Applied Sciences	Queensland University of Technology, SEF Finance, O Block Podium, Level 4, 2 George Street, Brisbane 4000	0.15	0.15
2015-16	Kasturba Medical College	ICON Clinical Research Limited (ICRL)	24.05	6.24
2015-16	Kasturba Medical College	Indian Council of Medical Research (ICMR)	23.43	3.75
2015-16	Kasturba Medical College	Science and Engineering Research Board (SERB)	22.14	7.00
2015-16	Kasturba Medical College	Science and Engineering Research Board (SERB)	21.60	7.50
2015-16	Kasturba Medical College	Science and Engineering Research Board (SERB)	21.00	2.67
2015-16	Kasturba Medical College	Indian Council of Medical Research (ICMR)	20.26	10.13
2015-16	Kasturba Medical College	Indian Council of Medical Research (ICMR)	18.43	0.65
2015-16	Kasturba Medical College	Sanofi-Synthelalo (India) Ltd	17.50	2.73
2015-16	Kasturba Medical College	Shantha Biotechnics Limited (SBL)	16.52	1.65

2015-16	Kasturba Medical College	Science and Engineering Research Board (SERB)	16.35	5.00
2015-16	Kasturba Medical College	Quintlies Research India Private Limited(QRIPL)	16.00	1.35
2015-16	Kasturba Medical College	Serum Institute of India Limited (SIIL)	15.53	1.28
2015-16	Kasturba Medical College	Indian Council of Medical Research (ICMR)	14.16	3.88
2015-16	Kasturba Medical College	Council of Scientific & Industrial Research (CSIR)	13.63	1.94
2015-16	Kasturba Medical College	Indian Council of Medical Research (ICMR)	13.30	3.97
2015-16	Kasturba Medical College	Indian Council of Medical Research (ICMR)	13.04	5.05
2015-16	Kasturba Medical College	Apex Laboratories Pvt Ltd (ALPL)	12.16	6.08
2015-16	Kasturba Medical College	Apex Laboratories Pvt Ltd (ALPL)	12.16	6.08
2015-16	Kasturba Medical College	Merck Serono India(MSI)	11.50	11.50
2015-16	Kasturba Medical College	Indian Council of Medical Research (ICMR)	10.24	4.95
2015-16	Kasturba Medical College	Apex Laboratories Pvt Ltd (ALPL)	9.76	1.39
2015-16	Kasturba Medical College	Apex Laboratories Pvt Ltd (ALPL)	8.29	4.97
2015-16	Kasturba Medical College	Regenerative Medical Services Private Limited (RMSPL)	8.19	1.24
2015-16	Kasturba Medical College	Quintlies Research India Private Limited(QRIPL)	7.73	7.73
2015-16	Kasturba Medical College	Apex Laboratories Pvt Ltd (ALPL)	6.26	3.76
2015-16	Kasturba Medical College	Indian Mectronic Private Limited (IMPL)	6.00	1.50
2015-16	Kasturba Medical College	ICON Clinical Research Limited (ICRL)	5.96	1.51
2015-16	Kasturba Medical College	Apex Laboratories Pvt Ltd (ALPL)	5.69	3.41
2015-16	Kasturba Medical College	Intel Technology India Private Limited (ITIPL)	5.90	5.90
2015-16	Kasturba Medical College	Forus Health Private Limited (FHPL)	5.00	2.00
2015-16	Kasturba Medical College	Apex Laboratories Pvt Ltd (ALPL)	4.30	1.72
2015-16	Kasturba Medical College	Apex Laboratories Pvt Ltd (ALPL)	4.30	1.72
2015-16	Kasturba Medical College	Martin and Harris Private Limited (MHPL)	4.22	4.22
2015-16	Kasturba Medical College	Indian Council of Social Science Research (ICSSR)	4.14	1.92
2015-16	Kasturba Medical College	Vision Group on Science & Technology (VGST)	4.00	4.00
2015-16	Kasturba Medical College	Quintlies Research India Private Limited(QRIPL)	4.00	0.32
2015-16	Kasturba Medical College	Research Society for the study of diabetes in India (RSSDI)	3.95	1.32

