Amrita Vishwa Vidyapeetham, Coimbatore
Annual Quality Assurance Report (AQAR) 2017-2018 of the IQAC

Part – A

1. Details of the Institution

1.1 Name of the School: AMRITA VISHWA VIDYAPEETHAM

1.2 Address Line 1: AMRITA VISHWA VIDYAPEETHAM

Address Line 2: AMRITA VISHWA VIDYAPEETHAM, AMRITANAGAR (PO)

City/Town: ETTIMADAI, COIMBATORE

State: TAMIL NADU

Pin Code: 641112

Institution e-mail address: univhq@amrita.edu

Contact Nos.: +91 9943984498, +91 9943944483

Name of the Head of the Institution: Dr. P. Venkat Rangan

Tel. No. with STD Code: (0422) 2685888

Mobile: +91 9047037777

1.3 Name of the University IQAC Chair: Prof. Prashant R. Nair
1.3 NAAC Track ID *(For ex. MHCogn 18879)*

TNUNGN10142

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)/03/RAR/60 dated 24-09-2014

1.5 Website address:

www.amrita.edu/iqac

Web-link of the AQAR:


1.6 Accreditation Details

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Cycle</th>
<th>Grade</th>
<th>CGPA</th>
<th>Year of Accreditation</th>
<th>Validity Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1st Cycle</td>
<td>A</td>
<td>3.20</td>
<td>2009</td>
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</tr>
<tr>
<td>2</td>
<td>2nd Cycle</td>
<td>A</td>
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<td>2014</td>
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<tr>
<td>3</td>
<td>3rd Cycle</td>
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<tr>
<td>4</td>
<td>4th Cycle</td>
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</tbody>
</table>

1.7 Date of Establishment of IQAC:

DD/MM/YYYY 17/04/2009

1.8 AQAR for the year *(for example 2010-11)*

2017-2018

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

i. AQAR__2008-09________ (20/11/2012)

ii. AQAR__2009-10_______ (20/11/2012)

iii. AQAR__2010-11_______ (28/12/2012)

iv. AQAR__2011-12_______ (27/12/2012)

v. AQAR__2012-13_______ (23/08/2013)

vi. AQAR__2013-14_______ (25/05/2015)

vii. AQAR__2014-15_______ (22/02/2016)
viii. AQAR_2015-16________ (30/10/2016)
ix. AQAR_2016-17________ (23/11/2017)

1.10 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 ☑

1.11 Type of Faculty/Programme

Arts ☑ Science ☑ Commerce ☑ Law ☐ PEI (PhysEdu) ☐

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

Others (Specify)

Biotechnology

1.12 Name of the Affiliating University (for the Colleges)

N.A. We are unitary university with constituent campuses

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

Autonomy by State/Central Govt. / University ☐
2. IQAC Composition and Activities

<table>
<thead>
<tr>
<th>2.1 No. of Teachers</th>
<th>432</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.2 No. of Administrative/Technical staff</td>
<td>148</td>
</tr>
<tr>
<td>2.3 No. of students</td>
<td>59</td>
</tr>
<tr>
<td>2.4 No. of Management representatives</td>
<td>19</td>
</tr>
<tr>
<td>2.5 No. of Alumni</td>
<td>29</td>
</tr>
<tr>
<td>2.6 No. of any other stakeholder and community representatives</td>
<td>11</td>
</tr>
<tr>
<td>2.7 No. of Employers/Industrialists</td>
<td>11</td>
</tr>
<tr>
<td>2.8 No. of other External Experts</td>
<td>20</td>
</tr>
<tr>
<td>2.9 Total No. of members</td>
<td>729</td>
</tr>
<tr>
<td>2.10 No. of IQAC meetings held</td>
<td>74</td>
</tr>
<tr>
<td>2.11 No. of meetings with various stakeholders:</td>
<td></td>
</tr>
<tr>
<td>Non-Teaching Staff</td>
<td>Students</td>
</tr>
<tr>
<td>Faculty</td>
<td>82</td>
</tr>
<tr>
<td>2.12 Has IQAC received any funding from UGC during the year?</td>
<td>Yes</td>
</tr>
</tbody>
</table>

If yes, mention the amount
2.13 Seminars and Conferences (only quality related)

(i) No. of Seminars/Conferences/ Workshops/Symposia organized by the IQAC

<table>
<thead>
<tr>
<th>Total Nos.</th>
<th>International</th>
<th>National</th>
<th>State</th>
<th>Institution Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>47</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>44</td>
</tr>
</tbody>
</table>

(ii) Themes

- Dr. H.N Vishwanath, Professor of Education, Sharada Vilas B.Ed College, Mysuru conducted a session on Teaching and Learning: Insights into Pedagogy on 15th July 2017
- A session on Introduction to SPSS by Prof. Manjunath, HoD, Dept. of Mechanical Engineering, SJCE, Mysore on 17th July 2017.
- A Workshop on Advanced Concepts of SPSS by Dr. Manjunath, Asst. Professor, SJCE, Mysuru was conducted on 18th July 2017.
- Three Days Hands on Workshop on Statistical Data Analysis using SPSS.
- Quality Research and Output
- Research Methodology and Ethics
- GLP and GMP Practices
- Cell Culture and Laboratory Training Workshop
- Workshop on Spectral Data Analysis by Dept. of Pharmaceutical Chemistry and Analysis from 14th & 15th December 2017
- Training to enable our faculty and research scholars to publish in good peer reviewed journals
- International conference on “Obesity – A Multifaceted Approach
- Awareness session on “Prevention of Cyber Crime and Self Protection” by Bodhini Team
- Educational session on topic “Be Positive” by Ms. Sujamal Jose (Columnist, Mathrubhumi Daily
- Workshop on “Postnatal Care”
- Fire fighting
- Pollution Control
- Infection Control

2.14 Significant Activities and contributions made by IQAC (please be as detailed as possible in your response)

School of Education, Mysore:

- Two guest lectures were arranged on
  i) 26th July 2017, titled ‘Constructivist approach’ by Dr. Sridevi K.V. , Assistant Professor, RMSA cell, NIE, NCERT, New Delhi.
As NPE, NCF and NCFTE documents suggest that ‘Every child has to explore and construct his knowledge’ and all our student trainees need to deliver their lesson using 5E in the schools, this titled was chosen to enhance our teacher educators and trainees creativity in teaching.

ii) 27th July 2017, ‘Action Research’ by Dr. Sridevi K.V., Assistant Professor, RMSA cell, NIE, NCERT, New Delhi. This session helped our student teachers to get awareness about the importance of research in school and enriched with an idea to conduct action research in different areas of school education.

- Contribution for syllabi of B.Sc. B.Ed Integrated Programme
- One day workshop on 14th August 2017 was conducted on the topic ‘Reflective dairy and 5E model lesson plan writing’ by Prof. V.K. Krishnappa, Principal, Mandovi College of Education, Mandya. This session dealt preparation to the student trainees for practicing the lessons using 5E model and also to reflect upon class after lesson.

School of Biotechnology, Amritapuri:

- Restructuring of existing infrastructure to provide space for additional labs and reading room/library:
  i. Faculty cubicles and cabins were reconfigured in space previously used as guest rooms and conference room.
  ii. Large area which was underutilized as space for faculty cubicles and cabins was reorganized as reading room and library with adequate space for stacking of reference books, reading area and check-out counters and office space for library staff.
  iii. Space vacated by shifting of library was reconfigured to house Advanced Microbial Genetics lab for work to be initiated with Tata Institute of Genomics & Society, Bangalore in collaboration with the TIGS Centre at the University of California, San Diego UCSD, USA.
  iv. Computational Biology laboratory to be reconfigured to house the Advanced Bioinformatics laboratory for pursuing collaboration with ID Genomics Seattle and University of Washington, Seattle, USA.
  v. New laboratory set up for work on Advanced Developmental Biology utilizing the fruit fly Drosophila model in collaboration with Clermont University, France.
  vi. New laboratory set up for cutting edge work with stem cells in cardiac fibroblast model with project support through a Ramalingaswami National Re-entry fellowship to faculty at the School of Biotechnology.

School of Ayurveda, Amritapuri:

- Parayana (Recitation/Reading of the scriptures by the students
- Weekly Seminar by the PG Students
- Seminar by Faculty for PG Students
- Case presentation by Internees BAMS
- Systematic Documentation with the support of ICTS department
School of Arts and Science, Mysore:

- Brain storming and suggesting strategies for overall improvement of the Campus.

- Suggestions for introduction of new programmes (such as the introduction of science stream through B Sc programme) are initiated through brain storming sessions of IQAC where inputs from various stake holders are taken into account.

- Requirement of infrastructural augmentation is placed before the management through IQAC: ex: setting up of Photography Studio, Edit Suite, Audio - Visual Tools, additional lab etc.,

- Initiatives towards setting in research culture in the campus – one day per week is dedicated to research / publication work.
  
  i. Suggestion to improve the faculty profile of each department – appointment of candidates with Doctoral Degree.

  ii. Decision to conduct National Level conferences / seminars / workshops in emerging areas.

- Institutional Membership and student branches of professional bodies like CSI (Computer Society of India), CII (Confederation of Indian Industries), IEEE (Institute of Electrical and Electronics Engineers)

Department of Management, Bangalore:

1. The IQAC is constantly trying to ensure to maintenance and improvement of the quality of our course. At the School management to IQAC make improvements in different aspects of school’s functioning.

2. The PGP office to ensure that all the faculty members teaching different courses submit their course outlines in time.

3. To ensure the course feedback from the students closes the loop by sharing it to respective faculty members in time

4. IQAC ensure that all the courses follow continuous evaluation Process.

5. To ensure that all the faculty members produce research output, IQAC proposed that the Annual Performance Management System be revised to give more points for research. This suggestion was accepted by the management and a new Integrated Performance Review System has been developed by a faculty team which the management has accepted.

6. Ensure that all PhD holding faculty are guiding at least one PhD student

7. IQAC ensure to that faculty members should have regular Mentors meetings with their students.

Department of Management, Kochi:

- Improvements in documentation and reporting using Excel, AUMS and PTP.

- Initiatives to improve the students’ performance in placement process, a public speaking drive for all students were introduced.
• Held a session for the admin staff on data capturing and documentation.

• Improvements suggested in the student evaluation process by inclusion of viva component in all electives.

**School of Business, Coimbatore:**

• The IQAC took steps to improve the research environment at the college. One of these was to organize seminars and workshops to help train our faculty members and PhD scholars so that they can publish in better journals.

**School of Nursing, Kochi:**

1. **Academic/Teaching – Learning and Evaluation activities**

• The capstone experience (Integrated Clinical Experience (ICE) initiated in September 2016 for the final year B.Sc Nursing students is continued in the following batch and the perceived clinical skills and self-esteem which are central to clinical decision making was evaluated

• The perceived effect of ICE on all the twenty clinical skills assessed and self-esteem were found to be statistically significant

• Planned to provide a two-day special clinical empowerment programme along with capstone experience to smoothen the role of transition from student to a professional nurse

• Planned certificate of selected clinical skills for the final year B.Sc Nursing students

• A core committee was constituted under curriculum committee to identify the core skills to be developed at the end of first year and methods to ensure competencies in them

• Objective Structured Clinical Examination Method (OSCE) was introduced in the first year B.Sc Nursing Programme to improve clinical, decision making and reasoning skills

• Both the undergraduate and post-graduate students are posted in the central simulation lab for skill oriented training. Post training evaluation was also done

• Extended the posting in casualty, blood draw and injection room to get better exposure to recent advances in the field of medicine

• Ensures completion of all the related clinical assignments in a given area before students are sent to next area

• The new department “Foundation of Nursing was added to focus on the basic nursing concepts and procedures for the first year B.Sc nursing students

2. **Research and Publications**

• The small group undergraduate projects with faculty as the primary investigator started in the year 2016-17 resulted in more active involvement of both the students and teachers in research. Thus 36 manuscripts could be sent for publication in various SCOPUS indexed journals of which a few are published and the remaining yet to publish

• The small group UG projects were continued in 2017-18. Thirty four manuscripts are getting ready for publication
Planned to complete the UG small group research studies sufficiently early to get it published before the university examination to facilitate the award of incentives to students as directed from the university.

Planned to conduct projects in collaboration with the department of Nursing Service, AIMS which would help in developing more evidences based practices in improving the quality of patient care.

Planned to focus on a few tribal project at Wayanadu district to sensitize the students to the needs of tribal community apart from the routine community surveys.

Sending the research work for publication in standard peer reviewed journals scopus indexed journals with considerably high impact factor is monitored using the University Guidelines.

Publishing student projects guided by the faculty has been considered as a joint responsibility.

Faculty with less number of publications are repeatedly reminded the need for the same to keep up the institutional/university standards. As per the university directions, publication targets have been set for each faculty positions as Professor - 4, Assoc. Professor - 3, Asst. Professor - 2 and Lecturer – 1. Measures are also taken to improve the performance of those with less number of publications as stipulated by the University.

A faculty member was given the responsibility of publication co-ordinator to monitor the whole process of publication including affiliation, plagiarism, citations and the indexing of journal before its submission.

Compliance to the policies and protocols related to publication has been ensured through the Publication Tracking Portal (PTP) conceived by the university before he approval of HOD.

The submission status of the institution has improved from 15 Non-Scopus and 4 scopus indexed publications in 2016-17 to 30 scopus indexed publications during the period of 2017-18.

Measures are taken to publish the unpublished these of the previous batches of students have contributed to this hike.

3. System of institutional-parent communication

A system of SMS facility to parents was established from academic year 2017-18 to make communication effective and prompt on academic and student specific matters. This has facilitated communication much faster, economic and time saving.

A parental port present in the Amrita University management system helps each parent to view the details of their ward in relation to academics. A demonstration for each batch of parents was carried during the parents’ meet to make it user friendly.

Parents meet has been regularly conducted especially after the first sessional examination of each year.

Postal and telephonic communications are made on special occasions with the needed parents.
• Multiple interactions with parents are done to facilitate learning and create awareness on their wards’ performance for slow learners.

• Parents are members of IQAC. Hence IQAC meetings provide the parent representatives an opportunity to understand, analyze the current issues and trends of the college, give their valuable suggestions and support the recommended interventions to improve educational outcomes.

• The parent executive council constituted with 3-4 parent representatives from each batch UG and PG provides them a platform to discuss their concerns with the faculty and management and in turn a channel of communication for the college to make them aware of the need for compliance with the existing or innovative practices.

4. Value Based Education
• Regular value based education is incorporated into the weekly time table. Preparation of a syllabus for structured value based education is also planned.

• Three students were sponsored by the college to participate in the ‘Geetamrutham’ camp organized by the University at Ettimadai, Coimbatore aimed to get a practical insight about life. The students gave a very positive feedback.

• Two faculty and 12 students participated in “AYUDH India National Camp” at Amritapuri campus which helped them to face life events and its challenges.

• Reconstituted the Cultural Education Committee.

• All the Undergraduate students wrote the preliminary examination for value based education conducted at the campus level.

5. Regular feedback about the teaching learning process is obtained from the students and alumni and modifications are done accordingly.

• Each department is entrusted to review the assignments every year to make it more creative and focussed. If necessary, delete the ones that are not effective and add the ones that are creative.

• Based on the assessment of the assignments, modifications were done in the number, type and quality of the assignments.

• Peer evaluation is conducted among the faculty members to improve the teaching learning skill and process.

6. Improved system of documentation

• The system of documentation through Amrita University Management system (AUMS) for all academic matters (admission, transfer, attendance, internal marks issue and return of library books etc) is continued.

• The practice of obtaining undertaking from the students and parents to make them aware about the ineligibility to appear for University examination continues.

• A virtual account for each student has been created by the university to specify each student’s money transaction.
7. Utilization of the central/common resources
   - Students and faculty get hands on training (15 hrs) in the central simulation lab on specific clinical skills.
   - Students and faculty get statistical consultation services from Dept. of Statistics for their projects.
   - Utilization of common resources like vehicles, canteens, playground, central library etc. continues.

8. Student exchange programme with international universities.
   - As a part of student exchange programme seven MBBS students from Lee Kong Chian School of Medicine, Singapore participated in the community health nursing experience along with fourth year B. Sc. Nursing students from 18/12/2017 to 24/12/2017.
   - Nursing students from Ryerson University, Canada during their student exchange programme with Amrita School of Medicine spent two days (5th & 8th August 2017) with the Fourth year B. Sc. Nursing students of Amrita College of Nursing jointly prepared materials for health education in the community.

9. Class committee meetings
   Meetings are continued to identify teaching learning issues early to resolve the same. Extended class committee meetings with all the students and all the subject teachers of a class helps to ensure communications on recommendations and decisions reaching each and every student.

10. Observation of Important Health Days
    - Observed the World Breast Cancer Awareness month on 21st October 2017 at Gynecology ward, AIMS and an interactive session on breast cancer, it’s prevention and management was organized by 4th year B. Sc. Nursing students to create awareness on breast cancer.
    - Observed International Yoga day on 21st June 2018 with yoga practice by the students of the college.
    - Observed International Women’s Day on 8th March 2018 in co-ordination with Amrita Urban Health Centre.
    - Observed World Health day 2018 on 7th April 2018.


12. Sessions on Personal Development
    - A session on “Prevention of cyber-crime and self-protection” by Bodhini Team was conducted for all the students and faculty of the college on 4th October 2017 at Amriteswari Hall.
    - A Session on “Be Positive” by Ms. Sujamol Jose (Columnist, Mathrubhumi Daily) was conducted in connection with College Anniversary celebrations on 1st November 2017.
Conducted a session on “Role of Individuals in maintaining balance in the ecosystem” by Dr. Giby Kuriakose (Asst. Professor, S. H. College, Thevara) on 7th December 2017.

School of Dentistry, Kochi:

1) Improvement of patient care and various departments sensitized to get oral healthcare delivery certified by National Accreditation Board for Hospitals & Healthcare Providers (NABH). Greater emphasis placed on Infection control.

2) The work for Electronic dental record system (EDR) is in progress.

3) Conducting more outreach programmes with social accountability.

4) Student feedback of lectures taken by faculty.

5) Incorporation of Bioethics into the curriculum and students sensitized to core fundamentals.

6) Strengthening of Anti-tobacco movement and research related to tobacco initiated.

7) Improvement in research activities. Staff provided intensive training in research methodology. Undergraduate students sensitized to research and encouraged to publish papers during internship.

8) Preventive oral health programme initiated by providing training for junior public health nurses under the National Health Mission

9) Evaluation of outreach programmes.

AIMS, Kochi

• “State Pollution Control Award” (Excellence among Medical Colleges (Govt & Autonomous). The award is given for pollution control & environmental protection. AIMS has been conferred this award for the third consecutive year. Hon’ble Chief Minister, Govt. Of Kerala, handed over the award on World Environment Day Celebration function held on 7th June 2018 at Thiruvananthapuram.

• Special Recognition: In the Outlook survey of top 25 medical colleges in the country (Drishti Professional College Survey 2017), Amrita School of Medicine, AIMS, Kochi, scored 14th rank (overall score 710.33).

• Dept. Of CVTS: Cardiac Sciences and Renal Sciences Division performed the Asia’s first simultaneous Heart and Kidney transplant in a 28 years old female patient who was diagnosed as Dilated cardiomyopathy with end stage Chronic Kidney disease (on maintenance dialysis). She is the 6th heart transplant patient at Amrita.

• Dept. Of Community Medicine conducted a workshop on “TB Free Cochin” was organized at the AIMS campus in coordination with the “Corporation of Cochin. Department of Community Medicine, Pulmonary Medicine, Microbiology also participated. The other stake holders of the mission are World Health Organization, Kerala Health Services department, RNTCP, National Urban Health Mission and Indian Medical Association Cochin Branch.
World Day for Safety and Health at Work 2017: Celebrated the **World Day for Safety and Health at Work on 28th April 2017** and organized various events with full participation of faculty, staff and students.

Dept. Of Audiology & Speech Language Pathology: Celebrated “**Voice Day**”. As a part of the celebration, Department of Speech Pathology and Audiology celebrated two days program "Save your voice".

In connection with World No Tobacco Day, ATMA (Anti Tobacco Movement @ Amrita) organized rally at the AIMS campus where faculty, students and staff actively participated.

**World Blood Donor’s Day**: In coordination with the 2015 batch MBBS students, the Department of Transfusion Medicine organized "**NIRANTARA 2K17**", World blood donor day programme with the theme 'Don’t wait until disaster strikes. What can you do? Give blood. Give now. Give often.' Interschool quiz, inter-college debate and poster competition were organized. Chief guests: Shri. Hibi Eden, MLA and Shri. Sharafudeen, cine artist, were the chief guests.

**Cancer Registry**: The 33rd **All India Annual Review Meeting** of National Cancer Registry Programme was conducted at the AIMS campus on behalf of the Indian Council of Medical Research, New Delhi. Dr. Prashant Mathur, Director, National Centre for Disease Informatics and Research conducted the proceedings. Cancer Registries from several States in India participated.

**Dept. Of GI Surgery**: In connection with Anti-Obesity day observation (26th November), jointly with Department of Endocrinology organised street plays, Diet exhibition, and awareness classes by Bariatric surgeon, Plastic Surgeon, Endocrinologist, Dietician and physiotherapist to create awareness among public. Also conducted a poster competition for all the students, faculties and staffs based on the theme 'treat obesity now avoid the consequences later'.

**Dept. Of Pulmonary Medicine**: AIMS was privileged to host **RNTCP State Task Force Meeting** for all medical colleges of Kerala on 24-10-2017. As a part of this, a CME session with topics relevant to TB control was conducted. Dr. Prem Nair, Medical Director, AIMS, inaugurated the session.

**Dept. Of Clinical Psychology**: On the occasion of the World Mental Health Day (10th October), the Department conducted a two hour workshop on "Towards Happiness & Wellbeing at Work" on 21/10/17 for the benefit of staff and students of the institution.

**Department of Pain and Palliative Medicine**: in association with Cochin Corporation, Department of Community Medicine & Indian Medical Association conducted a public awareness program on the occasion of World Palliative Care day on 14-10-2017 at Vylopally Park, Kaloor, Kochi.