2015-16	Kasturba Medical College	Apex Laboratories Pvt Ltd (ALPL)	2.94	1.47
2015-16	Kasturba Medical College	Philips Electronics India Private Limited(PEIPL)	2.70	2.70
2015-16	Kasturba Medical College	Apex Laboratories Pvt Ltd (ALPL)	2.64	1.32
2015-16	Kasturba Medical College	Indian Council of Medical Research (ICMR)	2.03	2.03
2015-16	Kasturba Medical College	Innvolution Med System (IMS)	2.00	0.18
2015-16	Kasturba Medical College	Ganpatrai Luhariwala Charity Trust (GLCT)	2.00	1.50
2015-16	Kasturba Medical College	Philips Electronics India Private Limited(PEIPL)	1.50	1.50
2015-16	Kasturba Medical College	Sanofi-Synthelalo (India) Ltd	1.40	0.56
2015-16	Kasturba Medical College	St John National Academy of Health Science	0.50	0.50
2015-16	Kasturba Medical College	Max Neeman Medical International Limited (MNIL)	0.28	0.28
2015-16	Kasturba Medical College	KPS Clinical Services Private Limited (KCSPL)	0.25	0.25
2015-16	Kasturba Medical College	Glenmark Pharmaceutical Limited (GPL)	0.25	0.25
2015-16	Kasturba Medical College	Sun Pharmaceutical Industries Limited (SPIL)	0.25	0.25
2015-16	Kasturba Medical College	Centre for International Co-Operation in Science (CICS)	0.20	0.20
2015-16	Kasturba Medical College	Novartis Health Private Limited (NHPL)	0.29	0.29
2015-16	Kasturba Medical College	Xerox Research Center, Webster, 800 Phillips Rd, MS128-56E, Webster, New York 14580	6.33	6.33
2015-16	Kasturba Medical College	Xerox Research Center, Webster, 800 Phillips Rd, MS128-56E, Webster, New York 14580	18.98	18.98
2015-16	Kasturba Medical College	Massachusetts Institute of Technology, 77 Massachusetts Avenue, Room E25-406, Cambridge, MA 02139	16.73	16.73
2015-16	Kasturba Medical College	Mapi Life Sciences UK Limited, 73. Collier Street, London N1 9BE, United Kingdom	7.10	7.10
2015-16	Kasturba Medical College	Nazlin Walji, Central Co-ordinator, Mood Disorders Centre, UBC Department of Pshchiatry, Rm 2C7-2255 Wesbrook Mall, Vancouver, BC V6T 2A1	4.74	4.74
2015-16	Kasturba Medical College	Universitats Medizin Mainz der Johannes Gutenberg- Universitats Mainz ,Langenbeckstr 1, 55131 Mainz, Germany	1.44	1.44
2015-16	KMC Hospital, Attavar	Manipal Acunova Ltd	5.98	5.98
2015-16	KMC Hospital, Attavar	Cliantha Research Pvt Ltd	4.70	4.70
2015-16	KMC Hospital, Attavar	Reliance Life Science Pvt Ltd	3.06	3.06
2015-16	KMC Hospital, Attavar	Manipal Acunova Ltd	2.89	2.89
2015-16	KMC Hospital, Attavar	Ciantha Research Ltd		

			1.56	1.56
2015-16	KMC Hospital, Attavar	Semler Research Pvt Ltd	1.50	1.50
2015-16	KMC Hospital, Attavar	Semeler Research Pvt Ltd	1.35	1.35
2015-16	KMC Hospital, Attavar	Reliance Life Science Pvt Ltd	1.34	1.34
2015-16	KMC Hospital, Attavar	Hetro Drugs Ltd	1.17	1.17
2015-16	KMC Hospital, Attavar	Cliantha Research Pvt Ltd	1.15	1.15
2015-16	KMC Hospital, Attavar	Quintiles Research Pvt Ltd	0.97	0.97
2015-16	KMC Hospital, Attavar	George Clinical India Pvt Ltd	0.70	0.70
2015-16	KMC Hospital, Attavar	George Clinical India Pvt Ltd	0.62	0.62
2015-16	KMC Hospital, Attavar	Eli Lilly & Co Pvt Ltd	0.36	0.36
2015-16	KMC Hospital, Attavar	Manipal Acunova Ltd	0.29	0.29
2015-16	KMC Hospital, Attavar	Reliance Life Science Pvt Ltd	0.28	0.28
2015-16	KMC Hospital, Attavar	Reliance Life Sciences Pvt Ltd	0.24	0.24
2015-16	KMC Hospital, Attavar	Cliantha Research Ltd	0.21	0.21
2015-16	KMC Hospital, Attavar	Eli Lilly & Co	0.12	0.12
2015-16	KMC Hospital, Attavar	Eli Lilly & Co	0.06	0.06
2015-16	KMC Hospital, Attavar	Hetro Drugs Limited	0.06	0.06
2015-16	KMC Hospital, Attavar	Eli Lilly & Co Pvt Ltd	0.06	0.06
2015-16	KMC Hospital, Attavar	Dr.Reddy Laboratories Pvt Ltd	0.06	0.06
2015-16	KMC Hospital, Attavar	Hetro Drugs Limited	0.05	0.05
2015-16	KMC Hospital, Attavar	Eli Lilly Co Pvt Ltd	0.01	0.01
2015-16	KMC Hospital, Attavar	Jiva Daya Foundation, 12400 Coit Road, Suite 570, Dallas, TX 75251.	4.80	4.64
2015-16	KMC, Mangalore	Indian Council of Medical Research (ICMR)	14.26	14.26
2015-16	KMC, Mangalore	Govt Of Karnataka	6.75	6.75
2015-16	KMC, Mangalore	Department Of Science & Technology (Dst) , Seed Division ,New Delhi	4.00	4.00
2015-16	KMC, Mangalore	Council of Scientific & Industrial Research (CSIR)	1.48	1.48
2015-16	KMC, Mangalore	Bigtec Pvt Limited ,2 Nd Floor ,Golden Heights Building ,59 ,C Cross ,4 M Block ,Rajajinagar ,Bangalore-10	1.29	1.29
2015-16	KMC, Mangalore	Philips India Ltd	0.92	0.92

2015-16	Manipal Centre for Philosophy and Humanities	Sutasoma Trust, PO Box 157, Haverhill, CB9 1AH	2.93	2.93
2015-16	Manipal Centre for Virus Research	British Council Division, 17 Kasturba Gandhi Marg, 17 Kasturba Gandhi Marg, New Delhi 110001	16.91	4.21
2015-16	Manipal Centre for Virus Research	American Society for Microbiology, 1752 N Street N.W., Washington, DC 20036	15.37	15.37
2015-16	Manipal College of Dental Science	European Dental Students Association, EDSA Office, Dublin University Hospital, Trinity College, Lincoln Place, Dublin 2, Ireland	6.65	6.65
2015-16	Manipal College of Pharmaceutical Sciences	University Grants Commission (UGC)	24.10	1.06
2015-16	Manipal College of Pharmaceutical Sciences	Science and Engineering Research Board (SERB)	19.91	7.50
2015-16	Manipal College of Pharmaceutical Sciences	Dept of Science & Technology (DST)	19.22	2.50
2015-16	Manipal College of Pharmaceutical Sciences	Dept of Science & Technology (DST)	15.67	2.84
2015-16	Manipal College of Pharmaceutical Sciences	Dept of Science & Technology (DST)	15.67	4.95
2015-16	Manipal College of Pharmaceutical Sciences	Biotechnology Industry Research Assistance Council (BIRAC)	14.00	1.95
2015-16	Manipal College of Pharmaceutical Sciences	Department of Biotechnology (DBT)	14.00	6.10
2015-16	Manipal College of Pharmaceutical Sciences	Indian Council of Medical Research (ICMR)	13.78	6.77
2015-16	Manipal College of Pharmaceutical Sciences	All India Council for Technical Education (AICTE)	13.00	2.44
2015-16	Manipal College of Pharmaceutical Sciences	Science and Engineering Research Board (SERB)	12.62	1.00
2015-16	Manipal College of Pharmaceutical Sciences	Indian Council of Medical Research (ICMR)	11.31	1.33
2015-16	Manipal College of Pharmaceutical Sciences	Department of Biotechnology (DBT)	10.80	3.64
2015-16	Manipal College of Pharmaceutical Sciences	Dept of Science & Technology (DST)	10.20	4.83
2015-16	Manipal College of Pharmaceutical Sciences	Dept of Science & Technology (DST)	10.20	4.83
2015-16	Manipal College of Pharmaceutical Sciences	All India Council for Technical Education (AICTE)	8.24	7.41
2015-16	Manipal College of Pharmaceutical Sciences	University Grants Commission (UGC)	7.72	3.39
2015-16	Manipal College of Pharmaceutical Sciences	Dept of Science & Technology (DST)	6.61	4.03
2015-16	Manipal College of Pharmaceutical Sciences	Arjun Natural Extracts	6.24	1.04
2015-16	Manipal College of Pharmaceutical Sciences	Council of Scientific & Industrial Research (CSIR)	6.06	0.69
2015-16	Manipal College of Pharmaceutical Sciences	All India Council for Technical Education (AICTE)	5.88	5.29
2015-16	Manipal College of Pharmaceutical Sciences	Indus Biotech Pvt Ltd	4.42	1.11
2015-16	Manipal College of Pharmaceutical Sciences	Council of Scientific & Industrial Research (CSIR)	4.06	2.03
2015-16	Manipal College of	Dept of Science & Technology (DST)		