**Medical Administration**: Under the aegis of the ICMR, conducted two programmes (i) "Dissemination program on ICMR National Ethical Guidelines for Biomedical and Health Research involving Human Participants and children" and (ii) "ICMR-DBT National guidelines for Stem Cell Research"

**Hospital Administration**: Organized a programme on ICMR Ethical Guidelines dissemination”
• **Anti Tobacco Movement @ Amrita:** In connection with World No Tobacco Day, organized a series of programmes. Inaugural speech was delivered by Sri Venugopal G Kurup, Superintendent of Police, Narcotic Control Beuaro, Kerala. Principals of various schools in the campus participated and delivered lectures. A campus Walkathon by students in the campus was also organized.

• **SWASTI:** is a health and well-being initiative of Amrita Institute of Medical Sciences, Kochi with the aim of improving awareness and promoting positive health and well-being. **SWASTI** will be an ongoing initiative with the aim of embedding **SWASTI** as a movement across all Amrita campuses in the years to come with topical themes on health and well-being every year.

### 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 outcomes achieved by the end of the year *

#### School of Engineering, Coimbatore

<table>
<thead>
<tr>
<th>PLAN OF ACTION</th>
<th>ACHIEVEMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOCIAL WORK DEPARTMENT</td>
<td></td>
</tr>
<tr>
<td>Conduct a National Conference.</td>
<td>Various training programmes for Government functionaries were conducted funded by UNICEF, NCW and NCPCR</td>
</tr>
<tr>
<td>Faculty to Publish papers in Scopus indexed journals</td>
<td>Faculty Members have published 2 Papers 1 paper has been accepted</td>
</tr>
<tr>
<td>Faculty to apply for more funded projects</td>
<td>Project applied by Faculty and sanctioned by UNICEF, NCW and NCPCR</td>
</tr>
<tr>
<td>MECHANICAL DEPARTMENT</td>
<td>Research publications:</td>
</tr>
<tr>
<td>-----------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Proposed number of International journal Publications in 100</td>
<td>No. of papers submitted: 178</td>
</tr>
<tr>
<td>Research projects from the sponsored agency for the worth of 75 lakhs</td>
<td>No. of papers accepted: 94</td>
</tr>
<tr>
<td>Augmentation of infrastructure – 40 Lakhs</td>
<td>No. of papers published: 85</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Funded Projects:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fund received:- 29.7 Lakhs(funding agency) (1.VSSC, 2.DRDO, 3. Raeng, UK Government)</td>
</tr>
<tr>
<td>Project Sanctioned:- Rs.63.44 Lakhs</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Equipment Detail:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Automotive emission Analyzer system purchased on 10-03-2018 Amount Jap YEN 23,30,000</td>
</tr>
<tr>
<td>2. AVL smart sampler - 10-03-2018 Amount Euro 1,41,913</td>
</tr>
<tr>
<td>University Contribution Rs.1.475 Cr</td>
</tr>
<tr>
<td>FIST Contribution Rs.1.475 Cr</td>
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<table>
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<tbody>
<tr>
<td>The plan of action chalked out by the IQAC in the beginning of the year towards quality enhancement and the outcomes achieved by the end of the year June 2018.</td>
</tr>
<tr>
<td>• To improve the quality and pass percentage of students by giving them additional teaching learning tools and hands-on training.</td>
</tr>
<tr>
<td>• To improve the quality of core placements by domain based training by department faculty.</td>
</tr>
<tr>
<td>• To improve academic and sponsored research and quality publications.</td>
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<table>
<thead>
<tr>
<th>OVERALL OUTCOME:</th>
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</thead>
<tbody>
<tr>
<td>1. Improvement in the pass percentage in students</td>
</tr>
<tr>
<td>2. Improvement in the quality of placements</td>
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<tr>
<td>3. Improvement in internship opportunities</td>
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<td>4. Improvement in research and paper publication</td>
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<tr>
<th>CIVIL:</th>
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<tbody>
<tr>
<td>Involving second and third year students in small shares of research works and final year projects to give them a good exposure to laboratory equipment handling and research methodologies.</td>
</tr>
<tr>
<td>Students were also motivated to attend the conference and publish their research work in conference/Journal.</td>
</tr>
<tr>
<td>Faculties were grouped in to different thrust area research group to discuss their research area and ideas and were advised to submit the proposal for funded project</td>
</tr>
<tr>
<td>Many students opting for internships in research institutions started working on mini projects and expressed interest in working part time in department’s funded projects.</td>
</tr>
<tr>
<td>Paper publication status of the department is improved</td>
</tr>
<tr>
<td>Number of proposal submitted from the department for Funded project is increased. Number of funded project sanctioned is also increased</td>
</tr>
<tr>
<td><strong>CEMS:</strong></td>
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<tr>
<td>Improvement of Laboratory Infrastructure</td>
</tr>
<tr>
<td>Enhance Industry - Department interaction and consultancy</td>
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<tr>
<td>Enhance the research publications</td>
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<tr>
<td>Submission of proposals to funding agencies to enhance research</td>
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<tr>
<td>Promote International Collaboration</td>
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<tr>
<td>Faculty Improvement</td>
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<tr>
<td>Implementation of Outcome based Learning (OBL)</td>
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</table>

### School of Education, Mysore

<table>
<thead>
<tr>
<th><strong>Plan of Action</strong></th>
<th><strong>Achievements</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>* To conduct Communicative English classes</td>
<td>*Both English and Kannada medium enriched with their confidence level.</td>
</tr>
<tr>
<td>*To include more teaching skills in micro-teaching sessions</td>
<td>*Students enhanced with their teaching skills</td>
</tr>
<tr>
<td>*To organise more in house co-curricular activities</td>
<td>*Students creativity was explored. Interpersonal relationship improved, healthy competition, community reach was improved, group cohesiveness was very positive.</td>
</tr>
</tbody>
</table>
### Department of Management, Amritapuri:

<table>
<thead>
<tr>
<th>PLAN OF ACTION</th>
<th>ACHIEVEMENTS</th>
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</thead>
<tbody>
<tr>
<td>1. Provide students the industrial exposure through industrial visits, talks from industry leaders and experts and impart additional skills to make them industry ready. (Skill Development)</td>
<td>1. Students had the opportunity to attend talks / lectures delivered by several industry experts. Some of the topics covered in these talks are as follows: Innovation, internet privacy policies with reference to European Union, Humanitarian and logistics management, Corporate challenges for MBA graduates, Innovation with a perspective on telemedicine, Internet of Things, Cultural Preparedness, Leadership@Roche and also Negotiation skills, Your CTC decoded for you, Volkswagen History, Competitors, KPIs and Future, Black Money &amp; Tax Havens, Mutual Funds - Introduction, Types of Mutual Funds, Finance as a specialization, My Life My Passion, Leadership &amp; Managing Performance – workshop, Six Sigma Yellow Belt, Effective Presentation and Basics of contracts, CRM and Corporate Alignment, Block Chain Technology, Current Trends in Digital Marketing, Transition of Career from Indian to Western Environment &amp; Women Empowerment. Students also went for Industrial Visits to Kerala Minerals and Metals Ltd, Chavara Special training program on Corporate Skill by Ethnus Consultancy Services, Bangalore for 120hrs.</td>
</tr>
</tbody>
</table>
2. Provide a global exposure to students by inviting *professionals* abroad to deliver course lectures via electronic means (Value added program).

<table>
<thead>
<tr>
<th>PLAN OF ACTION</th>
<th>ACHIEVEMENTS</th>
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</thead>
<tbody>
<tr>
<td>Restructuring of the existing infrastructure to provide space for additional labs and reading room/Library.</td>
<td>Existing infrastructure and space was reorganized to create new research laboratories with specialized focus in areas of Bioinformatics, Microbial Genetics and Developmental biology.</td>
</tr>
</tbody>
</table>

2. A series of invited talks from international experts were arranged. The list is as follows:
- Mr. Rajan Krishnan Retired from Exxon Mobile, USA, USA
- Mr. Michael Barton US Tax Lawyer, USA
- Prof. De Luc (SKYPE) Assistant professor in marketing at Sweden, Sweden
- Mr. Aris Bumm Finance office, Man Truck, Switzerland, Switzerland
- Dr. Harish, Equity investor and researcher USA
- Mr. Kessinger Entrepreneur, publisher USA
- Dr. Bodo Eickhoff Senior Vice President Sales & Marketing Molecular Diagnostics, Roche Diagnostics Deutschland GmbH, DEGA, Germany
- Mr. Jens Joergen Aakard Senior project manager, TDC Group (Telecommunication in Denmark and Norway) Denmark
- Mr. Thomas Grau Logistics manager at Doctors without Borders (DWB) France
- Mr. Jens Jørgen Aakard Project Manager, The TDC Group, Denmark
- Ms. Alison Richards Director of Marketing at Intel Corporation USA
- Dr. Bodo Eickhoff Senior Vice President Sales & Marketing Molecular Diagnostics, Roche Diagnostics Deutschland GmbH, DEGA, Germany
- Mr. Pratysuh Banerjee Head HR South East and Middle East Regions HCL Infosystems Singapore, Singapore
- Mr. Wolfgang Aris Bumm Finance Director - MAN Truck & Bus Switzerland, Switzerland
- Mr. Jayaprakash Financial Controller at QBE Insurance (PNG) Ltd Australia
- Shri Narayan Van de Graff, Senior Management Consultant, Australia
- Dr. Ram Bishu Professor University of Nebraska – Lincoln, USA
- Renjan Krishnan, Global Marketing, USA
- Ms. Aysha Syed Senior Vice President at Citigroup New York, USA

3. Improve Faculty Qualification

   3.2 existing faculty completed their PhD.

4. Enhance Research output of faculty and students.

   4. 25 scopus indexed paper produced by faculty and students.
Ph.D. students availing University fellowships are recommended to spend at least six hours per week for School related academic activities.

A total of 8 Ph.D. students at different stages of the Ph.D. program have been inducted as Teaching Assistants in the B.Sc. and M.Sc. programs to assist in hands-on training of the practical as well as the final semester research projects for both B.Sc. and M.Sc. students. This strategy has been very successful with a number of projects yielding Scopus indexed publication even at the B.Sc. level.

**School of Ayurveda, Amritapuri:**

<table>
<thead>
<tr>
<th>Plan of Action</th>
<th>Achievements</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Seminar</td>
<td>Achieved</td>
</tr>
<tr>
<td>Research Lab</td>
<td>Achieved</td>
</tr>
<tr>
<td>Research projects</td>
<td>Achieved</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>Progressing</td>
</tr>
<tr>
<td>100% permanent faculty</td>
<td>Achieved</td>
</tr>
<tr>
<td>Increase the number of faculty PhD</td>
<td>20 faculties registered</td>
</tr>
<tr>
<td>Increasing the number of publication in scopus and pubmed</td>
<td>Not remarkable</td>
</tr>
</tbody>
</table>

**School of Arts and Science, Amritapuri:**

The plan of action pointed out by the IQAC in the beginning of the academic year towards the quality enhancement and the outcome achieved by the end of the year.

The IQAC in its meeting held at the beginning of the academic year decided to implement new activities during 2017-18 and strengthen the activities which are already in place during the previous years.

As indicated in the report of the previous years, IQAC had initiated several programmes. These include the design and restructuring of the curricula, conducting invited lectures by eminent researchers from India and abroad to inculcate new concepts on the emerging areas of research, organizing Faculty Development Programmes (FDP), organizing seminars/workshops, instigating and strengthening the research activities, starting the collaborative research activities with other reputed institutions in the country and encouraging co and extracurricular activities among the students. IQAC decided that these activities should further be strengthened and extended to all Departments under the ASAS during the academic Year 2017-18.

In addition to the above it was decided that the faculty members should be encouraged to write project proposals to external funding agencies such as the DST, UGC, CSIR and other different funding agencies. It was also decided to invite distinguished speakers from various National Institutes and Universities to deliver lectures in the frontier areas of research for the benefit of the faculty and the students.
<table>
<thead>
<tr>
<th>Plan of Action</th>
<th>Achievements</th>
</tr>
</thead>
<tbody>
<tr>
<td>• In view of the additional programmes introduced and the increased strength</td>
<td>• Following augmentation initiatives were taken up during the academic year</td>
</tr>
<tr>
<td>and the increased strength of the school, infrastructure facility need to</td>
<td>2017-18.</td>
</tr>
<tr>
<td>be augmented:</td>
<td>- 300 chairs costing Rs. 6,20,017/- were purchased.</td>
</tr>
<tr>
<td>- Purchase of chairs at the cost of upto Rs.7,00,000/-</td>
<td>- CCTV cameras were upgraded to the tune of Rs. 95,025/-</td>
</tr>
<tr>
<td>- Upgradation and extension of CC TV Cameras to the tune of Rs. 3,00,000/-</td>
<td>- 24 X 7 Wi-Fi connectivity is extended in the campus</td>
</tr>
<tr>
<td>- Free 24x7 Wi-Fi connectivity in the campus extended to both staff and</td>
<td>• An exclusive Edit Suite was set up at the cost of Rs. 6,68,998/- to cater</td>
</tr>
<tr>
<td>student</td>
<td>to the editing and rendering needs of Visual Communications students in the</td>
</tr>
<tr>
<td>- Augmentation of Computer Labs with about 36 thin client systems with an</td>
<td>process of Film Production and Web Designing.</td>
</tr>
<tr>
<td>estimated budget of about Rs.5,00,000/-</td>
<td>• SOPHOS hardware fire wall was purchased and put in place.</td>
</tr>
<tr>
<td>• Purchase of high end desk top systems to cater to research purposes</td>
<td>• 16 teaching and 4 non-teaching staff were appointed</td>
</tr>
<tr>
<td>• Installation of fire wall for better cyber security.</td>
<td>• Preparation for introducing B.Sc B.Ed and B.Sc with two combinations of</td>
</tr>
<tr>
<td>Upgradation of EPBX with PRI cards for easy quick and improved connectivity</td>
<td>triple main model is made with required infrastructural augmentation –</td>
</tr>
<tr>
<td>• Appointment of additional teaching &amp; non-teaching staff</td>
<td>classrooms, furniture, audio-visual equipment and setting up of Physics &amp;</td>
</tr>
<tr>
<td>• To introduce Integrated BSc – B.Ed. programme</td>
<td>Chemistry labs, appointment of faculty members for Physics, Chemistry and</td>
</tr>
<tr>
<td>• Completion of ladies hostel</td>
<td>Mathematics.</td>
</tr>
<tr>
<td>• Renovation of the multipurpose hall to utilise the space for constructing</td>
<td>• The first block of the ladies hostel with an accommodation capacity of 190</td>
</tr>
<tr>
<td>three more floors accommodating computer labs, guest rooms and library</td>
<td>students is completed and occupied.</td>
</tr>
<tr>
<td></td>
<td>• Encouraging undergraduate students to write research papers for journal</td>
</tr>
<tr>
<td></td>
<td>publication:</td>
</tr>
<tr>
<td></td>
<td>- 12 students of BCA have published papers in Scopus indexed journals</td>
</tr>
<tr>
<td></td>
<td>• The practice of conducting bridge courses for non-computer science and</td>
</tr>
<tr>
<td></td>
<td>non-commerce students in their respective discipline, is continued</td>
</tr>
</tbody>
</table>
**Department of Management, Bangalore:**

<table>
<thead>
<tr>
<th>PLAN OF ACTION</th>
<th>ACHIEVEMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Updated Integrated Performance Management System</td>
<td>Based on previous year comments the committee further revised the Integrated Performance Review System. This structure gives an equal lot of emphasis on teaching, administrative and on Research while deciding the annual incentives for faculty.</td>
</tr>
<tr>
<td>To organize more Workshop for students in each course specialization.</td>
<td>We have conducted workshop on Excel, Digital Marketing, Research, Analytical Tools and Financial Management</td>
</tr>
<tr>
<td>To encourage our faculty members to participate in research conferences, seminars and Faculty Development Programs;</td>
<td>Many of our faculty members participated in international / national conferences, seminars and FDPs.</td>
</tr>
</tbody>
</table>

**Department of Management, Kochi:**

<table>
<thead>
<tr>
<th>PLAN OF ACTION</th>
<th>ACHIEVEMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• To increase the number of colloquia held during the year, for better industry exposure before the students start appearing for placement interviews.</td>
<td>• In progress. More colloquia planned for the coming year.</td>
</tr>
<tr>
<td>• To introduce an online database of leave information for the faculty and staff.</td>
<td>• Achieved</td>
</tr>
<tr>
<td>• To handle more number of courses internally and reduce the over dependence on visiting faculty.</td>
<td>• Achieved</td>
</tr>
<tr>
<td>• Engage full time faculty members in all areas of specialization.</td>
<td>• Achieved</td>
</tr>
<tr>
<td>• To introduce an internal newsletter for enhanced knowledge sharing.</td>
<td>• Not achieved. Work initiated to bring it out in the coming year.</td>
</tr>
<tr>
<td>• To have a dedicated area for CIR and placement activities like mock interviews and GDs</td>
<td>• Achieved</td>
</tr>
<tr>
<td>• To organize a soft skills workshop for faculty and non-teaching staff.</td>
<td>• Not achieved. Will be held in the coming year.</td>
</tr>
<tr>
<td>• To organize an environment awareness programme.</td>
<td>• Achieved</td>
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</table>

**Nanoscience, Kochi:**

<table>
<thead>
<tr>
<th>PLAN OF ACTION</th>
<th>ACHIEVEMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Setting up of GMP facility</td>
<td>85% completed</td>
</tr>
<tr>
<td>Setting up of 3D bio-printing facility</td>
<td>40% completed</td>
</tr>
<tr>
<td>BD Centre for Excellence in flow cytometry</td>
<td>Completed</td>
</tr>
<tr>
<td>Setting up of GLP facility</td>
<td>70% completed</td>
</tr>
<tr>
<td>Setting up of an energy storage lab</td>
<td>Completed 90%</td>
</tr>
<tr>
<td>Setting up a thin film deposition lab</td>
<td>Completed 50%</td>
</tr>
<tr>
<td>Pharmacy, Kochi:</td>
<td></td>
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<tr>
<td><strong>PLAN OF ACTION</strong></td>
<td><strong>ACHIEVEMENTS</strong></td>
</tr>
<tr>
<td>Increasing the quality of Publication</td>
<td>The no. of scopus publication has also increased from 52 in 2016 to 72 in 2017</td>
</tr>
<tr>
<td>Research</td>
<td>More faculty(8 Nos.) have registered for Ph.D programme</td>
</tr>
<tr>
<td>Attract Placement opportunities for students.</td>
<td>Initiated communication for placement with various Pharmaceutical companies namely,</td>
</tr>
<tr>
<td></td>
<td>1. Rhizen Pharmaceuticals, Hyderabad,</td>
</tr>
<tr>
<td></td>
<td>2. Cipla Pharmaceuticals Ltd, Bangalore,</td>
</tr>
<tr>
<td></td>
<td>3. Troika Pharmaceuticals, Ltd, Ahmedabad,</td>
</tr>
<tr>
<td></td>
<td>4. Bioclinica Pvt. Ltd, Mysore,</td>
</tr>
<tr>
<td></td>
<td>5. Sun Pharmaceuticals, Ahmedabad</td>
</tr>
<tr>
<td></td>
<td>6. Lupin Pvt. Ltd, Ahmedabad</td>
</tr>
<tr>
<td></td>
<td>7. Unichem Pvt. Ltd, &amp; Sanofi Pvt. Ltd, Goa</td>
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<td></td>
<td>8. Indigene Pvt. Ltd, Bangalore</td>
</tr>
<tr>
<td></td>
<td>9. Dr. Reddy Laboratories, Hyderabad</td>
</tr>
<tr>
<td></td>
<td>10. Syngene International Ltd, Biocon park, Bangalore.</td>
</tr>
<tr>
<td>Strengthen Industry Institution Interaction &amp; have MoU’s for training &amp; placement</td>
<td>Signed MoU with Nupal Remedies, Kochi for industry training for students.</td>
</tr>
<tr>
<td></td>
<td>Signed MoU with SKN organics pvt. Ltd, Pondicherry for campus placements.</td>
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<td></td>
<td>Prepared and circulated a placement brochure for the year 2017-18</td>
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<td></td>
<td>Initiated the preliminary steps for conduction of research-industry network(RIN) session at BioMet 2018 International conference on Biomaterials, Bioengineering and Biotheranostics</td>
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<tr>
<th>School of Business, Coimbatore:</th>
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<tbody>
<tr>
<td><strong>PLAN OF ACTION</strong></td>
<td><strong>ACHIEVEMENTS</strong></td>
</tr>
<tr>
<td>To organize seminars and workshops to help train our faculty members and PhD scholars so that they can publish in better journals; To ensure that all the new courses are reviewed at two levels – the area concerned and the entire faculty body.</td>
<td>Six seminars/workshops were held during the year. Introduced 8 elective courses during the last academic year</td>
</tr>
<tr>
<td>PLAN OF ACTION</td>
<td>ACHIEVEMENTS</td>
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</table>
| 1. To improve the quality and quantity of research projects of the college resulting in better research culture and more publications in SCOPUS indexed journals. | • The publication status of the institution has improved from 15 Non-Scopus and 4 SCOPUS indexed publications in 2016-17 to 30 SCOPUS indexed publications during the period 2017-18.  
• Ensured publication/processing of all PG and UG student research (both group and individual) projects before the commencement of University examinations.  
• The initiative of faculty as Primary Investigators could increase the number of faculty as authors or first author than being second or corresponding author.  
• Compliance to the University guidelines for faculty publications was better.  
• Small group projects resulted in more student involvement in the project, creating added awareness and experience in research.  
• All the UG students have one SCOPUS indexed publication to their credit as a co-author. |
| 2. Measures to strengthen the clinical skills and self esteem of nursing students. | • A new department, Foundations of Nursing was added to focus on basic nursing skills essential for nursing practice.  
• Formed core group to identify the skill gaps among First year nursing students and focused on these skills.  
• Better methodologies were discussed and framed to ensure the performance of the basic nursing skills by the First year B. Sc Nursing students.  
• Objective Structured Clinical Examination method (OSCE) was introduced in the First year B. Sc. Nursing programme to improve the clinical, decision making and reasoning skills.  
• A capstone experience (Integrated Clinical Experience/ICE) of one month was provided to the final year B. Sc. Nursing students and evaluated.  
• The perceived effect of ICE on all the twenty clinical skills assessed and self-esteem were found to be statistically significant, proving that it can make the role transition from student to professional nurse smooth. |
| 3. Student sensitization on community needs | • Planned to focus on a few tribal projects at Waynadu district to sensitize the students to the needs of tribal community apart from the routine community surveys.  
• Provide planned and incidental individual and family health education, exhibitions, etc in the community.  
• The final year B. Sc Nursing students conduct home visit and provide health education and care to the needy in the family.  
• Conducted family health survey in 14th and 15th wards and 2nd and 6th wards of Nayarambalam Panchayath, Ernakulam district from 04/10/17 to 07/10/17 and 5/12/17 to 9/12/17 respectively and covered 690 houses and a population of 2434. Population characteristics, housing pattern and environment, communicable and non-communicable disease prevalent in the community and health practices in the community were identified.  
• Organized various clinics like Under-five clinics, Geriatric clinic and conducted School health programmes which help in early identification of illnesses and referral services.  
• Conducted School health programme at St: Augustine High School, Kaloor on 13/10/17 and Bhagavathi Vilasam High School, Nyarambalam on 16/01/18. Screened 153 high school children (8th and 9th standard and identified the symptom of malnutrition in 68 students and vision problems in four students. A musical drama regarding substance abuse was conducted in both the schools.  
• Conducted Geriatric clinics in 14th and 2nd wards of Nayarambalam grampanchayath, Ernakulam Dist. on 04-11-2017 and 19/12/17 respectively. The main focus of the clinic was to assess the general health status of aged persons residing in the area. Forty eight geriatric population attended in both clinics. General physical examination, monitoring of blood pressure and blood sugar, recoding of height and weight were done. Health problems such as diabetes mellitus, hypertension, dyslipidemia and cataract were identified and refereed them to Amrita Health Centre, Njarackal.  
• Participation in medical camps organized by AIMS not only sensitize the students on societal needs but also improve their skills in |
communication, team work and nursing care. Twenty eight students participated in eight medical camps organized by AIMS in various districts of Kerala state.