	Pharmaceutical Sciences		3.50	3.50
2015-16	Manipal College of Pharmaceutical Sciences	Dept of Science & Technology (DST)	3.50	3.50
2015-16	Manipal College of Pharmaceutical Sciences	Enovate Biolife Pvt Ltd	2.87	0.57
2015-16	Manipal College of Pharmaceutical Sciences	All India Council for Technical Education (AICTE)	2.50	0.83
2015-16	Manipal College of Pharmaceutical Sciences	Enovate Biolife Pvt Ltd	2.41	1.45
2015-16	Manipal College of Pharmaceutical Sciences	Umalaxmi Organics Pvt Ltd, Jodhpur	2.37	1.99
2015-16	Manipal College of Pharmaceutical Sciences	All India Council for Technical Education (AICTE)	1.50	0.48
2015-16	Manipal College of Pharmaceutical Sciences	All India Council for Technical Education (AICTE)	1.50	0.49
2015-16	Manipal College of Pharmaceutical Sciences	Umalaxmi Organics Pvt Ltd, Jodhpur	1.45	1.16
2015-16	Manipal College of Pharmaceutical Sciences	Getwel Pharmaceuticals, Gurgaon, Haryana	1.00	0.20
2015-16	Manipal College of Pharmaceutical Sciences	Enovate Biolife Pvt Ltd	0.71	0.35
2015-16	Manipal College of Pharmaceutical Sciences	Enovate Biolife Pvt Ltd	0.71	0.36
2015-16	Manipal College of Pharmaceutical Sciences	Science and Engineering Research Board (SERB)	0.68	0.68
2015-16	Manipal College of Pharmaceutical Sciences	G.L.Viswanatha, Kengeri B'lore	0.59	0.42
2015-16	Manipal College of Pharmaceutical Sciences	Al-Shif College of Pharmacy, Kerala	0.59	0.35
2015-16	Manipal College of Pharmaceutical Sciences	Dr. Manjunath Bhat, Dept of Chemistry, Mangalore University	0.56	0.56
2015-16	Manipal College of Pharmaceutical Sciences	Al-Shif College of Pharmacy, Kerala	0.51	0.31
2015-16	Manipal College of Pharmaceutical Sciences	Al-Shif College of Pharmacy, Kerala	0.51	0.30
2015-16	Manipal College of Pharmaceutical Sciences	Mrs Shoba Gokul, Adiprashakhi College of Pharmacy, Melmaruvattur TN	0.50	0.50
2015-16	Manipal College of Pharmaceutical Sciences	Sajan Jose, Mahatma gandhi University, Kerala	0.42	0.42
2015-16	Manipal College of Pharmaceutical Sciences	VLCC Personal Care Limited	0.28	0.28
2015-16	Manipal College of Pharmaceutical Sciences	Centre for International Co-Operation in Science (CICS)	0.20	0.20
2015-16	Manipal College of Pharmaceutical Sciences	D. Y. Patil University, Kolhapur	0.10	0.10
2015-16	Manipal College of Pharmaceutical Sciences	SDM Ayurveda College, Udupi	0.10	0.10
2015-16	Manipal College of Pharmaceutical Sciences	Khalsa College of Pharmacy, Amritsar	0.03	0.03
2015-16	Manipal College of Pharmaceutical Sciences	Vindya Shankar, BET Campus, Bharathi Nagar, Maddur Taluk, Mandya	0.02	0.02
2015-16	Manipal Institute of Technology	Board of Research in Nuclear Sciences (BRNS)	24.97	1.25
2015-16	Manipal Institute of Technology	Board of Research in Nuclear Sciences (BRNS)	24.83	1.48