- Community based research projects are also given due importance.
- Observation of important health days has created better awareness among the students and faculty.
- The tribal community clinical experience provided for a week (20/11/17 to 25/11/17) to a selected 25 students under the guidance of faculty has provided a unique experience for them to the needs of poor and illiterate. Screening of non-communicable diseases in 535 people residing in 125 families at adopted tribal colonies in Wayanad like Mothakkara, Valliyookavu, Choondakunnu and Padachikunnu. They participated in the Medical Camp organized by Amritakripa charitable hospital, Kalpetta on 23/12/17. Students conducted screening programme for identifying Diabetes mellitus and Hypertensive patients at Valliyookavu on 22/11/17. The beneficiary of the camp was 21. A mass health education campaign using appropriate models was organized by them on tobacco chewing, ill effects of alcohol, child education after a tribal health survey and screening of non-communicable diseases at the adopted tribal colonies (as a part of Amrita SeRV).
4. Inter professional/ intra professional collaboration

- Conducted International conference on Obesity - a Multifaceted Approach on 1st and 2nd December 2017. Experts from various disciplines Medicine, Surgery, Psychology, Psychiatry, Paediatrics, OB&G, Nursing, Nutrition and Ayurveda were brought under one umbrella and their views on obesity, its prevention and control could be discussed.
- The most striking session of the conference was the sharing of experience of the patients who underwent Bariatric surgery.
- Around 600 delegates from various sectors – Nursing, Medicine, Psychology, Sociology, and Nutrition attended the conference.
- Faculty of the college attended a workshop on Qualitative Research methods organized by the Amrita School of Dentistry.
- Two faculty members of the college attended a course on Research writing organized by the Department of Community Medicine, AIMS.
- Faculty of Community Health Nursing attended Amrita online series conducted by the Dept. of Community Medicine, AIMS.
- Students participated in the poster designing competitions organized by the Departments of Gastrointestinal Surgery, Pulmonary Medicine and Hospital safety. Many prizes were bagged by the students.
- College of Nursing faculty is a part of the Co-ordinating committee for the International Conference “From Neglect to Equity” - Addressing the twin burden of Neglected Tropical Diseases and Non-Communicable Diseases” scheduled on 2nd & 3rd November 2018.
- Planned to conduct more clinical oriented research studies in collaboration with the department of nursing service/staff development centre.

5. Cultural education.

- Activities boosting the awareness of values and culture are organized at frequent intervals like Ramayana Day, Quiz Competitions, Onam, Gurupurnima Celebrations, Satsung by distinguished people etc.
- Regular value based education sessions are provided in batches.
<table>
<thead>
<tr>
<th>6. Measures for faculty development / Empowerment</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The general orientation sessions organized by the Nursing Service Department helps the newly joined faculty to get familiar with the hospital policies and protocols on patient care.</td>
</tr>
<tr>
<td>• Demonstration followed by discussion of selected nursing procedures is done to maintain uniformity of instruction especially among the newly joined teachers.</td>
</tr>
<tr>
<td>• Faculty members are trained in the high fidelity mannequins in the central simulation lab.</td>
</tr>
<tr>
<td>• Peer evaluation of the faculty has been initiated and feedback given for improvement.</td>
</tr>
<tr>
<td>• Faculty in turn attend short term workshops/sessions conducted by the in-service education department to update the clinical trends in health care.</td>
</tr>
<tr>
<td>• The faculty development programme of the college gives each member a platform to discuss the trends in patient care.</td>
</tr>
<tr>
<td>• Participation of faculty in national/international conferences organized by other institutions is facilitated through provision of leave and financial support.</td>
</tr>
<tr>
<td>• Faculty are encouraged to be resource persons in conferences conducted outside the institution.</td>
</tr>
<tr>
<td>• Faculty members are encouraged to present papers/posters in conferences.</td>
</tr>
<tr>
<td>• A few faculty members are examiners for the UG &amp; PG courses outside the state.</td>
</tr>
<tr>
<td>• One Professor is a member of Board of Studies in another University.</td>
</tr>
<tr>
<td>• Four senior faculty members are Adhoc Inspectors of the State Nursing Council.</td>
</tr>
<tr>
<td>• Powers and responsibilities appropriately delegated to the faculty in terms of Heads of Department, Chair persons of various committees, Research Co-ordinator etc.</td>
</tr>
<tr>
<td>• One faculty is awarded with Ph. D. in Nursing; two are in the process of completion and another three are registered.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7. Improve the quality of student evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Could rectify the issues identified in the University question papers such as disparity in the weightage of the units, non-uniformity among the subjects and specialities, lack of uniformity in the question pattern etc based on the analysis conducted as part of the workshop on “Evaluation of question papers”</td>
</tr>
<tr>
<td>No.</td>
</tr>
<tr>
<td>-----</td>
</tr>
<tr>
<td>8.</td>
</tr>
</tbody>
</table>
| 9.  | Invited talks                                 | • Session on “Prevention of cyber-crime and self-protection” by Bodhini Team on 4th October 2017 at Amriteshwari Hall.  
• Session on "Be Positive" by Ms. Sujamol Jose (Columnist in the Mathrubhumi daily) on 1st November 2017 at the College as part of the Annual day of the College and Kerala piravi.  
• Session on “ Role of Individual in maintaining balance in the ecosystem “ by Dr. Giby Kuriakose (Asst. Professor, S. H. College, Thevara on 7th December 2017. |
| 10. | Plans on online feedback system of the course/subject/ teacher. | Plans to start on online feedback system of the course/subject/ teacher.                                                                                                                                 |
| 11. | International conference                      | Conducted international conference on “Obesity - a multifaceted approach” in December 2017 where around 600 delegates participated.  
The conference gave an opportunity to collaborate with experts in various disciplines and could generate more scientific papers and posters on the theme. |
| 12. | Observing days of importance                  | Observed the following days of importance  
□ World Alzheimer's Day  
□ World Health day  
□ Breast Cancer Awareness month  
□ International Women’s Day  
□ Yoga day  
□ Children’s day  
□ Observing health days of importance has created awareness on its prevention, control and management including the responsibilities as health care providers. |
| 13. | Group SMS facility to the parents             | Introduced the system of group SMS facility to the parents.  
Group SMS facility has ensured prompt communication to the parents on the parents meet, payment of fees etc. Postal delays could be avoided. |
| 14. | Participation in Arts and Sports celebrations and competitions. | College level Annual sports and games competitions Yatna 2018 was held on February 2018. Overall Championship was bagged by the III year B. Sc. Nursing (14th batch) students.  
Student Nurses Association (Zonal Level) competitions were held at MOSC Medical |
Out of the 42 nursing colleges, Amrita College of Nursing was selected as the best unit of Central Zone B.

- Mr. Gokul G, final year B. Sc. Nursing student got the individual championship.
- Mr. Binoop Pushkaran of final year B. Sc. Nursing bagged 1st prize in the inter Amrita Weight Lifting championship, held at Amritapuri.
- Ms. Aiswarya N C, Nezra Joseph and Ms. Veena Venugopal (II Year B. Sc. Nursing) were in AIMS Basketball team and won 1st prize in Inter Amrita Basket Ball Competition, Kochi (13/10/2017-15/10/2017)
- Ms. Veena Venugopal of second year B. Sc Nursing had won third prize in shot put competition in the SNA State Level Sports Meet.

15. Release of Nursing College Magazine

- The work for the sixth college magazine has been initiated.

**School of Dentistry, Kochi:**

<table>
<thead>
<tr>
<th>PLAN OF ACTION</th>
<th>ACHIEVEMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) To improve the patient care.</td>
<td>1) NABH accreditation process preparation in progress. EDR system being developed. Increased participation from staff for outreach activities. Infection control given more emphasis and team to monitor and evaluate constituted. Improvement in infection control practices for dental camps</td>
</tr>
<tr>
<td>2) To improve the research activities</td>
<td>2) Staff provided intensive training in research methodology with emphasis on publishing papers with higher impact factor. Undergraduate students and interns encouraged to take up research.</td>
</tr>
<tr>
<td>3) Improvement in postgraduate training.</td>
<td>3) More guest lectures, Continuing Dental Education programmes, webinars and workshops conducted.</td>
</tr>
<tr>
<td>4) To improve the overall development of students</td>
<td>4) Students sensitized to Values-based case studies. “Values-based” lectures delivered to students and students encouraged to participate in activities benefitting the society. Public Health documentaries</td>
</tr>
</tbody>
</table>
5) Initiating activities which have social accountability.

6) Revamping of Dental Assistant Programme

AIMS, Kochi:

<table>
<thead>
<tr>
<th>PLAN OF ACTION</th>
<th>ACHIEVEMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Academic</strong></td>
<td><strong>New Programmes commenced:</strong></td>
</tr>
</tbody>
</table>
| Preparation for various MCI Assessments for Degree recognitions/re-recognition/seat increase/starting newly introduced Postgraduate Programmes. | M.Sc.Cardiovascular Technology  
M.Sc.Physican Assistant in Med Oncology  
M.Sc.Diabetes Sciences  
M.Sc.Dialysis Therapy  
M.Sc.Trauma & Critical Care  
M.Phil Hospital Administration |
| **Recognition of Degree:** | PG Diploma in Dermatology (DDVL) |
| **Re-recognition of Degree after 5 years:** | MD Physical Medicine & Rehabilitation  
Diploma in Child Health  
Diploma inENT (DLO)  
Diploma in Ophthalmology (DO)  
Diploma in Psychiatry (DPM)  
Diploma in Radiodiagnosis (DMRD)  
Diploma in Radiotherapy (DMRT) |
| Commenced Fellowship in specialities of Pathology (Renal Pathology,Gastrointestinal & Liver Pathology, Onco-Pathology) Paediatric Neurology. | |
| **Infrastructure:** | **Space:**  |
| Augmenting in-patient and out-patient facilities; procurement of equipments | Additional ward has been created in the B-Block (3rd, 4th and 5th floors).  
Construction of a new building almost completed and partly occupied.  
Medical Education Unit shifted to a newly created space with over 6000 sq ft area.  
A palliative Care cubicle for supportive care. |
<table>
<thead>
<tr>
<th>care started.</th>
</tr>
</thead>
<tbody>
<tr>
<td>New advanced diagnostic laboratory test started by Virology, microbiology, Neuro-immuno Lab., and Biochemistry.</td>
</tr>
<tr>
<td>A new specialty clinic “Hypertrophic cardiomyopathy” commenced by Dept. Of cardiology.</td>
</tr>
<tr>
<td>A new clinic “Genetics Tumor Clinic” commenced by Dept. Of Oncology.</td>
</tr>
<tr>
<td>Established an State of the Art Infertility Centre under the Department of Reproductive Medicine.</td>
</tr>
</tbody>
</table>
Part – B
Criterion – I

1. Curricular Aspects

1. Details about Academic Programmes

<table>
<thead>
<tr>
<th>Level of the Programme</th>
<th>Number of existing Programmes</th>
<th>Number of programmes added during the year</th>
<th>Number of value added / Career Oriented programmes</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD</td>
<td>7</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>PG</td>
<td>166</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>UG</td>
<td>45</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>PG Diploma</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advanced Diploma</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diploma</td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Certificate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>231</strong></td>
<td><strong>8</strong></td>
<td></td>
</tr>
</tbody>
</table>

1.2 (i) Flexibility of the Curriculum: CBCS/Core/Elective option / Open options
[Describe: (1) whether school follows CBCS (2) scheme for offering electives (3) types of electives and how they offer flexibility]

School of Engineering, Coimbatore

1. Choice based and open elective courses: The undergraduate curriculum for the 2015 batch includes choice based open elective courses like the live-in labs, negotiated studies and projects-based elective courses
2. Scheme for Elective Course Design: The electives courses are introduced on need basis any time in the curriculum on obtaining academic council approval.
3. Fractal credit system is introduced for the following course in M.Tech curriculum:
   a. Data structures and algorithms
   b. Mathematical foundations of Computer Science
   c. Cloud computing and IOT
4. Types of Elective: The electives are designed for undergraduate and post graduate as follows:
      • Computational Intelligence/Database Technologies/Image Analysis
      • Embedded Systems / Networking / Security
      • Software Development
      • Management
   b. M.Tech. CSE – Electives leading to Specialization in
      • Machine Learning and Data Science
      • Architecture and Systems
5. Flexibility in curriculum for students taking internship in industry and other universities.
   a. Pre-final & final year courses and project from foreign universities facilitated by Amrita Centre for International Programmes (ACIP) International Partnering Institutions
   b. Transfer of credits for foreign exchange students from participating universities and organizations
   c. Fast-track courses for project interns at Industry and R&D Labs Nearly 60% of B.Tech CSE Students take up this opportunity. Student go for internships in reputed companies and national research agencies like Microsoft, HCL, KalkiTech- Technopark, NLC, BSNL, HP, Uniq Technologies, DRDO, CDAC, Delta technologies, Ericsson, NAFEMS –Bangalore

**School of Arts and Science, Kochi:**
- The school follows CBCS system with continuous evaluation and semester
- There are four electives at UG level offered in semesters 4 and 5.
- At PG level eight electives are offered in semesters 8 and 9. In Semesters 4 and 5 pupils have to choose one of the two electives offered.
- In semesters 8 and 9 pupils have to choose two electives from four offered in each semester.

**School of Education, Mysore:**
The Programme is structured on credit based system and continuous evaluation, following semester pattern:

The curriculum of the B.Ed. degree programme has credits, apportioned as below in the following knowledge segments:

- Core subjects
- Allied subjects and
- Electives

Additionally, skill training and some social interaction/social work/out reaching programme is also part of the programme.

Credits are assigned to the courses based on the following general pattern
- One credit for each lecture period per week
- One credit for each tutorial of two periods per week
- One credit for each laboratory course/practical of two periods per week

There is mandatory registration and credit earnings requirement for core courses. While it is mandatory to register for the allied courses, failure to earn credit in them does not necessarily mean repeating the courses. Often another course may be permitted as replacement course. Electives are to be chosen from those offered.

**Electives List:**
- Communicative English
- Environmental Education
- Guidance and Counselling
- Health and Physical Education

Department of Management, Kochi:

<table>
<thead>
<tr>
<th>Course Category</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core</td>
<td>76</td>
</tr>
<tr>
<td>Electives</td>
<td>36</td>
</tr>
<tr>
<td>Colloquia</td>
<td>2</td>
</tr>
<tr>
<td>Summer Internship and Independent Study</td>
<td>9</td>
</tr>
<tr>
<td>Corporate Skills</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>126</strong></td>
</tr>
</tbody>
</table>

School of Business, Coimbatore:

The first year of the MBA programme comprising the first three trimesters offers only core courses in different functional areas of management in order to lay down the basic foundation in the discipline. In the second year comprising the fourth, fifth and sixth trimesters, we allow the students to choose ten elective courses depending upon their choice of the functional areas in which they want to specialize. Every student is allowed to specialize in their chosen area by taking at least five electives in that area. They can either distribute the remaining electives over a mix of other functional areas or can go for dual specialization. To qualify for dual specialization, they need to take at least five elective courses each from both the areas chosen. BRP is worth six credits (equivalent to two three credit elective courses). The BRP scheme allows a student to take up any management topic for his/her research study. He/she is guided by a faculty member who is chosen by him/her based on mutual consent between the student and the faculty member.

(ii) Pattern of programmes:

<table>
<thead>
<tr>
<th>Pattern</th>
<th>Number of programmes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester</td>
<td>228</td>
</tr>
<tr>
<td>Trimester</td>
<td>4</td>
</tr>
<tr>
<td>Annual</td>
<td>7</td>
</tr>
</tbody>
</table>

1.3 Feedback from stakeholders* (On all aspects)

MODE OF FEEDBACK

Online ✓ Manual □ Co-operating schools (for PEI) □

*Please provide an analysis of the feedback (use an Annexure if needed)
1.4 Whether there is any revision/update of regulation or syllabi, if yes, mention their salient aspects.

SCHOOL OF ENGINEERING, COIMBATORE

Sciences:

Major revision in syllabi and curriculum has been done. Adequately the syllabuses are improvised to meet modern day scientific knowledge.

Mechanical Engineering:

The Curriculum and syllabi revised for PG programs in the department

a. New M.Tech curriculum will come into effect from 2018 Admissions.

b. Research methodology course is newly introduced for 2 credits to give more research focus to the students.

c. Courses like Soft skills, Amrita Value Program are introduced to the program to improve the employability and imbibe the culture.

M.Tech Automotive Engineering

1. Low temperature combustion concepts such as HCCI, PCCI and RCCI are added in IC Engine course.

2. Based on the current research scenario, 3D Printing Techniques and its case studies are included in Automotive Materials and Manufacturing course.

3. Vehicle Dynamics course is modified as problem oriented and more focus is given to Simulation using ADAMS.

4. Actuators, Sensors and CAN based exercises are included in Electronics lab.

5. Vibration Measurement and Modal Analysis exercises are added in NVH Lab.

6. Students can take either FEA or CFD as their elective-I in their second semester.

M.Tech Engineering Design

1. Mathematics is removed from the curriculum and Selection of materials for mechanical design are moved to elective.

2. Combustion Engineering, Design of IC Engines and Computational welding mechanics courses are removed from electives.

3. Course on material joining techniques, Gear and Bearing design are introduced as electives.

4. Design Automation with IoT is introduced as an elective in discussion with Dr. Eric Blanco, Grenoble University, France.

5. Portion of Machine Condition Monitoring is added to failure analysis and design.

6. MOOC courses are allowed in electives with suitable monitoring and assessment procedure.

7. Predictive Reliability is included in product design and quality management.

8. Design Thinking course is introduced as an elective to make the students as a good designer by imparting creativity and problem solving ability.

M.Tech Manufacturing Engineering

1. The recent advances in materials and materials processing are incorporated in the curriculum.
2. Industrial Automation is going to have the latest trend on Internet of Things
3. Concept of Artificial Intelligence introduced in Reliability Engineering
4. Additive Manufacturing Course made as a Core to meet the Industry need.

**EEE:**
1. Revision and updation of regulation or syllabi is carried out for UG after completion of every 4 years and PG students after completion of every 2 years.
2. In all revisions the curriculum changes are carried out to accustom the factors of considering new electives, focus towards industry aspects, skill development and society oriented.
3. These revisions helped the curriculum shaped towards industry oriented and students to develop the thinking capability and imparted towards innovative products.

**ECE:**
PG programme in Bio-Medical Engineering / Communication Engineering Signal Processing / VLSI Design was revised with the salient features as below.
- Third and fourth semesters fully dedicated for pursuing industry internship/dissertation and quality publications.
- Fractal courses (with 1 and 2 credit courses) enabling student to have a quick coverage of the relevant course in addition to a diverse range of electives grouped in various streams in line with industry and technology trending topics.
- All theory courses to have a lab component giving adequate exposure to programming or usage of relevant tools to the respective domain.
- One lab course each in first and second semester for extensive hands-on practice.

**CSE:**
1. A customized orientation Programme to be conducted to bridge the gap between UG and PG programmes as well as the gap between exposure level of students from different Institutions / Regions.
2. Members suggested preparing a bubble chart showing the link and dependencies between different courses under each stream for course selection process.
3. Members suggested that the faculty advisors need to create awareness about various streams among students before choosing Soft Core and Electives through interactive sessions.
4. Selection and offering of Softcore and Elective courses in each campus was discussed. It was suggested that the Campus level specialization can be taken as criteria for selecting the soft core and electives.
5. Suggestion was made to prepare stream wise publication details, employment and research opportunities and to distribute them to the students to give exposure about the scope and opportunities of each stream. This will motivate the students to choose a stream of their interest.
6. Suggestion was also made to prepare a flexible bouquet of courses to enable the students to choose the course based on their interest and industry demand; to open electives across streams to all students – Chairman of BoS explained that such flexibility is available.
7. Members suggested to give freedom to students to choose online courses offered through some established Institutes (like NPTEL, Edx, Coursera) / offering of self-reading courses.
8. It was suggested that overlapping in sequence of courses belonging to a stream can be minimized. (For eg. Overlap in Data Visualization and Machine Learning can be reduced as well as overlapping in Data Intensive Computing & Cloud Computing may be minimized.)

9. Topics like Optimization theory, Graph theory and Bio inspired computing may be included in Mathematical foundations for CS.

10. Cognitive Computing may be introduced as a topics/ course in the appropriate place.

11. Research Methodologies should be included in II Semester of the programme.

12. Members suggested motivating the faculty members to interact with the industry relevant to their domain for formulation of problem statement towards the dissertation work to be carried out by PG research scholars under their guidance.