2015-16	Manipal Institute of Technology	Vision Group on Science & Technology (VGST)	20.00	10.00
2015-16	Manipal Institute of Technology	Board of Research in Nuclear Sciences (BRNS)	16.98	4.08
2015-16	Manipal Institute of Technology	Science and Engineering Research Board (SERB)	16.35	6.00
2015-16	Manipal Institute of Technology	Board of Research in Nuclear Sciences (BRNS)	14.78	1.08
2015-16	Manipal Institute of Technology	Board of Research in Nuclear Sciences (BRNS)	13.73	0.98
2015-16	Manipal Institute of Technology	IBM India Pvt Ltd	7.85	7.85
2015-16	Manipal Institute of Technology	UGC-DAE Consortium for Scientific Research	4.07	2.27
2015-16	Manipal Institute of Technology	Vision Group on Science & Technology (VGST)	4.00	4.00
2015-16	Manipal Institute of Technology	Science and Engineering Research Board (SERB)	2.07	2.07
2015-16	Manipal Institute of Technology	Indian Council of Social Science Research (ICSSR)	2.00	0.80
2015-16	Manipal Institute of Technology	Sidd Life Sciences Pv Ltd	2.00	1.00
2015-16	Manipal Institute of Technology	Science and Engineering Research Board (SERB)	1.70	1.70
2015-16	Manipal Institute of Technology	UGC-DAE Consortium for Scientific Research	0.80	0.45
2015-16	Manipal Institute of Technology	UGC-DAE Consortium for Scientific Research	0.45	0.45
2015-16	Manipal Institute of Technology	Karnataka State Council for Science & Technology, Bangalore	0.10	0.10
2015-16	Manipal Institute of Technology	Karnataka State Council for Science & Technology, Bangalore	0.09	0.09
2015-16	Manipal Institute of Technology	Invention Development Fund, LLC, General 3150, 139th AVE SE, Building 4, Bellevue, Washington - 98005, USA	0.49	0.49
2015-16	Manipal School of Nursing	Indian Council of Medical Research (ICMR)	9.22	4.11
2015-16	Manipal University	Science and Engineering Research Board (SERB)	23.68	2.50
2015-16	Manipal University	Board of Research in Nuclear Sciences (BRNS)	23.67	8.61
2015-16	Manipal University	Science and Engineering Research Board (SERB)	23.15	6.50
2015-16	Manipal University	Science and Engineering Research Board (SERB)	20.50	3.00
2015-16	Manipal University	Indian Council of Medical Research (ICMR)	14.67	7.33
2015-16	Manipal University	Public Health Foundation of India	13.41	9.40
2015-16	Manipal University	Science and Engineering Research Board (SERB)	12.12	4.50
2015-16	Manipal University	Public Health Foundation of India	11.53	8.09
2015-16	Manipal University	Indian Council of Social Science Research (ICSSR)	9.00	3.60
2015-16	Manipal University	Indian Space Research Organisation (ISRO)		

			5.72	2.86
2015-16	Manipal University	Indian Council of Social Science Research (ICSSR)	4.33	0.30
2015-16	Manipal University	University Grants Commission (UGC)	4.29	2.24
2015-16	Manipal University	Dept of Science & Technology (DST)	6.31	3.99
2015-16	Manipal University	Titan Company Ltd	1.49	0.81
2015-16	Manipal University	Entrepreneurship Development Institute of India (EDI)	0.70	0.14
2015-16	Manipal University	Bill & Melinda Gates Foundation through The INCLEN Trust International, F-1/5, Second Floor, Okhla Industrial Area, Phase-1, New Delhi-110020	41.99	12.60
2015-16	Manipal University	Adelphi Research Gemeinnutzige GmbH, Caspar-Theyss-Strasse 14a, 14193 Berlin	1.78	1.78
2015-16	Manipal University	Nossal Institute Limited, The University of Melbourne, Level 4, Alan Gilbert Building, 161 Barry Street, Carlton Vic 3010, Australia.	16.59	8.27
2015-16	Manipal University	Pricewaterhouse Coopers Pvt Ltd on behalf of Department for International Development(DFID), British High Commission, Shantipath, Chanakyapuri, Delhi-110021	24.92	7.94
2015-16	Manipal University	University Medical Center Groningen/Faculty of Medcial Sciences, The University of Groningen, The Netherlands	3.71	3.71
2015-16	Manipal University	Adelphi Research Gemeinnutzige GmbH, Caspar-Theyss-Strasse 14a, 14193 Berlin	2.20	2.20
2015-16	MCODS,Mangalore	Hindusthan Lever India Pvt.Ltd	11.22	11.22
2015-16	MCODS,Mangalore	Indian Council of Medical Research (ICMR)	8.57	8.57
2015-16	MCODS,Mangalore	Satish Chandar., Fire Stop Solutions	0.10	0.10
2015-16	Melaka Manipal Medical College	Indian Council of Medical Research (ICMR)	8.49	4.76
2015-16	Melaka Manipal Medical College	The University of Alabama at Birmingham, RPHB 430, 1665 University Bldg.,BIRMINGHAM, USA	0.32	0.32
2015-16	Melaka Manipal Medical College	Dr John Stenos, Sr. Scientist, Australian Rickettsail Lab & Dr Eugene Athan , Associate Professor, Director, Dept of Infectious Diseases, Barwon Health Geelong, VIC 3220, Australia.	5.49	5.49
2015-16	Melaka Manipal Medical College	Ms Cheryl Nineff D'Ambrosio, Founder, President MyGirlsBlood, PO Box 1223, Mercer Island Washington-USA 98040	3.22	3.22
2015-16	Melaka Manipal Medical College	Novo Nordisk Haemophilia Foundation, Andreasstrasse 15, CH-8050 Zurich, Switzerland	113.63	6.49
2015-16	School of Information Sciences	Philips India Ltd	5.35	5.35
2015-16	School of Information Sciences	Philips India Ltd	1.60	1.60
2015-16	School of Information	Philips India Ltd		