13. In Cloud and IoT course as well as Parallel and Distributed Data Management, Security of hardware and software platform may be included – (Eg Pacemaker)

14. Students may be encouraged to work both in Python and JAVA in Data Structures and Algorithms.

15. Modelling and Visualization course name can be renamed.

Civil:
To take forward the smart Cities Mission launched by prime minister, UGC has instructed all college and university to start a subject/course on urban planning. As per instruction from UGC, the department has offered new course CVL 474 Urban development planning as an elective course for B. Tech students.

CEMS:
1. M. Tech (MSE) curriculum and syllabus revised and approved. The salient points include restructuring of the introductory course on engineering materials, removal of course on transport processes, addition of content on ceramics, emphasis on physical metallurgy, and addition of two new elective subjects.

2. Curriculum revision for B. Tech (Chemical) initiated.
The content for all the mathematical courses to be developed to teach with the relevant Chemical Engineering examples to provide good understanding about the applications. All the mathematics courses are taught with the aid of Microsoft Excel, MATLAB or R (statistical software).

The fundamental courses to be separated from the design courses. The teaching of all the core courses such as material and energy balances (process calculations), thermodynamics, heat transfer, mass transfer, chemical reaction engineering and process control to be aided with the relevant software such as MATLAB, Aspen HYSYS and HTRI. By doing this, it is anticipated that the students will understand the strong connection between the core concepts, especially the Chemical Engineering Thermodynamics as they can solve the problems within a limited time using the software.

Cyber Security:
Conducted a workshop on Blockchain Technologies and based on that created an elective course on Blockchain Technologies and added to the new curriculum for courses undertaken by TIFAC CORE centre of Cyber Security.
SCHOOL OF ARTS AND SCIENCE, MYSURU:
- Syllabus revision is taken up once in 3 years. Syllabus revision was taken up at the University during the Academic year 2017-18 to be effective from 2018 admissions.
- The revised syllabus lays more impetus on application oriented approach without compromising on the conceptual clarity.
- A few papers of B Com Taxation were replaced immediately as an interim correction after the implementation of GST in April /May 2018
- More open electives are introduced.
- Elective papers in the emerging and interdisciplinary areas are introduced for programmes such as MCA and BCA

SCHOOL OF ARTS AND SCIENCE, KOCHI:
- The school follows CBCS system with continuous evaluation and semester
- There are four electives at UG level offered in semesters 4 and 5.
- At PG level eight electives are offered in semesters 8 and 9.In Semesters 4 and 5 pupils have to choose one of the two electives offered.
- In semesters 8 and 9 pupils have to choose two electives from four offered in each semester.

DEPARTMENT OF MANAGEMENT, KOCHI:
- Regular update of curriculum and syllabi based on industry requirement
- All campus committee set up for course curriculum update
- Rule book edited to accommodate Independent Course of Study

SCHOOL OF ENGINEERING, AMRITAPURI:
**EEE**
Yes , M.Tech Syllabus revision are done in this period and the salient features are
a) All courses will be lab oriented courses. There will be no separate course code for the laboratory courses.
b) The syllabus of the lab oriented courses are revised, such that the theory and the lab experiments will go hand in hand.
c) Syllabi is revised as per industry/R&D requirements giving due consideration to the suggestions from alumni.
d) “Open lab” in the second semester of the existing curriculum is changed as” Application Development Lab”
e) Second year (S3 and S4) will be fully devoted to Dissertation. This is to promote industry internships and industry oriented projects.
f) New elective courses are introduced to give an insight into the latest technologies

**CYBER**
Updated text book editions for all courses. Brought in active student participation in the course as they are more up to date about latest trends in malware & fill in the conceptual part of it

**WEGE**
Implemented Revised Syllabus

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

NIL
Criterion – II
2. Teaching, Learning and Evaluation

2.1 Total No. of permanent faculty

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Asst. Professors</th>
<th>Associate Professors</th>
<th>Professors</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1649</td>
<td>1076</td>
<td>204</td>
<td>267</td>
<td>102</td>
</tr>
</tbody>
</table>

2.2 No. of permanent faculty with Ph.D. 503

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

<table>
<thead>
<tr>
<th></th>
<th>Asst. Professors</th>
<th>Associate Professors</th>
<th>Professors</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>R V</td>
<td>R V</td>
<td>R V</td>
<td>R V</td>
<td>R V</td>
<td>R V</td>
</tr>
<tr>
<td>55 0</td>
<td>2 0</td>
<td>29 0</td>
<td>0 0</td>
<td>86 0</td>
<td></td>
</tr>
</tbody>
</table>

2.4 No. of (1) Guest (2) Visiting and (3) Temporary faculty 30 69 9

2.5 Faculty participation in conferences and symposia (please provide details in Annexure)

<table>
<thead>
<tr>
<th>No. of Faculty</th>
<th>International level</th>
<th>National level</th>
<th>State level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attended Seminars/Workshops</td>
<td>208</td>
<td>290</td>
<td>67</td>
</tr>
<tr>
<td>Presented papers</td>
<td>184</td>
<td>143</td>
<td>6</td>
</tr>
<tr>
<td>Resource Persons</td>
<td>66</td>
<td>72</td>
<td>61</td>
</tr>
</tbody>
</table>

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

1. Social communication lab – teaching students’ communication aids to work with the community- Certificate Course during the Fourth Semester

2. As a part of field work, students were placed in open community settings in rural areas to identify the problems of the individuals in community and plan interventions accordingly

3. Students’ assignment on various social institutions helped them to understand the institution in real life situation.

4. Teaching includes case study presentations, Students seminar and group discussion on the current national and international level social issues in the class.
5. The MSW students took part in the internship organised by the Amrita Live-in-Labs which is a multidisciplinary experiential learning program that facilitates the research, development, and deployment of sustainable solutions for current challenges faced by rural communities in India.

6. Celebration of UN Adopted Days by conducting Community Awareness Programmes

7. In association with various field work agencies, Community programs were conducted.

8. A CSR module was created by the students for Lakshya Labs (MNC) as a part of their Field work Initiative.

9. Arranging Guest lectures in thrust area and also motivating students to participate in soft skill programs

10. Encouraging faculty members to register for Ph.D and stipend is given for full time Ph.D scholars.

11. Motivate the students to participate in various club activities such as Indian Welding Society, Society for Automotive Engineers, Association of Mechanical Engineers and Automation and robotics club run by the department by giving weightage for each activities to improve their overall performance.

12. SAEINDIA Off-highway board started first ever student’s competition program named ‘TIFAN’. TIFAN stands for “Technology Innovation Forum for Agricultural Nurturing”. Twenty five undergraduate students involved in “Design of low cost onion harvester” and got selected through virtual event to participate in the SAE TIFAN Event at Rahuri, Pune.

13. Special leaves are sanctioned for both students and faculty to present their research outcomes in national/international conferences

14. Department follows outcome based education which enhance the teaching methodology of the faculty.

15. One-third of the technical staffs are available in the workshops/laboratories of the department up to 7:00 pm for helping the students in their projects.

16. Prof. Eric Blanco, from Grenoble University, France has accepted to handle the III semester M.Tech Engineering Design Elective course “Product Architect”.

17. Student online feedback mechanism is followed. Action is taken to deliver the subject in effective manner based on the feedback.

18. Inpods is followed for Outcome Based Education based on ABET.

19. C Programming weekly FDP for faculty

20. CTPS weekly FDP for faculty

21. Physical Computing introduced in CTPS course

22. FDP and refresher hands-on session is conducted for the courses: Embedded Systems, Computer Organization and Architecture, IoT.
23. Site visits/industry visits to various construction site, cement production units were arranged and students were advised to prepare the report based on the observations there. The data were then directly incorporated into class assignment questions and tests.

24. Data collected from the field was used in design or analyses of structures so that students got an idea about the real-time problems.

25. Term projects were given to B.Tech and M.Tech students to make a small technical contribution to the topic.

26. Implemented Outcome Based Learning (OBL) for all subjects. Faculty were provided training in OBL.

27. Implemented project-based learning in the ensuing academic year – two subjects (1 credit + 2 credits), which allow for a combination of independent study, peer-learning as well as supervised learning, on specific topics, designed to enhance understanding of core chemical engineering areas, while providing exposure to industrial and research practices.

28. Active student chapter of professional societies like Petrotech. Students are encouraged and guided by faculty to participate in National level technical competitions like Annual Petrotech Conclave, Industry defined problem event at Institute of Chemical Technology, Mumbai etc.

29. Inclusion of seminar, discussion, blended learning, co-operative learning, collaborative teaching learning methods.

30. ICT based teaching


   As part of this initiative, experienced faculty both in India and overseas will provide advanced training in the areas of Robotics, data analytics and Market research. In pursuing these open electives in areas not included in the prescribed syllabus, students are given a wider base to develop their potential and also explore areas that could provide wider exposure to current globally pertinent areas as also enhance capabilities and skills to be productive and successful in their future career.

32. We identify young students’ of creative abilities and encourage creative contributions. Think of ways to develop their creative ideas. Encourage different ideas, give them freedom to explore.

33. We have incorporated audio-visual materials in each class room. Now each class room is equipped with chrome cast device that can supplement textbooks with models, filmstrips, movies and pictorial material. Use info graphics or other mind mapping and brain mapping tools that will help their imagination thrive and grow. These methods will not only develop their ability to listen, but will also help them understand the concepts better.

34. We are working together as a team to bring new ideas for student development. We have started brainstorming sessions in the class room, real world learning by educational tours and classes outside the class room.
35. All the students have access to open access educational resources like NPTEL Lectures, Course era, EdX etc. Audio-visual devices are incorporated in teaching. Virtual laboratories are included in the curriculum of all graduate students of the departments.

36. Conducting bridge courses for non-computer science and non-commerce students in their respective discipline

37. Paper publication requirement for the award of distinction at the UG level serves as an incentive to the meritorious students to get involved in research activities.

38. Mandatory paper publication for PG students, started three years ago, has set in research culture in teaching and learning and is being continued.

39. The practice of employing a blend of teaching methodology - including lecture method, case study, role play, group discussions, simulated activities, seminars and presentations - is continued.

40. Interactive LAB, CIR Mock Interview, Pre-placement Training Sessions, Interactive sessions by Experts and Field Visit, Bridge course for non-Commerce students, Field trip and industrial visit for BBA Students.

41. Conducted exhibitions, workshops and seminars with professionals from industry, to enhance the academic as well as creative faculty of students.

42. Organized portfolio exhibition as part of ‘Dakshina’, projecting works of the final year media students, like short films, documentary, animation short films, ad films, graphic design, photography, artworks, sculptures etc.

43. Organized field visits and industrial visits as part of curriculum.

44. Published Lab journals and newsletters.

45. Conducted a Three-Day Art Camp in collaboration with ‘Kerala Lalithakala Akademi’.

46. A PR campaign ‘R4Respect’ was organized.

47. Students documented the renovation of the artworks and sculptures at ‘Subhash Park’, Ernakulam

48. English Department Published a book, Prepared Manuscript journal

49. Bridge Course on Accounting for non-Commerce students

50. Bridge course on Computer Programming for non IT Students

51. Organic Farming Workshop for the students.

52. Camera Speaks : photography workshop, exhibition & competition

53. Usage of more number of training methods during course delivery in addition to classroom lectures (simulation games, activities, application oriented projects etc.)

54. Proposed inclusion of compulsory viva component in electives.
55. Student projects at UG level from second year onwards
56. GPAT Coaching in final year
57. Invited talks
58. Conducted workshops on relevant skill development
59. Soft skill training for final year students of B.Pharm, M.Pharm and Pharm.D
60. Strengthening industry relations for placements

61. A six credit (equivalent to two full courses) component called Business Research Project (BRP) has been introduced a couple of years back by the School. All the students choose a research topic of their interest in any of the functional areas of management and work with a faculty guide towards the publication of a Scopus indexed publication. This has really helped to sharpen our students’ analytical, conceptual, research and communication skills. We are perhaps the first B-School in the country to make academic research an important and integral part of the curriculum. Given the fact that India is still behind many other major developing countries like China in research publications, we feel that it is an important contribution that we are making to our nation.

62. A Business Analytics Lab has been set up by our school in collaboration with IBM to provide hands on training in Business Analytics to our students along with the core course on Business Analytics which was recently introduced.

63. As a part of the core course called Self Awareness and Personal Growth, students are given training in Yoga.

64. As a part of the elective courses at the school, we have unique courses such as Management of Self for Success and Happiness, Management Beyond Profit and Cross Cultural Management.

65. We also have a core course on Soft Skills which helps the students to become ready for the placement process as well as a career in business management post graduation.

66. Comprehensive case management; case scenario presentations
67. Incidental short clinical examination.
68. Problem based learning.
69. Interactive lecture, video assisted teaching, quiz, role plays etc.
70. Posting for all the students in the central simulation lab.
71. Conducts individual conference; nursing care conference.
72. Short clinical examination (incidental), video assisted teaching.
73. Brain storming sessions to stimulate the thinking process of the students.
74. Mock drill on - disaster management; fire and safety.
75. Posting in the cytogenetic lab.
76. Creative revision of subjects.
77. Clinical supervision of a given area by a faculty.
78. Role plays, debates, puppet shows on selected topics or disease conditions.
79. Conducts exhibition as part of Community Health Nursing and Paediatric Nursing postings and as part of observing days of importance.
80. Open book examination.

81. OSCE.

82. Internal Workshops for Faculty and Students.

83. Special classes on selected topic before going for Company Interviews and tests. Gate Coaching for S6 Students

84. Conduct of class committee meetings in class room itself, so that there is direct interaction between students and faculty of department.

85. Project Exhibition and Demo for both B.Tech and M.tech students to showcase their work in front of external experts and also among the junior students

86. Lab FDP is conducted for Faculty and technical staff of EEE Dept, for getting complete awareness of the lab to be handled by them in the coming semester.

87. EEE Dept conducted two days mock technical interviews for the final year students, to give a clear picture of how much effort they need to put so that they can succeed in the core placements and bag good job offers

88. Conduct of Biennial International Conference Tap energy. Tap Energy 2017 helped the students to interact with eminent personalities from all over the world and also experts from India.

89. Industry Student Meet such as SysInfo to give deeper understanding of the course through its application.

90. Semester term system/Quarter system introduced in MTech program in WNA.

91. Our activity-based learning experiences in theory classes and the fieldwork experience serve to develop the best of each student's professional capacity and catalyze a lifelong investment in the values, goals and skills of social work. Fieldwork from our Centre is a unique experience which enriches their learning more in the interactive environment.

92. Following innovative processes are available at Amrita Institute of Medical Sciences:

- Clinical Skill Simulation Centre: Simulation-Based Medical Education (SBME)
- Amrita University Management System (AUMS)
- Amrita Hospital Information System (AHIS)
- Amrita Learning Disability Centre
- Central Library started two new databases (WEB OF SCIENCE – Research based database; EBSCO Discovery Service)
- Robotic Surgery training programmes
- Cyber Knife training programme

2.7 Total No. of actual teaching days during this academic year | 183

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

Yes.
- Online multiple choice examinations are conducted for Undergraduate and Post-Graduate students.
The University papers are evaluated by two evaluators (Section A & B separately). No double valuation.

If there is a discrepancy of more than 15%, the paper will be sent for revaluation.

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

<table>
<thead>
<tr>
<th>Title of the Programme</th>
<th>Total no. of students appeared</th>
<th>Distinction</th>
<th>I</th>
<th>II</th>
<th>Pass</th>
</tr>
</thead>
<tbody>
<tr>
<td>UG</td>
<td>2929</td>
<td>829</td>
<td>1501</td>
<td>160</td>
<td>439</td>
</tr>
<tr>
<td>PG</td>
<td>1231</td>
<td>519</td>
<td>589</td>
<td>38</td>
<td>85</td>
</tr>
<tr>
<td>INT PG</td>
<td>176</td>
<td>53</td>
<td>110</td>
<td>0</td>
<td>13</td>
</tr>
</tbody>
</table>

2.10 Average percentage of attendance of students

95%

2.11 Course/Programme wise distribution of pass percentage:

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

**AMRITA SCHOOL OF ENGINEERING, COIMBATORE:**

- Continuous Assessment through periodical tests, Assignments, seminars and End Semester Examination. Field work practical’s and Viva voce exam, Project Dissertation and viva Voice.

- Faculty development programs are conducted.

- Motivate the faculty members and students to participate in the international conference and present their research findings.

- Periodic academic performance review.

- Conducting sensitisation sessions.

- Giving feedback to the faculty with corrective measures.

- Course Mentors are identified for each course to plan and monitor the conduct of the course.

- Course committee meeting is being held at the beginning of the semester to discuss on the mapping of program objective to course objective.

- Class committee meeting is held thrice a semester to identify the student - teacher perspective of the course conduct.

- Student feedback is obtained for all the courses offered by the faculty members. The feedback is analysed and remedial action initiated by the Chairperson if required.
• Systematic analysis of outcomes of learning process through OBL portal.

• Every student mandatorily gives feedback 3 times. The feedback and analysis for individual subjects and faculty are available online to enable faculty and Chairpersons to take corrective actions / steps for improvement.

• The class committee meeting is convened 3 times a semester by the Chairperson for feedback from the students. Corrective actions are initiated by Chairperson to address the issues raised by students. In the case of faculty from outside the department handling the subjects, Chairperson takes measures through the concerned department Chairperson.

• Teaching learning process was evaluated based on the difficulty level of the question paper and by checking attainment level in each periodical test.

• It is also monitored by checking the problem solving ability of the student when they were given a real time problem as an assignment or mini project.

• Grades are assigned in a class committee meeting comprising of Senior Faculty in the department and the class committee members.

• Teaching learning process is evaluated based on the difficulty level of the question paper and by checking attainment level in each periodical test.

• It is also monitored by checking the problem solving ability of the student when they were given a real time problem as an assignment or mini project.

• Faculty development programs are conducted.

• Course Mentors are identified for each course to plan and monitor the conduct of the course.

• Course committee meeting is being held at the beginning of the semester to discuss on the mapping of program objective to course objective.

• Outcome Based Education is done for all the courses semester wise to monitor the performance of the students on regular basis. Interim corrections are taken to improve the quality of course delivery.

DEPARTMENT OF MANAGEMENT, AMRITAPURI:

• Based on student feedback from class room interactions with faculty, their experiences during placement interviews, guidelines from the relevant authorities both at the University and the Governmental levels, the IQAC conducts group/one-on-one discussions with faculty to evaluate the relevance of the courses offered and the methods of delivery.

SCHOOL OF EDUCATION, MYSORE:

1. Procurement of Library Books

2. IQAC visualises relevant experiences that enable students to enhance their competencies and skills to become wholesome, sensitive teachers.

3. Monitors the process of Mentoring students with low academic achievement.
4. Supervises their regularity
5. Counselling will be done for the needy to boost their self-esteem and confidence

**SCHOOL OF BIOTECHNOLOGY, AMRITAPURI:**
- Periodic class committee meetings involving IQAC members, teaching faculty members and student representatives to review academic programs, address problems and initiate new approaches to improve quality of education
- Review online feedbacks received from students at the end of the semesters and initiation of corrective measures
- Monitor and recommend necessary curriculum changes

**SCHOOL OF AYURVEDA, AMRITAPURI:**
- Ensure heightened level of clarity and focus in institutional functioning towards quality enhancement
- Provide a sound basis for decision-making to improve institutional functioning;
- Promotes motivational seminar conducted for the staff before the start of the academic year.
- Motivating the staff and students to participate in seminars, workshops, publish papers, apply for minor research projects.
- Strengthening the laboratories and the Library.

**SCHOOL OF ARTS AND SCIENCE, MYSURU:**
- IQAC initiated the practice of department wise course plan presentation by course handling teachers followed by a brainstorming session from the peer and modification of the course plan for improved delivery of the course content.
- IQAC arranges orientation for the new recruits regarding the teaching practices and other academic matters.
- Organises motivational talks for faculty members on general topics such as Research Proposal Preparation, student counselling, Pedagogy etc.
- Important matters, if any, raised in the class committee meetings or expressed by the students in the periodically administered feedback forms, are taken up for discussion and deliberations during the IQAC meetings and appropriate measures taken
DEPARTMENT OF MANAGEMENT, BANGALORE:
- The IQAC Ensure timely submission of the submission of the course outlines of all the courses
- IQAC ensure efficient classroom infrastructure. Periodical check of classroom hardware and software so that all the system work efficiently.
- It ensures that all the students get a copy of the course outline for every course before the course begins. In Addition to that Faculty provides all the related teaching material to students.
- Receive feedback from the students and share this with respective faculty for corrective action.

DEPARTMENT OF MANAGEMENT, KOCHI:
- Feedback process and modification of courses as per feedback
- Regular upgradation of course contents in coordination with the PGP committee
- Curricular, co-curricular and extra-curricular initiatives introduced based on student and industry feedback

PHARMACY, KOCHI:
- Online Faculty feedback is collected from the students twice a year and report generated is communicated to faculty.
- Class committee meetings are conducted regularly.
- Two Hands-On Workshop on In-Silico drug design using Biovia discovery studio & spectral analysis

SCHOOL OF BUSINESS, COIMBATORE:
- IQAC ensures that all the faculty members teaching the courses submit their course outlines in time and clearly mention the course objectives and evaluation criteria. The quality of questions set in the examinations is also constantly evaluated. The IQAC monitors the quality of course delivery by looking at the student feedback for each course that is submitted by the students at the end of each course. There are student members on the IQAC which ensures that the IQAC gets continuous feedback about the quality of delivery of different courses.

SCHOOL OF NURSING, KOCHI:
- Ensures that the teaching learning process is implemented strictly as per the INC norms and regulations.
  - Delivers the teaching learning contents as per the course requirement; unit and lesson plans.
  - Implements clinical experience in accordance with the requirements
Plans assignments as per the INC guidelines and skill requirement

- Addresses the institutional issues in teaching learning and evaluation processes, recommends interventions to resolve them and ensures methodologies and better outcomes.
- Could rectify the issues identified in the University question papers such as disparity in the weightage of the units, non-uniformity among the subjects and specialties, lack of uniformity in the question pattern etc based on the analysis conducted as part of the workshop on “Evaluation of question papers”.
- Feedback obtained from students, alumni, parents and teachers help in identifying gaps that have an influence on learning and development and providing appropriate student support and guidance.
- Suggestions and recommendations on innovations for better outcomes are invited, discussed and shared.
  - Doing small group projects for Undergraduates and getting it published.
  - Providing a capstone (Integrated Clinical Experience) for the final year students for a month

**SCHOOL OF DENTISTRY, KOCHI:**

- A Sound mentoring system is in place to ensure feedback from the students. Special emphasis given to look into various issues faced by students and attempts made to reduce their stress levels.