	Sciences		0.80	0.80
2015-16	School of Information Sciences	Philips India Ltd	0.80	0.80
2015-16	School of Life Sciences	BTFS Government Karnataka	24.90	24.90
2015-16	School of Life Sciences	Department of Biotechnology (DBT)	24.58	7.37
2015-16	School of Life Sciences	Department of Biotechnology (DBT)	24.55	8.48
2015-16	School of Life Sciences	Board of Research in Nuclear Sciences (BRNS)	24.31	1.14
2015-16	School of Life Sciences	Indian Council of Medical Research (ICMR)	15.49	7.75
2015-16	School of Life Sciences	Indian Council of Medical Research (ICMR)	13.67	4.08
2015-16	School of Life Sciences	Dept of Science & Technology (DST)	10.71	3.90
2015-16	School of Life Sciences	Dept of Science & Technology (DST)	8.00	8.00
2015-16	School of Life Sciences	Council of Scientific & Industrial Research (CSIR)	5.64	2.82
2015-16	School of Life Sciences	Indian Council of Medical Research (ICMR)	4.45	2.09
2015-16	School of Life Sciences	Dept of Science & Technology (DST)	3.50	3.50
2015-16	School of Life Sciences	Maastricht, the Netherlands	3.42	3.42
2015-16	School of Life Sciences	Department of Biotechnology (DBT)	2.25	2.25
2015-16	School of Life Sciences	Science and Engineering Research Board (SERB)	1.70	1.70
2015-16	School of Life Sciences	King Abdulaziz University, Saudiarabia	1.16	1.16
2015-16	School of Life Sciences	Science and Engineering Research Board (SERB)	1.16	1.16
2015-16	School of Life Sciences	Science and Engineering Research Board (SERB)	1.06	1.06
2015-16	School of Life Sciences	Partec Pvt Ltd, New Delhi	1.05	1.05
2015-16	School of Life Sciences	Department of Biotechnology (DBT)	0.60	0.60
2015-16	School of Regenerative Medicine	Department of Biotechnology (DBT)	24.79	5.88
2015-16	School of Regenerative Medicine	Council of Scientific & Industrial Research (CSIR)	22.96	4.16
2015-16	School of Regenerative Medicine	Council of Scientific & Industrial Research (CSIR)	22.92	7.29
2015-16	School of Regenerative Medicine	Science and Engineering Research Board (SERB)	21.30	5.50
2015-16	School of Regenerative Medicine	Indian Council of Medical Research (ICMR)	19.45	9.48
2015-16	School of Regenerative Medicine	Council of Scientific & Industrial Research (CSIR)	18.00	4.84
2015-16	School of Regenerative Medicine	Elbit Medical Diagnostics Ltd	15.71	7.85
2015-16	School of Regenerative	Dept of Science & Technology (DST)		