- IQAC constantly monitors the teaching and learning process by student evaluation forms, patient satisfaction feedbacks, monitoring of exam results etc.

- Online tracking of student’s progress is facilitated with the help of Amrita Vidya Portal.

- Educational movies are screened to inculcate values.

- Undergraduate students are encouraged to take up research to sharpen their critical thinking

**2.13 Initiatives undertaken towards faculty development (provide details in an Annexure)**

<table>
<thead>
<tr>
<th>Faculty / Staff Development Programmes</th>
<th>Number of faculty benefitted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refresher courses</td>
<td>28</td>
</tr>
<tr>
<td>UGC – Faculty Improvement Programme</td>
<td>2</td>
</tr>
<tr>
<td>HRD programmes</td>
<td>0</td>
</tr>
<tr>
<td>Orientation programmes</td>
<td>19</td>
</tr>
<tr>
<td>Faculty exchange programme</td>
<td>9</td>
</tr>
<tr>
<td>Staff training conducted by the university</td>
<td>44</td>
</tr>
<tr>
<td>Staff training conducted by other institutions</td>
<td>45</td>
</tr>
</tbody>
</table>
### 2.14 Details of Administrative and Technical staff Recruited

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of permanent positions filled during the Year</th>
<th>Number of positions filled temporarily</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative Staff</td>
<td>7</td>
<td>94</td>
</tr>
<tr>
<td>Technical Staff</td>
<td>4</td>
<td>21</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of permanent positions filled during the Year</th>
<th>Number of positions filled temporarily</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer / Winter schools, Workshops, etc.</td>
<td>160</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>66</td>
<td></td>
</tr>
</tbody>
</table>
Criterion – III

3. Research, Consultancy and Extension

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

- Participatory Rural Appraisal Workshop was conducted for students as part of their one week Rural Camp.

- Students placed in funded projects for Field work, Internship and Job.

- Funded projects obtained and attended funded International workshops on Rural Health care Research

- Consultancy:
  
a. Dr.P.Rangasami is a member of the Juvenile Justice Board, Coimbatore.

  b. Dr. Suja M K is a honorary consultant of HCA( Home for Children and Adults), Lakshmi Deaddiction and Counselling Centre, Natchiyar Mind Care and Streechethana (NGO working for Women Empowerment at Calicut)

- Increasing number of proposal submission, encouraging collaboration outside of the department and university, PG student’s project work into scopus indexed publication. Availing the student internship.

- Motivating the students to take innovative research work as a minor project in the lower semester itself and guiding them properly to publish their work in conferences/journals.

- Encouraging faculty and students to actively take part in Curricular/Co-curricular/Extra-curricular activities.

- All the department laboratories are opened till 7pm for students and faculty research activities.

- Seed funding by the institute based on proposals submitted and financial support to attend conferences, review presentation for funded proposals.

- Support for research scholar under teaching assistantship.

- Sharing information regarding available funding opportunities and assisting in submitting project proposals.

- Faculty members of the institution are associated with one of the following thrust area groups:
  
  1. Biometrics
  2. HCI (Human Computer Interaction)
  3. Image Analysis and Pattern Recognition
  4. Computer Vision for Medical Imaging
  5. Multimedia Signal Processing and Security
6. Multidimensional Data Analytics
7. Evolutionary Computation
8. Next Gen Computing
9. Data Analytics
10. Information Security
11. Predictive Analytics and Internet of Things
12. Machine Learning

The role of thrust area group includes the following:
- Writing research proposals.
- Regular meetings were conducted to discuss on technology and project/product initiatives and solutions.
- Guiding student projects in the corresponding area.
- The progress of the group is reviewed by a committee on regular basis.

Specialized labs established for several research domains.

Facilitate Industry-Institute-Interaction – Provides regular consultancy to polymer Industries. 4 faculty members are involved in project and training for V-Guard Industries Ltd. (Cable Division).

Fostered collaborative research within university, nationally & internationally resulting in project proposals to various national and international funding agencies.

Promotes and facilitates international collaboration resulting in joint authorship publications and research proposals submitted for funding to international agencies.

Research scholars encouraged and supported to apply for international exchange programs and participate in International conferences inside and outside the country.

Junior Faculty counselled to register for research under the various schemes of the University.

Conducts workshops/Seminars/Conferences and invited talks on regular basis.

Motivating the students to take innovative research work as a minor project in the lower semester itself and guiding them properly to publish their work in conferences/journals.

Procurement of Journals and Research related books.

Internet accessibility.

Saturdays are dedicated for research activities. The idea of dedicating one day per week exclusively for research / publication work for the faculty members, was mooted by IQAC with an objective of providing the faculty members a fully immersed and focused environment that can enhance research activities in the institution.

Enhanced focus on the BRITE Research program - (B.Sc. Research Initiatives Towards Excellence). Students in the final semester of the B.Sc. Biotech/Microbiology programs are initiated into research and included in active funded research projects under the
supervision of senior faculty and given the opportunity for hands-on experience resulting in the promotion of greater interest in research and incentive to be included as co-authors in good research publications.

- Extensive support for internship in research laboratories overseas where both B.Sc. and M.Sc. students have been able to gain internship training in laboratories across the globe e.g. University of California, Riverside, University College Dublin, Ireland, National Ilan University, Taiwan.

- Elective courses in Research Methodology and current topics in Basic and Clinical Research areas provides students strong coverage of pertinent areas and fully equips them with in-depth knowledge of pertinent research topics with sensitization to problems and solutions in the basic sciences.

- Conducting FDPs on publishing quality research papers and applying for funded projects.

- Promotion of reading and research orientation through each course in the MBA curriculum

- Early start to Independent study course activities.

- Research paper submission made mandatory at the end of ICS.

- Grading of independent study course linked to publication

- Faculty with less number of publications are repeatedly reminded the need for the same to keep up the institutional/university standards. As per the university directions, publication targets have been set for each faculty positions as Professor - 4, Assoc. Professor - 3, Asst. Professor - 2 and Lecturer – 1. Measures are also taken to improve the performance of those with less number of publications as stipulated by the University.

- Entrusted a faculty member or administrative staff in each school as publication co-ordinator to monitor the whole process of publication including checking the affiliation, citations and the indexing of journal.

- From the academic year 2016-’17, the group projects of the undergraduates (IV Year B. Sc. Nursing) is done with faculty as the Primary Investigator. The number of students in a group is also reduced from five to two. This could increase the number of projects in a year and subsequently the number of publications.

- Compliance to the policies and protocols related to publication has been ensured through the Publication tracking portal (PTP) conceived by the University before the approval of HOD.

- Research Synergy Day is observed by School of Dentistry, Kochi.

- Exclusive Central Research Laboratory with state of the art facilities
3.2 Details regarding major projects – above INR 5 Lakhs (provide details in an Annexure)

<table>
<thead>
<tr>
<th>Number</th>
<th>Ongoing</th>
<th>Sanctioned</th>
<th>Submitted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outlay in Rs. Lakhs</td>
<td>6150</td>
<td>5776.91</td>
<td>1449</td>
</tr>
</tbody>
</table>

3.3 Details regarding minor projects – below INR 5 Lakhs (provide details in an Annexure)

<table>
<thead>
<tr>
<th>Number</th>
<th>Ongoing</th>
<th>Sanctioned</th>
<th>Submitted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outlay in Rs. Lakhs</td>
<td>64.04</td>
<td>70</td>
<td>25.06</td>
</tr>
</tbody>
</table>

3.4 Details on research publications (provide details in an Annexure)

<table>
<thead>
<tr>
<th></th>
<th>International</th>
<th>National</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer Review Journals</td>
<td>626</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>Non-Peer Review Journals</td>
<td>430</td>
<td>27</td>
<td>---</td>
</tr>
<tr>
<td>e-Journals</td>
<td>72</td>
<td>----</td>
<td>---</td>
</tr>
<tr>
<td>Conference proceedings</td>
<td>732</td>
<td>--</td>
<td>---</td>
</tr>
</tbody>
</table>

3.5 Details on Impact factor of publications:

- Range: 0.11-34.09
- Average: 2.726
- h-index: 14
- No.s in SCOPUS: 497

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

<table>
<thead>
<tr>
<th>Nature of the Project</th>
<th>Duration Year</th>
<th>Name of the funding Agency</th>
<th>Total grant Sanctioned</th>
<th>Received</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major projects</td>
<td>2017-18</td>
<td>Amrita, BRNS, DST, UNDEF, APSSDC, Graduate Institute of International and Development Studies, Geneva, NOW-NTRO, DST Coconut Development Board, Ministry of Earth Sciences, Indo USA, FIST, Biotechnology Industrial Research Assistance Council (BIRAC), Bill and Melinda Gates Foundation (BMGF), DBT, DST, BM Bristol-Meyer Squibb, C-CAMP, ID-GENOMICS, ICMR, Stelis Biopharma, KSCSTE</td>
<td>3606.6</td>
<td>3412.5739</td>
</tr>
<tr>
<td>Minor Projects</td>
<td>2017-18</td>
<td>SERB, KSDMA, DRDO, TBI-EIT, Omnex, Section 35- Research for Heart, MSME- TBI, KSCSTE, Amrita</td>
<td>64.05</td>
<td>40.01</td>
</tr>
<tr>
<td>Interdisciplinary Projects</td>
<td>2017-18</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Industry sponsored</td>
<td>2017-18</td>
<td>Robert Bosch, Pricol, General Motors, V-Guard, CTS, CISCO, TCS, Larsen and Turbo, Dynamic Techno Medical Private Ltd., Shatel Engineering, Molwell Products, BEP India, ATS, Automotive Test Systems</td>
<td>2170.89</td>
<td>2078.01</td>
</tr>
<tr>
<td>Projects sponsored by the University/College</td>
<td>2017-18</td>
<td>Amrita Internal Seed Fund</td>
<td>1500.01</td>
<td>1500.01</td>
</tr>
<tr>
<td>Students research projects (other than compulsory by the University)</td>
<td>2017-18</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

3.7 No. of books published

- i) With ISBN No. 11
- Chapters in Edited Books 52

- ii) Without ISBN No. 4

3.8 No. of University Departments receiving funds from

<table>
<thead>
<tr>
<th>UGC-SAP</th>
<th>CAS</th>
<th>DST-FIST</th>
<th>DPE</th>
<th>DBT Scheme/funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>--</td>
<td>--</td>
<td>7</td>
<td>--</td>
<td>1</td>
</tr>
</tbody>
</table>

3.9 Revenue generated through consultancy 4490.12000

3.10 No. of conferences organized by the Institution

<table>
<thead>
<tr>
<th>Level</th>
<th>International</th>
<th>National</th>
<th>State</th>
<th>University</th>
<th>College</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>9</td>
<td>7</td>
<td>3</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>Sponsoring agencies</td>
<td>Fulbright Specialist Program (US Department of State), Caesurae Collective Society, Kolkata, Amrita Vishwa Vidyapeetham, Ayush,</td>
<td>Amrita Vishwa Vidyapeetham, DRDO, DST, ISRO, IETE, MAT Lab, Taxmann Consultancy</td>
<td>Amrita Vishwa Vidyapeetham</td>
<td>Amrita Vishwa Vidyapeetham, IETE, Oriental Research Institute, University of Mysore, Swadeshi Science Movement</td>
<td>Amrita Vishwa Vidyapeetham</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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3.11 No. of faculty served as experts, chairpersons or resource persons: 96

3.12 No. of collaborations: International 96, National 199, Any other 3

3.13 No. of linkages created during this year: 58

3.14 Total budget for research for current year in lakhs:

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>From funding agency</td>
<td>5840.9595</td>
</tr>
<tr>
<td>From Management of University/College</td>
<td>725.58856</td>
</tr>
<tr>
<td>Total</td>
<td>6566.54815</td>
</tr>
</tbody>
</table>

3.15 No. of patents received this year:

<table>
<thead>
<tr>
<th>Type of Patent</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>National</td>
<td></td>
</tr>
<tr>
<td>Applied</td>
<td>8</td>
</tr>
<tr>
<td>Granted</td>
<td>4</td>
</tr>
<tr>
<td>International</td>
<td></td>
</tr>
<tr>
<td>Applied</td>
<td>15</td>
</tr>
<tr>
<td>Granted</td>
<td>7</td>
</tr>
<tr>
<td>Commercialised</td>
<td></td>
</tr>
<tr>
<td>Applied</td>
<td>0</td>
</tr>
<tr>
<td>Granted</td>
<td>0</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Total</th>
<th>International</th>
<th>National</th>
<th>State</th>
<th>University</th>
<th>Dist</th>
<th>College</th>
</tr>
</thead>
<tbody>
<tr>
<td>145</td>
<td>54</td>
<td>37</td>
<td>20</td>
<td>17</td>
<td>11</td>
<td>6</td>
</tr>
</tbody>
</table>

3.17 No. of faculty from the Institution who are Ph. D. Guides and students registered under them: 503

3.18 No. of Ph.D.s awarded by faculty from the Institution: 38

3.19 No. of Research scholars receiving fellowships (Newly enrolled + existing ones):

<table>
<thead>
<tr>
<th>Type</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>JRF</td>
<td>42</td>
</tr>
<tr>
<td>SRF</td>
<td>40</td>
</tr>
<tr>
<td>Project Fellows</td>
<td>25</td>
</tr>
<tr>
<td>Any other</td>
<td>--</td>
</tr>
</tbody>
</table>

3.20 No. of students Participated in NSS events:

<table>
<thead>
<tr>
<th>Level</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>University</td>
<td>156</td>
</tr>
<tr>
<td>State</td>
<td>0</td>
</tr>
<tr>
<td>National</td>
<td>0</td>
</tr>
<tr>
<td>International</td>
<td>0</td>
</tr>
</tbody>
</table>

3.21 No. of students participated in NCC events:

<table>
<thead>
<tr>
<th>Level</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>University</td>
<td>0</td>
</tr>
<tr>
<td>State</td>
<td>0</td>
</tr>
<tr>
<td>National</td>
<td>0</td>
</tr>
<tr>
<td>International</td>
<td>0</td>
</tr>
</tbody>
</table>

3.22 No. of Awards won in NSS:

<table>
<thead>
<tr>
<th>Level</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>University</td>
<td>0</td>
</tr>
<tr>
<td>State</td>
<td>0</td>
</tr>
</tbody>
</table>
3.23 No. of Awards won in NCC:

<table>
<thead>
<tr>
<th>National level</th>
<th>International level</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>University level</th>
<th>State level</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>National level</th>
<th>International level</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

3.24 No. of Extension activities organized

- University forum ✓
- College forum □
- NCC □
- NSS □
- Any other □

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

- Setting up of a Power System Laboratory (Hardware Based)
- Setting up of an Electric Drives Laboratory (Hardware Based)
- Setting up of a Control System Laboratory (Firmware Based)
- II MSW Students assisted liver check-up camp in Palana Hospital, Palakkad on 25.07.2017. Nearly 120 persons were screened in this camp.
- II MSW student gave a session on positive thinking for paramedical students at Palana Hospital on 03.08.2017. Nearly 20 students attended the session.
- Conducted a Road Safety Workshop in Anokha 2018, the 8th edition of Techfest, from 22nd to 24th February, 2018.
- MSW students conducted Mime and Street Play at Palakkad Railway Junction on occasion of ‘World Mental Day’ on 9th November.
- Social work Trainee of NCLP project Conducted an awareness session on Child Rights, Hand Wash, Sexual Abuse – Good Touch Bad Touch- Child Line in Thondamuthur NCLP special centre for students.

Live in labs project: Live-in-Labs (project based course) was carried out in various villages across India during 2016-17 summer vacation (June 2017) for a period of 15 days. It includes 6 day workshop and village visits. From CSE department 4 faculty members and 2 students were involved. Faculty members visited the allotted villages to identify the issues related to making the villages self-reliant. As part of our chancellor AMMA’s 101-village adoption programme, across different villages all over India, our students visited several villages in the country, stayed there and identified the problems associated with the villagers, provide solutions to the potential problems associated with them.
As part of Live-in-Labs and Amrita SERVE Dr. Uday Baskar Reddy Ragula of Chemical Engineering and Material Science Department along with partnering university – TU Delft Netherland developed hybridization unit for Lemongrass distillation unit for helping villagers of Mullakara, Wayanad District of Kerala

Research and consultancy joining hands with the government: Works carried out in these aspects are

- The beach erosion control project
- Funded project submission for costal reservoir
- Live in labs project

Quilled earing stall in the campus as part of Gokulashtami celebration with the help of EEE department students

Participation in Coimbatore Area Development Programme (ADP) Child Protection Committee Meeting ) at Corporation Kalayana Mandapam, Edaiyarpalayam Road, Kavundampalayam, Coimbatore

Well cleaning with the participation of Community at tribal village, at Managalathi chelaar Tribal colony in Walayar

Amrita University, SAARC Members, Centre on Integrated Rural Development for Asia and the Pacific (CIRDAP), joined For Expert Consultation Meeting At Coimbatore Campus

Visit to AIISH to make students to get exposure about special education.

Organised medical camp in collaborating Amrita Krupa hospital in the selected villages

Planted saplings to convey the message ’save our environment’

Conducted ABC

Conducted survey in the selected villages to know the status of education ,health facilities and support from government schemes.

**Creatome:**
School of Biotechnology launched a Consortium of Creativity - “CREATOME”, a cornucopia of creativity and ideas. A student driven club that acts as a platform
to showcase the fabulous array of talents that the students of our department possess. We have 7 wings – Performing Arts, Non-Performing Arts, Literature, Sports, Multimedia, Science, Values for Life that broadly represent most of the activities that take place at ASBT. CREATOME hopes to inspire creativity, ingenuity, team spirit and individuality in our students and help our students prepare to take on the big world, confidence in themselves and their abilities.

Initiatives by CREATOME:
- Kalotsavam : Annual Cultural Fiesta at School of Biotechnology (May 2018)
- CREATOME Photography Competition (April 2018)
- A creative poster making competition on Peace and Forgiveness commemorating 72nd Hiroshima/ Nagasaki Day and International Forgiveness Day (August 2018)
- The month of Karkitaka in Kerala is being celebrated as the Ramayana month. CREATOME organizes various events at Amritapuri Campus to cherish and imbibe the primordial poem of Sage Valmiki (July 2017)

- SAH:
  Amrita Vishwa Vidyapeetham, Amritapuri Campus, has initiated Serve an Hour (SAH) program in an effort to bring its students to explore the real creativity within. This platform is a great way to channel the energy of youth and encourages a future interest to serve society in a wide variety of scientific fields. Every first-year class from the School of Engineering, School of Arts and Sciences, School of Biotechnology and School of Ayurveda, is divided into groups and given a certain topic. These topics range over a wide array of subjects that cover ethical, social and environmental issues. After selecting the topic, the group does research on the topic and also tries to come up with solution to combat these issues.

- ABC:
  It is a campaign aimed at cleaning India’s public places and national highways. Through this cleanliness drive, MAM hopes to raise social awareness of humanity’s debt to our beautiful earth and nature. Amma launched this project on her 57th Birthday celebrations on 27th Sep 2010. The staff and faculty members from Amritapuri Campus of Amrita Vishwa Vidyapeetham, AYUDH India and Mata Amritanandamayi Math volunteers, collectively around 1200 volunteers, joined for a two day Sabarimala Cleanup Drive held on 11th and 12th November, 2017.

- AYUDH
  AYUDH Amritapuri organised the program "Anpuadan Amrita" (With love from Amrita) where our students and staff visited remote and tribal location, 'Pravilai' tribal village in Kanyakumari District and donated a School Kit comprising of study belongings to deserving children. (May 2018)
  AYUDH is the international youth wing of Embracing the World, a global network of charitable activities created by Amma. AYUDH India organized two national level training summits at Amritapuri from 24-31 December 2017-Leaders Training Summit (24-27 December) for youngsters aged 15 to 30 years,
followed by Mentors Training Summit (28-31 December) for adults aged 30 to 50 years.
AYUDH Amritapuri celebrated Diwali with little brothers & sisters at Parippally. (October 2018)
AYUDH Amritapuri celebrated Rakshabandhan with the CRPF Jawans, our brave brothers who protect us day and night. (August 2017)

- **Vishuthaineetham**
  Amma asked all those who celebrate the Kerala festival of Vishu to incorporate love and reverence for nature into their celebration. Students of Amrita Vishwa Vidyapeetham planted and distributed saplings on the occasion. Renowned artists, writers and activists helped to distribute the saplings at our ashrams and centers throughout Kerala. (April 2018)

- The Dept. of Visual Communication, Amrita University Mysuru Campus commemorated “World Heart Day” on September 29th 2017. The main motive was to promote the theme “Share the power” synonymous with World Heart Federation.

- Ayudh – A Leaders Training Summit was organised from 24th to 27th December at Amritapuri campus. Mr. Shiju TC & Mr. Santhosh Kumar B J attended the programme along with 18 student volunteers.

- National Pre-Camp Youth Meet held on 13th August 2017 in Bangalore Campus. Mr. Shiju T C attended the programme.