Financial Year	Institution	Name of the Funding agency	Sanc Total Amount	Received Amount
	Medicine		12.09	3.85
2015-16	School of Regenerative Medicine	Stemade Biotech Private Limited	10.00	0.50
2015-16	School of Regenerative Medicine	Science and Engineering Research Board (SERB)	6.33	5.00
2015-16	School of Regenerative Medicine	Dr Reddy's Institute of Life Sciences, Hyderabad	5.00	5.00
2015-16	School of Regenerative Medicine	Cryo Save India Pvt Ltd	3.74	1.72
2015-16	Schoolof Allied Health Sciences	Dept of Science & Technology (DST)	24.35	1.32
2015-16	Schoolof Allied Health Sciences	Dept of Science & Technology (DST)	19.82	3.87
2015-16	Schoolof Allied Health Sciences	Dept of Science & Technology (DST)	16.38	8.19
2015-16	Schoolof Allied Health Sciences	Dept of Science & Technology (DST)	11.75	0.53
2015-16	Schoolof Allied Health Sciences	Indian Council of Social Science Research (ICSSR)	10.00	1.50
2015-16	Schoolof Allied Health Sciences	Indian Council of Medical Research (ICMR)	7.60	0.63
2015-16	Schoolof Allied Health Sciences	Bombay Scientific	1.00	0.50
2015-16	Schoolof Allied Health Sciences	Science and Engineering Research Board (SERB)	0.23	0.23
2015-16	Schoolof Allied Health Sciences	Medical Committee Netherlands Vietnam, Room 103-Block E3, Trung Tu Diplomatic Compound, N0 6 Dang Van Ngu Street, Dong Da Dist, Hanol City, Vietnam.	2.68	2.68
		Total	**1,933.81**	**765.57**

		Industry Sponsored		
Financial Year	Institution	Name of the Funding agency	Sanc Total Amount	Received Amount
2015-16	School of Life Sciences	Indian Academy of Sciences, Bangalore	4.37	4.37
2015-16	School of Life Sciences	Bhat Biotech Pvt Ltd, Bangalore	0.28	0.28
2015-16	School of Life Sciences	Bhat Biotech Pvt Ltd, Bangalore	0.21	0.21
2015-16	School of Life Sciences	Natural Remedies,Bangalore	0.20	0.20
2015-16	School of Life Sciences	Enovate Biolife Pvt Ltd	0.15	0.15
2015-16	School of Life Sciences	Enovate Biolife Pvt Ltd	0.15	0.15
2015-16	School of Life Sciences	Indo German Alkaloids, Mubmai	0.07	0.07
2015-16	School of Life Sciences	Bhat Biotech Pvt Ltd, Bangalore	0.05	0.05
2015-16	School of Life Sciences	Bhat Biotech Pvt Ltd, Bangalore	0.04	0.04
		Total		

			5.51	**5.51**

Projects sponsored by the University / College				
Financial Year	**Institution**	**Name of the Funding agency**	**Total Grant Sanctioned**	**Received**
2015-16	Manipal University	Manipal University TMA Pai Endowment Chairs (Internal source)	132.05	132.05
		Total	**132.05**	**132.05**

Students research projects (*Other then compulsory by the University*)				
Financial Year	**Institution**	**Name of the Funding agency**	**Total Grant Sanctioned**	**Received**
2015-16	Manipal University	Manipal University	96.26	96.26
		Total	**96.26**	**96.26**
		Grand Total	**16,201.94**	**2,950.98**

Annexure - II

Sl.no.	Name of the visiting Academician	Location	Institution / Organization	Designation
1	Dr. Annesha Choudhury	Bangalore	Academy for Conservation Science and Sustainability Studies, Ashoka Trust for Research on Ecology and the Environment	Doctoral Scholar
2	Dr. Tathagata Chatterji	Bhubaneswar	Department of Urban Governance, Xavier University of Management Studies	Professor
3	Mr. Hara Kumar Varma N	Bangalore	Sustainable Habitata Division, The Energy and Resources Institute (TERI)	Research Associates
4	Mr. Kiriti Sahoo	Bangalore	Sustainable Habitata Division, The Energy and Resources Institute (TERI)	Research Associates
5	Ms. Nisha Damodar Kundar	Mumbai	Academy of Architecture, Mumbai	Urban Design Consultant and Visiting Faculty
6	Mr. Vasanth Kamath V P	Manipal	General Management & Entrepreneurship, TAPMI	Assistant Professor
7	Ms. Deepta Sateesh	Bangalore	School of New Humanities and Design at SRISHTI, Institute of Art, Design & Technology	Dean
8	Ar. B.H. Rathi	Bangalore	Rathi Associates	Practicing Architects
9	Mr. A. P. Mahesh	Chennai	Meinhardt Facade Technology (India) Pvt. Ltd	Regional Director (South Asia)
10	Ms. Rachita Mishra	Bangalore	Urban Community Lab SELCO Foundation	Programme Manager
11	Dr.Ashish K Rege	Goa	Goa Colleage of Architecture	Professor & Principal
12	Dr.Naseer M.A	Kerala	Dept. of Architecture, N.I.T.Calicut	Professor & Head
13	Mr. Gopal Bhat	Udupi	A G Associates	Structural Consultant
14	Mr. Premlal	Kerala	JLP Architects	Practicing Architects
15	Ar. Joseph Chandy	Kochi	C J Designs	Practicing Architects

16	Mr. Venkatesh R	Bangalore	Keystone Architects	Practicing Architects
17	Ar. Vasudevan R.Kadalayil	Bangalore	Ecumene Habitaat Solution Pvt Ltd	Practicing Architects
18	Ar. Arun Prasad	Tamil Nadu	Arun Prasad and Associates	Architects and Planners
21	Ar. Divya Khush	New Delhi	Indian Institute of Architects	President
22	Ar. Deepak D'souza	Mangalore	General Corporation- Architecture & Interiors	Architectural Consultant
23	Ms. Anupama	Bangalore	Arvind Mills	Senior Manager
24	Ms. Ashok Mendonca	Mangalore	Mendonca Associates	Practicing Architects
25	Prof. Satyaprakash Varanasi	Bangalore	Sathya Consultants	Practicing Architects
26	Dr. Ranjini Bhattathiripad	Thrissur	Dept of Architecture, Govt. Engg.College	Professor & Head
27	Ar. Muhammed Nissar	Mangalore	MNA Design Studio	Practicing Architects
28	K Savitha Kumari	Mangalore	Fashion Design Department Karavali College	HOD
29	Dr. Mohammed Firoz	Calicut	Faculty of Architecture, NIT	Associate Professor
30	Kanchana Pai	Manipal	Red Earth	Practicing Architects
32	Ramani Hande	Udupi	ACE Technocrats Pvt.	Practicing Architects
33	Sudhir Acharya	Bangalore	Impact School of Architecture	Director
34	Ar. Vasudevan Katalayil	Bangalore	Ecumene Habitat Solutions Pvt Ltd	Principal Architect
35	Ar.Ajay Appachu	Bangalore	Synectics- Architecture & Interiors	Architect
36	Ar. Kireeti Amberkar	Bangalore		Practicing Architects
37	Ar. Sunil Nayak	Mysore	Sunil Nayak Architects	Practicing Architects
38	Ar.Ms.Minni Sastry	Bangalore	Sustainable Habitata Division, The Energy and Resources Institute (TERI)	Associate Director
39	Ar.Niren Jain	Mangalore	N I R E N J A I N - Architect	Chief Architect
40	Ar. Adarsh V.P	Bangalore	I by Design	Practicing Architects
41	Ar. Vijay Upadhyaya	Bangalore		Practicing Architects

42	Ar. Sahana Shenoy	Bangalore	Firm Terra Architects	Senior Architect
43	Ar. Colin Pinto	Mangalore	Concept Enclave	Practicing Architects
44	Dr. Rama Subrahmanyan	Bangalore	Dayanand Sagar School of Architecture, DSCE	Professor& Head
45	Ar. Sheel Raj Shetty	Udupi		Practicing Architects
46	Ar. Subhas Basu	Mangalore	Nitte Institute of Architecture (NIA)	Professor-Design Chair
47	Prof. Nishita R. Tadkodkar	Belagavi	KLS Gogte Institute Of Technology	Prof. & Head
48	Ar. Sadanand Nayak	Mangalore	Architetcure Plus	Practicing Architects
49	Mr. Premlal	Kochi	JLP Architects	Practicing Architects
50	Ar. Joseph Chandy	Kochi	C J Designs	Practicing Architects
51	Ms. Miji Mathew	Mangalore		Practicing Architects
52	Ar.Rohit Menon	Bangalore	Vistara, Edifice Consultants Pvt. Ltd	Chief Architects
53	Ar.Anand VM	Bangalore	AA Design	Practicing Architects
54	Dr. P P Anil Kumar	Calicut	Department of Architecture, NIT	Professor and Head
55	Dr. Harimohan Pillai	Kerala		Practicing Architects
56	Ar. Vikram Bhat	Bangalore	Urban Synthesis	Director & Principal Architect
57	Ar. Kumarchandra M.R.	Mangalore	Srinivas School of Architecture,SIT	Professor &Dean
58	Ar. Om Prakash Bawane	Bangalore	R V College of Architecture	Principal
59	Ar. Shalini Suresh	Udupi	SYS Creators	Consulting Architects & Engineers