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Date</th>
<th>Event</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>24-Jul-17</td>
<td>Food Packets for families</td>
<td>Family Food Kit consisting of Rice, Coconut oil, Sugar, Tea and pulses</td>
</tr>
<tr>
<td>2</td>
<td>29-Jul-17</td>
<td>Amount for helping Patient</td>
<td>Monetary contribution</td>
</tr>
<tr>
<td>3</td>
<td>31-Jul-17</td>
<td>Amount for helping Patient</td>
<td>Monetary contribution</td>
</tr>
<tr>
<td>4</td>
<td>17-Aug-17</td>
<td>Amrita Institute for Differently Abled Kochi</td>
<td>Monetary contribution</td>
</tr>
<tr>
<td>5</td>
<td>23-Aug-17</td>
<td>Donation given to a 6th standard child to pay her school fee</td>
<td>Monetary contribution</td>
</tr>
<tr>
<td>6</td>
<td>25-Aug-17</td>
<td>Commodities for poor families</td>
<td>Packets distributed</td>
</tr>
<tr>
<td>7</td>
<td>2-Nov-17</td>
<td>Commodities for poor families</td>
<td>Packets distributed</td>
</tr>
<tr>
<td>8</td>
<td>15-Nov-17</td>
<td>Donation to buy medicines</td>
<td>Monetary contribution</td>
</tr>
<tr>
<td>9</td>
<td>4-Dec-17</td>
<td>Commodities for poor families</td>
<td>Packets distributed</td>
</tr>
<tr>
<td>10</td>
<td>16-Jan-18</td>
<td>Commodities for poor families</td>
<td>Packets distributed</td>
</tr>
<tr>
<td>11</td>
<td>23-Feb-18</td>
<td>Commodities for poor families</td>
<td>Packets distributed</td>
</tr>
<tr>
<td>12</td>
<td>21-Apr-18</td>
<td>Commodities for poor families</td>
<td>Packets distributed</td>
</tr>
<tr>
<td>13</td>
<td>1-Nov-17</td>
<td>Organized an event called PRANA- Plant a Sapling</td>
<td>The Chief Guest for the program was Mr. C. N. Mohanan (GCDA Chairman) and the Guest of Honor was Mr. Abdul Ghani also known as the Green Man of India</td>
</tr>
</tbody>
</table>
Nanoscience: Seminars with theme on Research Methodology and Research Ethics
- Study tour with visit to other research institutions
- Seminar and workshop on Meditation and Cultural Education
- Amalabharatham Cleaning Program
- Food kit distribution for underprivileged family
- Study material distribution for underprivileged school children
- Quality time with activities and entertainment for differentially abled children.
- Meet with the Legend Program, for students to interact with accomplished veterans from diverse disciplines.

- **Pharmacy:** Amala Bharatam Campaign (ABC): Students actively participate in Amalabharatam cleaning campaign at AIMS, local premises in Ernakulam district and Sabarimala temple

- **Medical Camp:** Students actively participate in medical camps organised by AIMS at various locations.

- **Pharmacy week celebrations:**
  As a part of National Pharmacy week celebration every year, patient counseling was conducted at Primary Health centre, Edappilly in which around 200 patients participated. Street plays on rational drug use was conducted at Amrita Vidyalayam school & AIMS hospital.

- **Monthly distribution of Rice & gram:**
  Students and staff actively participate in the monthly distribution of rice, grains and other essential provisions to 20 families in nearby areas.

- Students visit the rural and urban community, make community diagnosis through surveys as a part of the Community Health Nursing experience.

- Provide planned and incidental individual and family health education, exhibitions, etc in the community.

- The final year B. Sc Nursing students conduct home visit and provide health education and care to the needy in the family.

- Organize various clinics like Under-five clinic, Geriatric clinic and also conduct School health programmes which help in early identification of illnesses and referral services.

- Participate in medical camps organized by AIMS not only sensitize the students on societal needs but also improve their skills in communication, team work and nursing care.

- Community based research projects are given due importance.

- Observation of important health days has created better awareness among the students and faculty.

- The tribal community clinical experience provided for a week to a selected 25 students under the guidance of faculty has provided a unique experience for them to the needs of
poor and illiterate. A mass health education campaign using appropriate models was organized by the students on tobacco chewing, ill effects of alcohol, child education after a tribal health survey and screening of non-communicable diseases at the adopted tribal colonies (as a part of Amrita SeRV).

- Students and faculty participated in the Seva day at Amritapuri in association with Amma’s Birthday celebrations.

- Students and faculty participated in the AYUDH India National Camp was organized at Amritapuri. A total of 12 B. Sc. Nursing students and two teachers participated in the camp. They got a chance to participate in existing activities and workshops.

- As a part of student exchange programme seven MBBS students from Lee Kong Chian School of Medicine, Singapore participated in the community health nursing experience along with fourth year B. Sc. Nursing students from 18/12/2017 to 24/12/2017.

- Nursing students from Ryerson University, Canada during their student exchange programme with Amrita School of Medicine spent two days (5th & 8th August 2017) with the Fourth year B. Sc. Nursing students of Amrita College of Nursing jointly prepared materials for health education in the community.

- The third year B Sc Nursing students (13th Batch) participated in the World Alzheimer's Day programmes organized by Alzheimer’s Related Disorders Society of India (ARDSI), Kochi on 21st September 2017. The students also participated in Memory walk competition.

- Department of Obstetrics and Gynecologic Nursing organized Three-days workshop on “Postnatal Care” on 24th - 28th February 2018 at Gynecology Ward, AIMS for antenatal and postnatal mothers.

- Observed health days of importance.

- Children’s Day - 14th November 2017 by the Third year B. Sc. Nursing students for the children and their parents.

- Breast cancer awareness day - on 21st October 2017 Gynaecology ward, AIMS. An educational session on breast cancer, its prevention and management was organized by 4th year B. Sc. Nursing students, after which there was an interactive session with audience.

- International Women’s Day in coordination with Amrita Urban Health Centre on 13th March 2018 at Anganwadi No.73, Kaloor division III

- International Nurses Day celebration conducted by Nursing service Dept. of AIMS. Three faculty members have done a theme presentation on the topic “Nurses: a voice to lead: Health is a human right” on 12th May 2018.

- International yoga day was observed on 21st June 2018 with a mass yoga practice by the students and staff of the college.
• The annual denture camp Amritasmitham 2017 was conducted from 29th to 31st August, 2017. Free dentures were provided for 64 patients.

• World Car Free day was observed with vigour on September 22nd 2017.

• No Tobacco day was observed and the public sensitized to ill effects of tobacco. Other activities included lectures, oath taking, debates and walkathon.

AIMS, Kochi

The Department of community medicine conducted/organized following activities at various urban, rural and remote areas:

• 21 health education classes at various schools/offices and organizations.
• 3 Counselling sessions for public
• 2 School health programmes
• 2 CMEs on Doctor’s Day
• 5 invited talks
• 2 presentations
• 8 meetings attended at various forums
• 9 training programmes conducted
• 27 public awareness programmes
• Attended quarterly review meetings of RNTCP
• 5 meetings – WHO external monitoring agency on MR campaign
• Attended district task force meeting
• 16 medical camps conducted
• 8 conferences/seminars/workshops attended
• 5 “Adithi Devo Bhava” – Migrant Welfare Programmes
• Psychological assistance for the inmates of “Snehatheeram” Old Age Home.
• “Amritam Arogyam” programme
• “Hridayamritham” Yoga & Meditation programme
• Conducted Geriatric Clinic (Punarjani)
• Hridayamritham – Good food for good health- Nutrition training program for Kudumbasree workers
Criterion – IV
4. Infrastructure and Learning Resources

4.1 Details of *increase* in infrastructure facilities:

<table>
<thead>
<tr>
<th>Facilities</th>
<th>Existing</th>
<th>Newly created</th>
<th>Source of Fund</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campus area</td>
<td>1000</td>
<td></td>
<td></td>
<td>1000</td>
</tr>
<tr>
<td>Class rooms</td>
<td>395</td>
<td></td>
<td></td>
<td>395</td>
</tr>
<tr>
<td>Laboratories</td>
<td>209</td>
<td>9</td>
<td>DST, DRDO, Amrita</td>
<td>218</td>
</tr>
<tr>
<td>Seminar Halls</td>
<td>46</td>
<td></td>
<td></td>
<td>46</td>
</tr>
</tbody>
</table>

No. of important equipments purchased (≥ 1-0 lakh) during the current year.

| Value of the equipment purchased during the year (Rs. in Lakhs) | 13072874 | Amrita, DRDO, |

Others

4.2 Computerization of administration and library

- Admission and publication of results of entrance examination is through AUMS (Amrita University Management System software)
- Attendance and internal assessment are entered online
- Submission of application form for university examination, generation of hall ticket, publication of results etc are done through AUMS
- Library – Computerized issue and return of books; collection of fine; no due details
- Library has internet access for both faculty and students
- Intranet facility is available for inter departmental and interoffice communication.
- Implemented online publication portal, PTP, for tracking the status of faculty publication.
- Undertaking from the parents and students on Anti Ragging is taken online.
- AUMS Software is used for Computerization of the Central Library. All the transactions and housekeeping operations of Central Library are handled through AUMS software.
- Bar-coding is implemented for circulation of books.
- OPAC – Online Public Access Catalogue is provided for searching the Library resources through AUMS software.
- Auto e-mail alert is introduced through AUMS software to know the circulation status of the books for every member.
- E- Resources like E-Books, E- Journals, E-Databases, Digital repositories are accessible at Central Library web page via campus LAN.
4.3 Library services:

<table>
<thead>
<tr>
<th></th>
<th>Existing No.</th>
<th>Value</th>
<th>Newly added No.</th>
<th>Value</th>
<th>Total No.</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Text Books</td>
<td>99713</td>
<td>27098186</td>
<td>2264</td>
<td>1079677</td>
<td>101532</td>
<td>65492103</td>
</tr>
<tr>
<td>Reference</td>
<td>17734</td>
<td>28671742</td>
<td>378</td>
<td>871696</td>
<td>15182</td>
<td>29543439</td>
</tr>
<tr>
<td>e-Books</td>
<td>8059</td>
<td>6012941</td>
<td>4858</td>
<td>5355888</td>
<td>12917</td>
<td>11368829</td>
</tr>
<tr>
<td>Journals</td>
<td>948</td>
<td>23530065</td>
<td>491</td>
<td>1552624</td>
<td>915</td>
<td>24997129</td>
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<tr>
<td>e-Journals</td>
<td>28395</td>
<td>49754334</td>
<td>28378</td>
<td>23713791</td>
<td>19310</td>
<td>73468125</td>
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<tr>
<td>Digital</td>
<td>791</td>
<td>14483518</td>
<td>24</td>
<td>858752</td>
<td>793</td>
<td>17524277</td>
</tr>
<tr>
<td>CD &amp; Video</td>
<td>8405</td>
<td>552505.5</td>
<td>3</td>
<td>0</td>
<td>9128</td>
<td>552505.5</td>
</tr>
<tr>
<td>Others (specify)</td>
<td>1657</td>
<td>549220</td>
<td>68</td>
<td>615</td>
<td>1755</td>
<td>489835</td>
</tr>
</tbody>
</table>

4.4 Technology Upgradation (overall)

<table>
<thead>
<tr>
<th></th>
<th>Total Computers</th>
<th>Computer Labs</th>
<th>Internet</th>
<th>Browsing Centres</th>
<th>Computer Centres</th>
<th>Office</th>
<th>Dept.s</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing</td>
<td>4032</td>
<td>1040</td>
<td>All Systems are Networked</td>
<td>Wifi Provided In All Hostels</td>
<td>7</td>
<td>427</td>
<td>1774</td>
<td>133</td>
</tr>
<tr>
<td>Added</td>
<td>246</td>
<td>140</td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
<td>31</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>4278</td>
<td>1180</td>
<td></td>
<td></td>
<td>8</td>
<td>428</td>
<td>1805</td>
<td>144</td>
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</tbody>
</table>

Technology Enhancement Data from Library

<table>
<thead>
<tr>
<th>Databases Renewal cost 2017</th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACM</td>
<td>555342</td>
</tr>
<tr>
<td>ASCE</td>
<td>273352</td>
</tr>
<tr>
<td>ASME</td>
<td>227498</td>
</tr>
<tr>
<td>ASTM</td>
<td>102965</td>
</tr>
<tr>
<td>EBSCO: CMMC</td>
<td>427222</td>
</tr>
<tr>
<td>IEEE (ASSP)</td>
<td>3227182</td>
</tr>
<tr>
<td>J-Gate (JET)</td>
<td>69000</td>
</tr>
<tr>
<td>JSTOR (AAF-ESS)</td>
<td>107105</td>
</tr>
<tr>
<td>Science Direct</td>
<td>12578580</td>
</tr>
<tr>
<td>Springer eJournals</td>
<td>2690443</td>
</tr>
<tr>
<td>Springer eBooks</td>
<td>5016345</td>
</tr>
<tr>
<td>Access Eng.</td>
<td>215953</td>
</tr>
<tr>
<td>Delnet Membership</td>
<td>11500</td>
</tr>
<tr>
<td>Total</td>
<td>25502487</td>
</tr>
</tbody>
</table>
4.5 Computer, internet access, training to teachers and students and any other programme for technology up-gradation (Networking, e-Governance etc.)

School of Arts and Science, Mysuru:

• Availability of lab facility even beyond working hours facilitating students to work on projects and reference work.

• Access to high quality journals for reference work in various fields of study.

• Orientation provided to the newly recruited faculty members and every new batch of students on the use of and access to AUMS.

• A session on Empowering Researcher with an effective use of Reference Management tools was conducted by Mr. Vinayak Hegde, Asst. Prof., Dept. of Computer Science on 16th Aug 2017.

• An awareness session on the use of e-resources at the campus: Amrita Sudha E-Books Library was given by the Librarian Mr. Chetan Hege on 13th January 2018 through Calibre E-Books Management software.

• The following 17 events were conducted to train students on various topics relevant to their discipline of study:

  - 13.10.2017 - A technical talk on “BIG DATA” Resource person - Mr. Manohar L, Senior Technical Expert, HPE Micro Focus and Team

  - 13.10.2017 - A technical talk on “MOBILE APPLICATION DEVELOPMENT” Resource person – Mr. Hemanth .L. , Director – Talent Being , Unit Of 9AHM Software Private Limited, Bengaluru

  - 16.10.2017 – Workshop on “Distributed Computing Using Hadoop”, Resource Person - Mr A. Bharanidharan, Assistant Professor, SNS College of Engineering, Coimbatore.

  - 16.10.2017 - Seminar on “Agile Process Model and Research Opportunities”, Resource person – Dr. J. Selvakumar, Associate Professor, SNS College of Engineering, Coimbatore.

  - 2.11.2017 - Workshop on “Python Programming”, Resource Person - Mr Pratik Pai , Director, LogicHive Solutions, Mysuru.

  - 02.11. 2017 - Skill Development Session on “Leadership Development Training”, Resource Person - Ms Savitha, freelancer and Soft Skill Trainer

  - 03.11. 2017 - Skill Development Session on “Leadership Development Training”, Resource person - Ms Reena, freelancer and Soft Skill Trainer

- 12th February 2018 – Workshop - “Practical Exposure to Linux OS”, Resource Persons – Mr. Sandesha Hegde, Professional Trainer, ConsultNCorptrain, Bangalore

- 13th March 2018 – Seminar on - “Cloud- Devops”, Resource Persons - Mr Prathap Parashar and Ganesh Palaniswamy, Spogworks IT Solutions, Bangalore

- 23.03.2018 - Seminar on “Data Analytics ”, Resource Person - Mr Venkatesh Yellamell , SAP Business Intelligence Consultant in Business warehouse technologies, Global Solutions Chennai

- 10.04.2018 - Seminar on “Article Writing And Publication ”, Resource Person - Dr. Sreenath J , Associate Professor, SJCE

- 10.04.2018 - Technical talk on “Software Testing Using Selenium ”, Resource person-Mr.Panakaj, Professional software testing trainer Hyderabad

- 23rd & 24th 2018 A Puppetry workshop was organized with Mr.Charles Barnabas and Mrs. Gwedaline Barnabas of Gwen Puppets Pvt Ltd, Chennai, as resource persons

- 21.03.2018 Students of B.Sc Visual Media Semester Four attended the Trolley and Crane Workshop to demonstrate real time Film Production with Mini-Crane and Mini- Trolley sets.

- 24.10.2017 A workshop on positive journalism and writing skills for print media by Mr.S.S Mahadevan , former Editor of The New Indian Express and India Today.

- Prof.Syed Kaleem Senior Producer of EMMRC, University of Mysore addressed the students of Visual Communication on the significance of lenses in photography, films and Broadcast media

**Department of Management, Bangalore:**

1. All our faculty members and staff have unlimited access to the internet.

2. Students have their own laptops and internet room with 24/7 wi-fi connectivity in hostel as well in class rooms as the School building is Wi-Fi enabled.

3. Students have unlimited access to the internet. The ICT facility at our School is managed by the University’s ICTS department who give us excellent support.

4. We have adopted the AUMS (Amrita University Management System) which is a paperless approach to manage academic related activities like Student registration for courses, attendance, record of marks and grades, academic related resources sharing.

**School of Arts and Science, Kochi:**

1. Upgraded Leased Line Internet bandwidth to 280 Mbps.

2. Campus wide Wi-Fi access to all Faculty rooms and Hostels.

3. Added new browsing centre inside the library for E-Learning and research activities.

4. Network connected to all classrooms for easy access to E-Learning content.

5. Full-fledged Computer Labs with advanced software’s

6. A Mail server (Amrita Mail server) is installed for Official purpose.
7. Firewall (H/W) is updated and upgraded
8. All PCs upgraded with latest Version of OS.

**Department of Management, Kochi:**

1. Network infrastructure upgraded to 'Layer 3' technology, Increased 7 new WiFi access points. Installed WiFi facility in Hostel.
2. Purchased new CCTV management software (Milestone), Backbone switch upgraded to Layer 3 technology, Internet line speed maintaining 100 Mbps.

**School of Nursing, Kochi**

1. Installed 23 CCTV cameras in different venues - exam hall, all class rooms and library
2. As part of the curriculum, students of all the programmes have courses on Basics of Computer Application.
3. There are 41 computers with internet facilities and 25 computers with SPSS facility.
4. Library – five computers have internet facility.
5. LCDs are provided in the classroom to facilitate teaching.
6. A session on accessing, citing publications was taken by one of the faculty from University.
7. All the departmental heads have computers with internet facilities.

**School of Dentistry, Kochi:**

All the departments are connected via intranet. All faculty and students have access to internet. We have a separate wing called Information Technology (IT) service which exclusively deals with computer related problems and doubts. The IT service takes up the issue of training faculty whenever technology is upgraded.

**4.6 Amount spent on maintenance in lakhs:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>i) ICT</td>
<td>230.12953</td>
</tr>
<tr>
<td>ii) Campus Infrastructure and facilities</td>
<td>9758.35259</td>
</tr>
<tr>
<td>iii) Equipments</td>
<td>7919.22153</td>
</tr>
<tr>
<td>iv) Others</td>
<td>5578.78824</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>23486.49189</strong></td>
</tr>
</tbody>
</table>
Criterion – V
5. Student Support and Progression

5.1 Contribution of IQAC in enhancing awareness about Student Support Services

- Student representatives on the IQAC to communicate the student requirements and perspectives to IQAC and to disseminate the support services available at the school as well as the new proposed schemes and suggestions among the student community.

- Counselling extra classes for up-gradation of academically weak students, students participating in various conferences in India and abroad, provide guidance for presenting papers in seminars and conferences. Health insurance is also offered.

- IQAC provides information about various Student Support Services available at the institution and other levels.

- The IQAC regularly conducts national level seminars

- Amrita Center for International Programmes (ACIP) helps the students to get placed in world-wide universities for higher education, internship, projects, etc.

- Meetings with Administrative staff & faculty members

- Counselling extra classes for up-gradation of academically weak students, students participating in various conferences in India and abroad, provide guidance for presenting papers in seminars and conferences. Health insurance is also offered.

- Opportunities for students to go to foreign universities for exchange programmes

- Placement training by CIR which manages placements, soft skill training and special training for CAT/GMAT/GATE/GRE.

- The physical education department has a modern gymnasium, and organizes regular coaching in games and athletics.

- Initiation of strong Co-curricular engagement of students through the conduct of national-level inter-university techfests, management fests and some fests has been initiated through suggestions from School IQACs.

- Initiation of optional foreign language courses in Japanese, German, Spanish, etc., to improve employability.

- IQAC has pointed out the need to attract more foreign students leveraging the extensive tie-ups and MoUs that AMRITA has with 75 premier universities in USA, Europe, Japan and Australia.

- Interaction with students to provide guidance for new opportunities e.g. employment, research fellowships, international conferences and workshops

- The IQAC had suggested that every course outline should also contain a section where the instructor mentions his availability for at least one hour every week outside the class. This
suggestion has been incorporated from the academic year 2014-15 onwards. Making this mandatory has encouraged greater faculty-student interaction with respect to different courses outside the class.

- We have a well-established IQAC, which monitors the proper functioning of women grievance cell, student mentoring system, student feedback and complaint redressal cell.

- Each department supports and guides students to participate in national level technical competitions and take up projects that are of social and societal benefits.

- Orientation for first year UG and PG students is conducted at the time of admission. The rules and regulations, curriculum, facilities available, etc., are elaborated.

- Each department conducts workshops for the benefit of increasing research awareness among the UG and PG students.

- Training given to students to face interviews through Mock interview

- Online Lab Usage & Language Lab

- Induction Programme for the fresher’s

- Interaction with students to provide guidance for new opportunities e.g. employment, research fellowships, Summer internships, conferences and workshops

- Feedback from the students, followed by corrective measures

- **Soft skills training**: There is a separate department named the Centre for Corporate and Industrial Relations (CIR), which have well experienced faculty engaged in soft skill and placement training for the students of the campus. The focus is on student's communication and presentation skills. Students are allowed to use the English Language Lab in this endeavour. Soft Skills is a value added course offered by the University. It is included in the curriculum as a credit course in order to ensure that all students have access to it.

- **Student Counsellor/Advisor**: Each faculty designated to function as a focal point for solving students' problems related to studies and discipline. Students can approach the facilitator on a one-to-one basis to enhance their academic performance.

- **Career Guidance**: It is offered to students through various invited lectures by eminent faculty drawn from various National and International Research Institutes in various disciplines.

- **Grievance Cell**: Any academic or non-academic issues/complaints related to the campus are addressed by this cell.

- **Student Feedback System**: Online feedback system is available. Student can administer Academic Feedback on Teaching Faculty after the completion of the course for effective Teaching - Learning Practice.

- **Student Counselling**: Full time experienced councillor is available in the campus. Students can fix appointments and consult her regarding personal or academic matters.
• A general orientation given at the commencement of the programme helps students and parents understand the working of the college and the facilities available here.

• The Faculty Advisor is assigned to each class guides the students on academic events and procedures.

• All the students are encouraged to do collaborative research work with faculty members

• Students given proper orientation on the mentoring system. Directed to meet the mentors at least once in a trimester.

• Parents meetings with the mentors arranged.

• Students given proper sensitization on activities that may be classified as ragging, harassment and the associated penalties.

• An online undertaking on anti-ragging is taken from all the students and the hardcopy signed by the parents. Awareness on ragging, its punishments and reporting if so is given through posters, contact numbers in emergency and also through anti ragging sessions to students. The anti-ragging squad constituted in the college visits the hostel during night for a month after the admission of new batch apart from monitoring the same during the day.

• Sessions for personal development provided include:
  ❖ "Be Positive" by Ms. Sujamol Jose (Columnist, Mathrubhumi Daily) on 1st November 2017.
  ❖ "Role of Individual in maintaining balance in the ecosystem" by Dr. Giby Kuriakose (Asst. Professor, S H College, Thevara) on 7th December 2017.

• The counselling cell of the college provides the students an opportunity to discuss the personal and professional problems. If necessary students are referred to the Department of Psychology.

• Parent meetings are conducted periodically and Parent-Teacher Executive committee is involved in the major decisions made.

• Assigned teachers as student mentors who meet the students regularly and discuss issues if any and provide direction and advice on important matters.

• The slow learners are identified early and additional classes/tests are provided to support them.

• Provisions are made for participation in co-curricular activities like arts and sports through Student Nurses Association (SNA) at Zonal, State and National Level.

• Involvement in the Medical Camps organized by AIMS help in the development of communication, teamwork and patient care skills.
● Student clubs such as yoga club, gardening club, Music club and dance club promotes better student interaction and relaxation for them.

● Leadership qualities are developed in the students from the First year through the variety of assignments provided to them like presentations, debates, which is carried forward in the senior years in terms of case study presentations, seminars, discussions, role play, exhibitions, PBL, research projects and integrated clinical learning experiences.

● Working with nine nursing students from Ryerson University, Canada on 05/08’/17 and 08/8’/17 in the preparation of materials required for health education was a novel experience for the final year B. Sc. Nursing students.

● Training in computer system (online services)

● Yoga & Meditation sessions (I AM TECH)

● Active involvement of undergraduate students in the activities of “Say No To Drugs” in coordination with the Students Police Cadets;

● Motivation by organizing events like Anti-Tobacco day, Blood Donation Day), Mental Healthy Programme, Saraswathy Pooja etc.

● Active participation in various outreach facilities in tribal areas eg, Wayanad- district of Kerala, Vallikavu and Sabarimala.

● Participation in community welfare activities like School Health Programmes, Adithi Devo Bhava – migrant welfare programmes, Snehatheeram – Old Age Home visit, Hridayamritam – Yoga Programme,

5.2 Efforts made by the institution for tracking the progression

● Continuous monitoring and assessment of the progress of students, counselling, students representation in class committee, course committee etc.

● The institution monitors and ensures the achievements of the learning outcome through analysis of the tests, examination results and the pass percentage

● Faculty counsellors keep a track of the student progression

● Meeting with students & parents and discussing the students’ progress with their parents

● Faculty-Advisor for every 60 students and a counsellor for every 20 students to monitor the academic and personnel issues.

● Students having more than 6 arrears have to register for the failed subjects which are being offered before they register subjects of the higher semester subject to a maximum of 28 credits.
• The result analysis is discussed in the academic committee and parents are informed of the arrear subjects.

• Introduction of counselling diary

• Counselling periods increased from 1 to 2 periods

• Coordination with CIR with regards to technical as well as soft skills

• Technical and non-technical competitions conducted by AEEE and IEEE students chapter

• Strong support for remedial courses

• International and industrial internship for students.

• In-plant training for 2nd and 3rd year students

• In the Department of Social Work, learning through fieldwork is closely monitored and the reports are corrected and given feedback to improve. Based on the performance in the periodical tests, the feed backs were given to the students by the respective course faculty to improve their academic aspects. A monthly work schedule was prepared for the students regarding their research dissertation to track their progression. The fieldwork manual was used to track the progression of the students in their fieldwork learning.

• Maintaining a register that is updated to reflect recruitment of students to new positions across the country and overseas

• Constant updates through Alumni Association records and information.

• We follow a system of continuous evaluation with a minimum of four evaluation components in every course. There are quizzes, assignments, presentations, projects being continuously evaluated apart from the examinations. This helps us to track student progression continuously.

• Feedback forms are collected form students and parents including international elective trainees.

• The institution takes interest in fast rectification of complaints of the faculty as well as the students. We also make sure that the action taken on the complaints are intimated from time to time.

• Meet regularly with class coordinators and HODs to evaluate progression

• Project Log Book system tracks the Research progress of UG and PG students

• Organizing Cultural Activities

• Life skills- SUPW

• Enhancement of social managerial skills

• The institution monitors and ensures the achievements of the learning outcome through analysis of the tests, examination results and the pass percentage
• Class committee meetings
• Constant updates through Alumni Association records and information
• Collection of student feedback and corrective measures
• Review of progress made by the students at the department level and a second review by the Head of the institution.
• Periodical progress report is sent to the parents three times in a semester, indicating the academic performance and the attendance status of their ward.
• The Student Welfare Officer closely monitors attendance and the progress of the students and counsels students with low attendance or low performance.
• The well performing students who have scored distinction are encouraged to involve in research projects and publications.
• Continuous Evaluation Process: We follow a system of continuous evaluation with a minimum of four evaluation components in every course. Mid-Course evaluation.
• There are quizzes, assignments, presentations, projects being continuously evaluated apart from the examinations. This helps us to track student progression continuously.
• PG Students and MPhil scholars were placed in reputed institution and some MPhil scholars joined for PhD programmes at reputed institutions
• Individual personal and professional counselling is given to students who face difficulty in getting placed.
• Regular follow up of student/s with wide gap in the course (due to illnesses requiring prolonged treatment or personal issues) has promoted in completing the course within the prescribed INC period.
• Strengthened Alumni with the following measures:
  ❖ By selecting representatives from each batch to get updated information from the Alumni.
  ❖ By creating an official e-mail ID for the smooth interactions with the alumni.
  ❖ Assigned a clerical staff to track the same.
  ❖ Through personal contact with faculty and students.
  ❖ By formulating groups in social media like facebook and WhatsApp.
  ❖ Provides information to the Alumni through College newsletter including research newsletter.
• Reports from the Chief Hostel Wardens
• CCTV monitoring
5.3 (a) Total Number of students

<table>
<thead>
<tr>
<th></th>
<th>UG</th>
<th>PG</th>
<th>Ph. D.</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>13781</td>
<td>5432</td>
<td>680</td>
<td>0</td>
</tr>
</tbody>
</table>

(b) No. of students outside the state

6917

(c) No. of international students

23

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th></th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>10575</td>
<td>%</td>
<td>8638</td>
</tr>
<tr>
<td>%</td>
<td>55.04</td>
<td></td>
<td>44.95</td>
</tr>
</tbody>
</table>

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

Amrita organizes coaching classes for various competitive examinations across all the campuses. These coaching classes are conducted by external professional agencies as well as internal faculties. We organize coaching classes for GRE, CAT, and GATE and also organize Foreign Language training in German and Japanese for initial and advanced level certifications. Students are also given training for BEC vantage and advanced level certification. The number of students from all the campuses who have undergone such trainings is given below:

- GPAT coaching class and online examinations are conducted regularly for B.Pharm final year students.
- Soft skill training classes, group discussion and mock interview are conducted for B.Pharm, M.Pharm & Pharm.D final year students.
- Invited talks by eminent experts from other Pharmacy Institutions to get exposure to different career opportunities in pharmaceutical Industries.
- For MBA students, we train our students for their placement process by giving them coaching for CV writing, Group Discussion skills, Personal Interview and Aptitude Tests preparation etc. But no coaching is provided for competitive examinations as such.

<table>
<thead>
<tr>
<th>Last Year</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>General</td>
<td>SC</td>
<td>ST</td>
<td>OBC</td>
<td>Physically Challenged</td>
<td>Total</td>
<td>General</td>
<td>SC</td>
<td>ST</td>
<td>OBC</td>
<td>Physically Challenged</td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>10986</td>
<td>493</td>
<td>44</td>
<td>6384</td>
<td>0</td>
<td>17907</td>
<td>11908</td>
<td>469</td>
<td>55</td>
<td>6781</td>
<td>0</td>
<td>19213</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

No. of students beneficiaries

792
5.5 No. of students qualified in these examinations (provide details in an Annexure)

<table>
<thead>
<tr>
<th>Examination</th>
<th>No. of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>NET</td>
<td>21</td>
</tr>
<tr>
<td>SET/SLET</td>
<td>17</td>
</tr>
<tr>
<td>GATE</td>
<td>22</td>
</tr>
<tr>
<td>CAT</td>
<td>30</td>
</tr>
<tr>
<td>IAS/IPS etc</td>
<td></td>
</tr>
<tr>
<td>State PSC</td>
<td></td>
</tr>
<tr>
<td>UPSC</td>
<td>5</td>
</tr>
<tr>
<td>Others</td>
<td>80</td>
</tr>
</tbody>
</table>

5.6 Details of student counselling and career guidance

- Counselling for weaker students. Career Orientation classes provided by CIR
- Special career guidance is given for students opting for the exit option.
- Academic counselling for students given at regular intervals as part of their assessment.
- Training for the competitive examination is made part of the regular curriculum to provide an intensive support for the students.
- Individual student mentoring is done by the faculty and records are maintained in a mentoring file. The Department PGP Committee counsels the weak students and facilitates their taking re-exams to help them to improve grades. Parents are also included in the process.
- Enquiry committees are set up in case of disciplinary issues and letters sent to the parents. All related documents are filed.
- The industry speakers and alumni who address the students also provide career guidance in their areas. Specialized placement training on aptitude skill, soft skills, group discussions and mock interviews are provided to students. Alumni working in similar industries and companies often offer help during placement preparation.
- Conducts Life Skill training (soft skills, verbal skills and aptitude skills) for the career development of students. These training courses are conducted over a period of two to four semesters in Engineering, Management and Arts and Science streams in all the campuses. We conducts one to one career guidance and counselling of students in Engineering and Management streams. We organize guest lectures and training by industry experts for enhancing the career preparation of students. We organize mock interview by industry experts for the final year students in Engineering and Management streams. We also organize assessment by professional agencies for the final year students before the commencement of the placement process. The number of final year students from all the campuses who have undergone such training and placement preparation is given below.
- The college has a student counselling cell headed by faculty specialized in Mental Health Nursing and other selected teachers as members at Kochi Campus.
- Counselling is facilitated by scheduling time in every week along with the provision of the same whenever it is necessary.
• Students who require special attention of the Psychologists are referred to the Clinical Psychology Department of AIMS and the documents of the counselling sessions are maintained and kept confidential.

• We have a mentoring system and designated staffs are involved in counselling. Every year lecture is given to the interns about various career options after course completion. The students are informed about the various coaching institutes available for postgraduate entrance preparation. They are also informed about the various finishing schools available for updating their skills.

• The institution follows a Gurukula system of education. The Acharya (a senior professor from the Dept) provide career guidance to the students under him/her (10 to 15 students each per group). These Acharya also provide counselling to the students in close coordination with the Department of Clinical Psychology.

No. of students benefitted  

7505

5.7 Details of campus placement

<table>
<thead>
<tr>
<th>On campus</th>
<th>Off Campus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Organizations Visited</td>
<td>Number of Students Participated</td>
</tr>
<tr>
<td>567</td>
<td>---</td>
</tr>
</tbody>
</table>

5.8 Details of gender sensitization programmes

• Girl students are given counselling separately. Anti-Ragging committee is coordinated by the advisors, counsellors. Grievance redressal committee to handle gender related issues.

• The Women Development Cell works actively

• An awareness programme for women employees at the school regarding work life balance of women and essential health care - A session conducted by Dr. Sowmya Modi, Gynaecologist, Amrita Krupa Hospital, Mysuru on January 10th 2018.

• A demo and talk on Personal Health and Hygiene by P&G on 26th April 2018.

• On 8th March 2018, International Women’s day was celebrated with the theme “Press for Progress”.

• We have a Co-education programme and both male and female students do combined studies and interact freely as a part of different groups for the various group projects and assignments. They also actively participate together in the organizing of different cultural events at the school such as Envisage (cultural Event) the ONAM festival and many more such celebrations. We do not feel the need for a gender sensitization programme. Our lady students stay in separate girls’ hostels and there are lady wardens to take care of all their
needs. Our lady faculty members are also available for them whenever they need. We have a zero tolerance policy towards eve-teasing and ragging. There is a 24 hour camera surveillance of the campus. All these steps taken by us ensure a very pleasant and safe stay for our lady students at the campus.

- Women Cell- International Women’s Day observed
- No gender based discrimination during the selection process.
- Mixed group activities encouraged throughout the programme so that the students get ample opportunity to understand and learn to respect the opposite gender.
- Grievance handling mechanisms to handle gender related issues.
- Both genders represented in all student committees.
- Arranged a session on “Be Positive" by Ms. Sujamol Jose (Columnist, Mathrubhumi Daily) in connection with College Anniversary Day celebrations on 1st November 2017.
- Conducted Breast Cancer Awareness day programme was on 21st October 2017 at Annex Gynaecology Ward, AIMS. An educational session on breast cancer, its prevention and management was organized by 4th year B. Sc. Nursing students, after which there was an interactive session with audience.
- Women empowerment programmes : Life enrichment Education by Group of students in the selected 7 villages in various state of India including Uttarakhand, Gujarat, Panjab, Madyapradesh, Telungana, Tamil Nadu and Kerala, during the Field work placement in the month of September 2017 and March 2018

5.9 Students Activities

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

<table>
<thead>
<tr>
<th>State/ University level</th>
<th>National level</th>
<th>International level</th>
</tr>
</thead>
<tbody>
<tr>
<td>207</td>
<td>57</td>
<td>0</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Sports</th>
<th>State/ University level</th>
<th>National level</th>
<th>International level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>44</td>
<td>7</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Cultural</th>
<th>State/ University level</th>
<th>National level</th>
<th>International level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>69</td>
<td>2</td>
<td></td>
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</tbody>
</table>
### 5.10 Scholarships and Financial Support

<table>
<thead>
<tr>
<th></th>
<th>Number of students</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial support from institution</td>
<td>408</td>
<td>34794600</td>
</tr>
<tr>
<td>Financial support from government</td>
<td>287</td>
<td>37504331</td>
</tr>
<tr>
<td>Financial support from other sources</td>
<td>15</td>
<td>161000</td>
</tr>
<tr>
<td>Number of students who received International/ National recognitions</td>
<td>27</td>
<td></td>
</tr>
</tbody>
</table>

### 5.11 Student organised / initiatives

<table>
<thead>
<tr>
<th></th>
<th>State/ University level</th>
<th>National level</th>
<th>International level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fairs</td>
<td>22</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Exhibition</td>
<td>4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 5.12 No. of social initiatives undertaken by students

76

### 5.13 Major grievances of students (if any) redressed:

1. Wifi connectivity provided in the gents’ hostel at Kochi Campus
2. Non veg canteen introduced in boys hostel at Kochi Campus
6.1 State the Vision and Mission of the institution

We envision a world endowed with the wealth of knowledge and the strength of discrimination (Viveka).

We envision a system, which is a healthy breeding ground for the sprouting, culturing and dissemination of the whole gamut of knowledge in a wholesome and holistic manner for the well-being of humankind.

We envision a human being empowered with wholesome knowledge, which makes one an enabler and facilitator in the deep search and striving of every human being for that knowledge.

We envision a system where in there is a great interplay and exchange of ideas, thoughts, feelings and actions which develop people empowered with noble character and wholesome values. They go out into the fields of action to build a world of love, harmony, peace and knowledge. They follow the path of “Dharma” and give a clear direction in every thought and human endeavour.

Mission

To provide value-based education and mould the character of the younger generation through a system of wholesome learning, so that their earnest endeavor to achieve progress and prosperity in life is matched by an ardent desire to extend selfless service to society, one complementing the other.

6.2 Does the Institution has a management Information System (provide a brief description)

Yes. Amrita University Management System (AUMS) is a comprehensive software system that was developed in-house, and encompasses all aspects of the university’s academic and administrative functioning. A brief discussion of its usage with respect to the above points is given below:

a. **Administrative procedures including finance:** includes student and staff profiles, fee management, accounting, issue of certificates (bonafide, transfer certificate, grade sheet, degree certificate, etc.), etc.

b. **Student admission:** a state-of-the-art admissions module enables simultaneous counselling for B. Tech admissions across multiple campuses (in three different states), and the entire data - from issue of hall tickets, to rank data, and entry data upon admission – is captured in the system, subsequently generating roll numbers that feed into the student registration & evaluation processes.

c. **Student records:** apart from personal profiles, this includes student registration records, marks & grades, student progression data, progress reports, hostel information, etc.

d. **Evaluation & Examination procedures:** the entire gamut of activities from registration through results, including attendance and other data are captured and maintained with
appropriate access levels to students, faculty, management, administrative personnel, parents, and other stakeholders.

e. **Research administration:** in the staff profile, there is a provision for faculty members to maintain records of research publications, conferences attended, research grants received, etc.

f. **PTP portal:** New portal with the name PTP: Publication Tracking Portal is being introduced in every department with the aim of systematic consolidation of research publication by faculty and students and improve accessibility of papers by others faculty and student of institution to improve citation count.

g. **Inpods:** University started the usage of InPods, a system that facilitates outcome-based learning.

h. **Others:** E-learning module – this provides an excellent suite of tools for the teaching-learning process, including the provision to set up question banks, conduct online exams, share teaching materials & resources, host discussion forums, conduct surveys & polls, generate course-related performance-reports, etc.

i. **Amrita Vidya:** School of Dentistry, Kochi has a management information system known as “Amrita Vidya” and all the academic details are documented in this system. The parents can access information about the performance of their ward from any part of the world.

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

- Exclusive Quality Assurance Cell
- Annual inspection by NABL, NABH, ISO for continuance of accreditation
- Working strictly as per the guidelines of the statutory bodies
- Encouragement for research & publication (University & institutional level).

#### 6.3.1 Curriculum Development

The University follows a systematic process in the design and development of the curriculum. Syllabus is subjected to periodic updates. Feedback from each course teacher is collected by the respective departments which is consolidated and forwarded to the Board of Studies to be considered at the time of revision. Feedback from employers and alumni gives direction on the required modifications to be made in the syllabus. Subject experts both from academia (Professors from other Universities) and industry who are on the Board of Studies are consulted before revision of syllabus.

The Board of Studies frames the curriculum and the detailed syllabi of each program, after the discussion among its members. The suggestions of the board will be taken up by higher bodies such as Committee for PG Programs and Academic Council.

- Departments introduce new electives in emerging areas on a regular basis as per current and projected needs.

- In some departments the curriculum revision also takes inputs from additional sources like ACM IEEE-CS Curricula, MIT Open Course Ware, Coursera, etc.
Faculty members are asked to maintain a separate file regarding the changes needs to be made in the next curriculum revision based on their day-to-day experience with the course content & current issues.

Internships : Compulsory for PG Students

Courses comprise Lectures/Tutorials/Labs.

Seminars/Group Discussions/Presentations are highly encouraged

Enrichment courses to support regular academic courses

Soft skills training programme for final year UG and PG students

Cultural education classes to inculcate social, ethical and moral values

Special guidance given to students for qualifying exams like GPAT

The curriculum is visualised with an objective of need based with adequate flexibility to include and effectively reflect the emerging concerns and expectations of learner and society and is according to NCTE framework for School of Education

Curriculum development in Ayurveda school is done as instructed by the apex body CCIM

**Department of Management, Bangalore:** Ensure regular Course feedback from Students. All the internal faculty members take regular course feedback on their course outlines from fellow academics to improve their courses. Students give feedback to the faculty at the end of every course which is shared with them. This also helps them to improve their course delivery. Every year, a fresh course outline is submitted for every course before the beginning of the term. All the course outlines are scrutinized by the PGP Committee continuously to ensure their quality and currency. Courses are assessed by the students via a Course and Faculty Feedback Form. Broadly the feedback is given in the following criteria: Course Content, Course Delivery, Opportunity for Participation Faculty-Student Relationship Overall effectiveness and quality of the Course

Curriculum and Syllabi updated based on the industrial needs.

Expert opinions from academicians and industrialists were incorporated for the upgradation of syllabus and curriculum.

**School of Dentistry, Kochi:** The institution has a management information system known as “Amrita Vidya” and all the academic details are documented in this system. The parents can access information about the performance of their ward from any part of the world.

**School of Engineering, Amritapuri:**
1. We revise curriculum once every 2-3yrs as per the necessity. We take into consideration recent technological changes and input from industry
2. The following are the decisions for curriculum development of M.Tech
   - Power and Energy Engineering
   - Control & Instrumentation engineering
   - All courses will be lab oriented courses. There will be no separate course code for the laboratory courses.
• The syllabus of the lab oriented courses revised, such that the theory and the lab experiments will go hand in hand.
• Syllabi are revised as per industry/R&D requirements giving due consideration to the suggestions from alumni.
• “Open lab” in the second semester of the existing curriculum is changed as” Application Development Lab”
• Second year (S3 and S4) will be fully devoted to Dissertation. This is to promote industry internships and industry oriented projects.
• New elective courses are introduced to give an insight into the latest technologies

3. Updated the text book editions for all courses
4. Involvement of the adjunct faculties in developing the curriculum based on the latest knowledge and current developments in the learning areas.
5. Board of Studies members include members from various streams of study and industry whose thoughts and expertise in the subject are utilised in the curriculum development.
6. Curriculum revamp as par with world standard
7. Development of curriculum by concerned Department faculty
8. Annual review of curriculum by UG & PG Committees
9. Periodic College Council meetings
10. Approval by University Academic Council

6.3.2 Teaching and Learning

The university’s teaching, learning and assessment strategies are continually reviewed, ideas for improvement identified, and implemented. Some of these include:
• Outcome-based learning (a pilot implementation of InPods software system was initiated).
• Greater importance for continuous assessment, creatively implemented as per the needs of each course (with appropriate combination of homework assignments, collaborative projects, in-class discussions, presentations, research papers, creation of models and videos, etc.).
• Hiring well qualified staff as available, rather than just as per need (to go well beyond minimum requirement).
• A new comprehensive faculty appraisal procedure implemented that addresses research, teaching, and administrative aspects of duties for faculty – this enabled clear setting of goals and expectations for faculty, and subsequent evaluation for developmental action.
• Significant increase in staff strength over the last four years.
• Fully qualified and competent faculty members with a background of academia and Industry.
• Healthy faculty-student ratio (university-level it is 1:11)
• Detailed course plan in line with the prescribed syllabus for every theory course and a separate lab cycle for lab courses ensures smooth conduct of classes.
• Periodic Class Committee meetings: Chairperson, Faculty Advisor, course teachers and two student representatives of the class meet to ensure transparency in curriculum delivery and evaluation pattern.
• Objective assessment of teachers through student feedback administered in the middle of the semester helps in improved content delivery
• Deployment of AUMS – Amrita University Management System, for academic and administrative purposes
• Use of NCTF (National Capture The Flag) game environment for offensive & defensive skill development
• Faculty development programs are conducted regularly, and faculty members are encouraged to attend FDPs at other eminent institutions as well
• Continuous evaluation system is followed
• Classrooms are equipped with audio-visual aids to enhance the quality of the teaching-learning process
• Rigorous Training on Skill Development
• Technology Oriented Training
• Reflections on general themes through discussions and seminars
• Fully qualified and competent faculty members with a background of academia and Industry.
• Healthy faculty-student ratio of 1:18
• Detailed course plan in line with the prescribed syllabus for every theory course and a separate lab cycle for lab courses ensures smooth conduct of classes.
• Meticulous academic delivery resulting in ranks at the University level.
• Periodic Class Committee meetings: Chairperson, Faculty Advisor, course teachers and two student representatives of the class meet to ensure transparency in curriculum delivery and evaluation pattern.
• Objective Assessment of teachers through student feedback administered in the middle of the semester helps in improved content delivery.
• Deployment of AUMS – Amrita University Management System, for academic and administrative purposes.
• ICT enabled teaching and learning
• Practical exposures to the concepts and progress towards research

• **Department of Management, Bangalore:** Orientation Program: 2 weeks orientation program for the new batch.
• Orientation Program provides fundamental courses required for MBA. Students from different educational background gain knowledge out this orientation program.
• We have Add-on and Enrichment courses for wholesome learning experience. We do offer AUDIT courses in the second year to gain additional knowledge, Interactive sessions with industry experts.
• Master thesis implementation: To ensure and enhance the research among the students

• **School of Nursing, Kochi:** Undergraduate students are posted continuously for one shift to ensure continuity in patient care and also to provide more patient focused care which suits the academic level of the students.
• The final year B. Sc Nursing students have one month of Integrated Clinical Experience/Practice in a particular area under a mentor to facilitate hands on experience in patient care. Two batches have already undergone the programme and found to be effective in improving the clinical skills and self-esteem.
• Planned to arrange ten clinical oriented sessions for two days for the final year B Sc Nursing students to prepare them better for the ICE like ECHS, Protocols & policies, fire & safety etc.
• Planned to get all the final year students certified in specific skills like BLS.
• As the number of seats in the first year and second year is enhanced from 75 to 100, the batch is divided into two (50 each) to make teaching learning process more learner centred.
• M. Sc. Nursing students are given independent patient care assignments to improve competence.
• Clinical rotation plans are prepared based on the INC specification and changes made to ensure the practice of clinical oriented nursing skills in the beginning of an academic year after getting the feedback from students and faculty.

**School of Engineering, Amritapuri:**

- Student feedback and peer evaluation. Faculty doing PhD and attending workshops/FDPs to improve skills
- Regularly conduct FDP/Workshop/Invited Talks/Industrial Visits/Conference in association with IEEE and IITs and other technical organizations like Energy Management Centre, NTPC etc.
- There are Four Department level class committee meetings to monitor performance of students
- Project Demo and Poster Presentations for B.Tech and M.Tech students of EEE Dept.
- Teaching and Learning
- Hands on Projects having exercises rather than theory oriented
- Conducting faculty development programmes
- Invited Lectures of faculties from National and International universities as well as industries on different subjects.
- Practical applicability of every courses is being included in the syllabus

**6.3.3 Examination and Evaluation**

All the University examinations are conducted under the supervision of the Exam Control Division headed by the Deputy/Assistant Controller of Examinations. The centralized paper evaluation is undertaken in the office of the Exam Control Division itself and the results are declared after the approval of the concerned evaluation committee of the college.

Some of the features include:

- Central valuation
- Question paper vetting by the chief mentor before the exams and auditing after the exam
- Transparent Revaluation - Revaluation will be done in the presence of student, chairman of the department by the same faculty.
- Monitoring the performance of the students by means of Internal Exams, End Semester Exams, and Continuous Evaluation
- Communication of evaluation methods to the students by faculty at the beginning of each semester
- Mini Projects
- Journal/Research Article reading Assignments/Presentations in curriculum
• Declaration of Results and conducting supplementary / arrear examination for failed students
• Timely result publication within 10-12 days from the last day of the end semester examination
• Result through AUMS (Amrita University Management System)
• Systematic evaluation process supported by AUMS allows timely result publication within 10-12 days from the last day of the end semester examination.
• Effective student support system with constant monitoring and counselling where each Faculty Counsellor mentors and motivates a group of 30 students.
• Student progress report sent thrice a semester and access to parent portal for student performance & attendance result in increased rapport with stakeholders.
  o Systematic and methodical conduct of periodical tests and examination.
  o Provision of second chance exam and other remedial courses to support students of different learning capabilities.
• Double Valuation (Ayurveda)
• Revaluation on request
• External reviews of projects:

We follow a continuous evaluation scheme to help the students and the faculty to assess the students’ progress in all the courses continuously. All the courses have at least four components to give enough scope for evaluation through projects, group assignments, case analysis and presentations, role plays etc. We have appointed one of our faculty members as an internal Controller of Examination to regulate our examination process better. This includes setting the question papers ready in time, maintain their confidentiality better, conducting the examinations and declaring the results on time, maintaining the standard of the question papers, and to have better discipline during the examinations.

The evaluation of final year project (for both UG and PG students) is carried out in a transparent fashion with the student progress, marks allotted and any issues being documented in the Project Log Book after each periodic review. The Project Log Book is made available to the student immediately after the review so that he/she can go through it and see the marks obtained as well as the comments of the reviewers. Any issues can immediately be taken up with the project review committee.

In the Department of Social Work, a new method of field based student presentation on child protection, women empowerment, water, waste management, etc., was introduced as part of the specialization [elective] courses to evaluate the students’ understanding.

Credit Based evaluation pattern is followed.

The Academic performance of each student in each course will be assessed on the basis of continuous assessment and an end-semester examination. The continuous assessment in theory courses shall consists of at least two periodicals tests, other quizzes, assignments, tutorials, viva voce etc. The weightage for the internal Assessment components for the theory –based courses shall be 15 marks each, for the two periodical tests and 20 marks for the continuous assessment component (comprising of quizzes, assignments, tutorials, viva-voce etc.)
In theory courses, the weightage will be 50:50. And for practical the weightage will be 80:20.

A student will be eligible to appear for the end-semester examination only if he/she have appeared for at least ONE periodical test during the semester.

It is mandatory for the students to appear for the end-semester examination /supplementary examination for completion of the course.

The final evaluation will be based on the content of the report, presentation by student and a viva-voce examination on the project. There will be 50% weightage for continuous assessment and the remaining 50% for final evaluation.

- Exclusive and separate Exam Control Divisions for MCI approved programmes and for Allied Health Sciences programmes (ECD-I & ECD-II)
- Centralized evaluation
- Fully computerized system
- Appointment of Examiners and evaluation as per the guidelines of the statutory Body/University.

6.3.4 Research and Development

In an effort to further enhance the research structure and output, the university initiated the formation of Thurst Area Groups (TAGs). These groups within each department, work together in focused areas, and provide regular reports, which are then reviewed by management for the following reasons:

1. To provide any support (additional infrastructure, facilities, instruments, stipends, etc.)
2. To help in case of any roadblocks and challenges faced by researchers
3. To monitor progress and output

The university has a Research Committee to monitor and address issues related to research. Each school also has a research committee to facilitate, monitor and encourage the research activities. It meets regularly to discuss various plans to promote research and motivate the faculty for academic advancement.

There is a chairman in each campus with overall responsibility for the PhD programme. The Dean of the campus/Dean of the school/Principal of the School/Senior is also involved closely in the overseeing of the research activities. Vice-Chairman and also representatives from each department, eminent scientists/researchers from premier institutes in India and abroad are included as members of the research committee.

Teachers are informed about the various fellowships available and they are encouraged to apply for the same.

Faculty members that do not have a doctoral degree are encouraged to register for PhD.

Monitory assistance and incentives provided to faculty members for publication and attending conferences.

- University is directly funding many research projects
- Research publications and guiding research is counted for promotion
- Special Laboratories have been setup for research
- University is funding teachers to participate in conferences/workshops/symposia.
• Support students in participate in International/National competitions.
• Few research centres have been setup attached to school.
• Robust QA team internal and external experts.
• Annual reviews with researchers from other research departments of Amrita University
• Arrange invited talks of experts from reputed International/National institutions.
• Thrust areas for research within the departments are identified and faculty members are grouped to work on the thrust areas, based on their expertise. Students and members of the faculty are encouraged to publish papers in journals and conferences.
• In B.Tech Program, Paper publication in International/National conference/Journal is mandatory for the award of distinction.
• In M.Tech Program, Paper publication in International/National conference/Journal is mandatory for the award of degree.
• Conducted faculty seminars on their research areas
• The Department of Sciences involve student right from their second year of studies in the various funded research projects
• Faculty are encouraged to come out with R&D proposals towards which Head, Reasearch organization is facilitating interaction with various funding agencies like ISRO, NRB, BRNS etc.
• Students are encouraged to take up research based projects associated with the funded projects.
• The Department of Mechanical Engineering has established the Amrita Automotive Research and Technology Centre – supported by Automotive Test Systems, New Delhi and Robert Bosch, Bangalore.
• The Department of Mechanical Engineering has set up of new Tribology Laboratory and Condition Monitoring Laboratory
• Saturdays are completely dedicated to research work

All the faculty members have a computer and an office to themselves with unlimited access to internet. They have access to most of the major research databases such as Science Direct, Elsevier, EBSCO, PROQUEST, IBID, CAPITALINE etc. We encourage our faculty to publish in good journals and our Performance Management System gives significant weight to such publications. Faculty are encouraged to present their research at different national and international conferences. They are given special casual leave to do so and all their expenses are reimbursed.

Research proposals are reviewed by the Research Advisory Committee/Ethics Committee before implementation.

Resource Mobilization through MoUs with leading pharma/biotech companies and premier research institutes such as:
  ▪ Univeristy of California  San Diego, San Diego, USA
  ▪ Columbia University, New York, USA
  ▪ NIAID, NIH, Hamilton, MT, USA
  ▪ Kazan Federal University, Russia
  ▪ National Institute of Infectious Diseases, Tokyo, Japan
  ▪ Indriyam Biologics Pvt. Ltd, Thiruvananthapuram
- Global Good Fund/Intellectual Ventures Lab, Seattle, USA
- Agilent Technologies, Germany
- Regional Cancer Centre, Thiruvananthapuram
- University of Oxford, UK
- University of Cambridge, UK
- National Ilan University, Taiwan
- C-CAMP, Bengaluru
- NCCS, Pune
- WIPRO Limited, Bengaluru

- **Department of Management, Bangalore:** All the faculty members have a computer and an office to themselves with unlimited access to internet. They have access to most of the major research databases such as EBSCO, PROQUEST, IBID, CAPITALINE etc. We encourage our faculty to publish in good journals and our Performance Management System gives significant weightage to such publications. Faculty are encouraged to present their research at different national and international conferences. We have an internal Amrita Working Paper Series where our faculty and PhD scholars can publish their research work and get feedback from their colleagues. In year faculty are given Special Casual leave for their research work, (like for attending conference, data collection review work etc.)

- All the students are encouraged to do collaborative research work with faculty members for the mandatory masters’ thesis.

- We have taken a number of steps to encourage the research culture at our school. However, we do not want only our faculty members and Doctoral scholars to do research. We want to bring the research culture even to our MBA program. This is in alignment with our Mission Statement where we have stated that we wish to ‘emphasize research’ at our school. As a result of this desire, we have become the first leading Business School in the country that requires its MBA students to produce at least one academic paper which is published in a SCOPUS indexed conference proceedings or Journal. This new requirement was introduced in the academic year 2014-15 in the form of a Masters’ Thesis leading to a paper. We have modified this to a Business Research Project (BRP) which should lead to a publishable paper. All the students of the MBA program are required to do a BRP research project. They work under the guidance of a faculty mentor in order to produce the paper which then needs to be submitted to a SCOPUS indexed conference or Journal. We have revamped our faculty’s PMS to give more weightage to research publications in journals benchmarked against the ABDC list of journals. As mentioned earlier, Mondays and Tuesdays have been earmarked for faculty interaction on research and Thursdays for the second year students for BRP research work.

- **School of Engineering, Amritapuri:**
  1. The department has two research lab – HUT LaB and ASPIRE Lab for BTech and MTech students.
  2. Regular TAG meetings  
     Monitoring of TAG activities by management.  
     Research Day for faculty members once in a month
  3. 
     - User studies on UX/UI on games with rural audience.
     - Pilot studies on games about Life-skill learning.
• Dr. Sidney Strauss working closely with teams at field and helping research
• In conjunction with Live in Labs students our researchers published papers
• Publications on other Humanitarian innovations and rural applications and waste management and plastic waste into use.
• Human Robot Interaction research methodology: using a Wizard of Oz protocol to study untrained users naturalistic speech and gesture interactions with an unmanned ground vehicle (UGV). Aim is to develop user model to support humanitarian and developing world applications, to enable untrained users to successfully control robots.
• Innovative 3D model toilet mould made by researchers can be used to built by our trained mason in 4 days
• Pilot studies in robotics for education with school children.
• Robot research in the wild: Water transport in rural India in collaboration with Glasgow university got published in IEEE spectrum

4. Every PG student is required to publish a paper as part of the PG Programme.

5. In the center, there are sponsored projects wherein students are exposed to the real requirements of the research projects. It is not just bookish knowledge they are offered. ITRA helping the students in taking up research projects and in doing PhD.
• Involvement of Industry partners in new research projects for the ease of developing and testing prototypes. Many international researchers in social work, gender equality were able to work with

• Many international researchers in social work, gender equality were able to work with the center this year and also with the MSW students. Our researchers are able to work with and get guidece from Dr. Sidney Strauss, Dr. Miriam Reiner, Dr. Laura Corradi, Dr. Malini, Dr. Sophia, Meltem, Dr. Athi Sivan and many more.
• Research Scholars are offered advanced level courses by Experts including Experts from Foreign Universities/ institutions.
• Interaction with Experts in the relevant research area is encouraged. Experts from National Institutions or Foreign Universities support the research activities either through personal visits or through e-mails, on-line programs or Video channels.
• Doctoral Committees of the research scholars include Professors from National Institutes/Foreign Universities either as Members or as Co-guides. Regular reviews are arranged by the Doctoral Committees,
• Collaborative research programs with well-known Universities (National & Foreign) help improve the quality a lot. Visits to famous Labs and opportunities to work in other similar labs are arranged wherever possible/required.
• Encourage exchange programs, short visits, participation in workshop/seminars etc. in/to Universities and Institutions including those in Foreign countries,
• Encourage/arrange internship programs in Industry and R&D organizations.
• “Publication in reputed peer-reviewed Journals” is made mandatory for achieving the doctorate degree from this University.

• In the center, there are sponsored projects wherein students are exposed to the real requirements of the research projects. It is not just bookish knowledge they are offered. ITRA helping the students in taking up research projects and in doing PhD.
• Involvement of Industry partners in new research projects for the ease of developing and testing prototypes.
  ❖ Central Research Lab
  ❖ University & Institutional funding for research projects & Publications
  ❖ Students Research Core Fund
  ❖ Exclusive Office & staff for proper coordination.

6.3.5 Library, ICT and physical infrastructure / instrumentation

The university had provided all infrastructures which in turn provide a conducive physical ambience for the faculty in terms of adequate library, research laboratories, ICT, computing facilities and allied services. The faculty can access on-line teaching and learning resources and other knowledge and information database/packages provided to the staff and students for quality teaching, learning and research through internet and intranet facilities. Teachers have access to internet, can download teaching materials and resources and take copies through the reprographic centre, free of cost. The university provides the basic necessities for research also in terms of lab facilities, instruments and open access library facilities which provides good atmosphere for effective teaching and research.

• Library is fully automated with Amrita University Management System (AUMS)
• The E-Learning Centre in the library provides access to the Vidya Digital Knowledge Archive.
• Classrooms, Seminar Halls and Conference Rooms are equipped with Computers and Video Projectors / LED Panels.
• Round the clock internet connectivity with 20 mbps (leased line) speed both for staff and students
• Wi-Fi connectivity to the staff members & students
• Audio Recording Studio, Visual Effects Studio
• Effluent treatments plant
• Uninterrupted power supply
• 1000 acres of land across the university’s five campuses
• Over 9 million square feet of built up area across the university’s five campuses
• Subscription to research databases (Science Direct, Scopus, Springer, jGate, JSTOR, ASCE, Access-Engineering) and plagiarism detection software (TurnItIn)
• Sophisticated software for design, simulation, modelling, computing, etc.
• The health sciences campus in Kochi has acquired many state of the art equipments and commenced new laboratory investigations and specialty clinics.
• The Library of the Amrita Vishwa Vidyapeetham -Bangalore Campus established in the year 2002
• The few details of the library holdings: Print (books, back volumes and theses)
• Volumes: 6692 /Titles: 4550. Electronic (e-books, e-journals) EBSCO, ABI/INFORM Complete (Proquest), CAPITALINE, India Business Insight Databases (IBID);, CABELL's Directory, CRISIL Research, J-Gate: Management & Social sciences, SUNY-Buffalo University e-resources, We order Harvard Cases for different courses.
- We have a fully equipped state of the art library equipped with the LibSys, a fully integrated multi user library system incorporating the latest in information technology. There is a dedicated ICTS department at the university level which provides us with ICT support in the form of a well equipped computer lab. Our building is WiFi enabled with 24X7 access to the internet. All the students have a laptop. All the classrooms have a computer for faculty use with access to the internet. Every class has laptop charging points provided next to the students’ seats. Every class has a whiteboard with sufficient number of markers, a collar mike for the faculty, a state of the art projection system.

- The institution has a management information system known as “Amrita Vidya” and all the academic details are documented in this system. The parents can access information about the performance of their ward from any part of the world.

- Quality improvement strategies
  - Library working hours - 8:00 am to 10:00 pm
  - Automated circulation
  - Automated gate register using barcode scanner
  - Library orientation
  - Display of new arrivals
  - Organizing book exhibition
  - E mail alert services for monthly new arrivals & toc
  - Internet cafe
  - Inter library loan (delnet- mou)
  - Tracing system
  - Institutional repositories
  - Library web page service
  - Feed-back strategies
  - Organising workshops/seminars
  - Online user entry system

LIBRARY SERVICES

- BARCODE - Circulation, Online renewal/ online reservation service
- OPAC service
- High speed internet service/ Internet cafe
– Vidya Digital Library service
– NPTEL & DSpace online service
– Delnet services (ILL and DDS)
– Print journals and documentation service
– Newspaper Clippings service
– Current awareness service
– On line Data base/Journal services
– New arrival service
– E mail alert service
– Reprography service/Question Paper Collections Service
– WiFi access service in Reading Halls

❖ AIMS - Kochi
– Air-conditioned Central Library & Departmental libraries
– Mini Library in Ladies Hostel
– Exclusive building for Central Library
– Online Databases for up-to-date information & knowledge
– UG, PG & Faculty/staff sections
– Timings 8.00 AM to 11.30 PM
– In-house developed Independent Department of Computer Facility
– 24 hours IT Helpdesk
– Centralised Department of Audio-Video

6.3.6 Human Resource Management

• The university has a Director of Human Resources, with separate HR offices within each campus.
• Social media is being used to attract the potential and huge base of prospective candidates, given the great success and popularity of social media like face book etc. Occasionally, a few students who were unable to continue the course and were about to discontinue, were provided part time jobs and also concession in the fees so as to motivate them to pursue their education. This has resulted in reducing the numbers of drops out. Staff members
who reside in staff quarters are also involved in the student monitoring mechanism. This has resulted in more friendliness in student-faculty relationship.

- The campus has a centralized human resource department which monitors the working atmosphere of the faculty and staff. Feed backs are taken periodically so that the appropriate work culture is maintained. The institute has a well monitored biometric identification system.
- The institution has sincere, dedicated and committed faculty and visionary management.
- The college has an adequate number of qualified and competent teachers to handle the courses.
- The faculty members have access to the computer and internet facility that are available in the departments.
- Workshops and training programmes are arranged for the faculty to enrich their knowledge in handling the computers effectively
- Encouragement and support are provided to faculty members for participating and organizing of faculty development programmes.
- Orientation is given to all teaching and non-teaching staff.
- Faculty are sponsored for attending two national/International conferences.
- A few faculty members are supported by the transportation, computer and accommodation facilities.
- Festival loan is given to non-teaching staff.
- Training pertaining to BLS course and fire and safety is given to all the staff.

The campus has a centralized human resource department which monitors the working atmosphere of the faculty and staff. Feed backs are taken periodically so that the appropriate work culture is maintained. The institute has a well monitored biometric identification system.

- Structural framework of departmental hierarchy.
- There is a Performance Measurement System (PMS) which is used to evaluate faculty performance on their teaching, research and administrative responsibilities. This PMS has been revised twice in the last two years to give more weightage to research as well as excellence in teaching. Faculty are also given points for guiding PhD scholars as well as summer internship and Business Research Projects. They are also given points for discharging their administrative responsibilities such as being members of different committees. Decisions regarding these policies are taken in concurrence with the faculty members themselves by a consensus. Nothing is imposed from the top. There are two all faculty full day sessions conducted every year in the presence of the Chairperson where faculty members collaboratively think of ways and means to bring about an improvement in the functioning of different aspects of the school.
- Several restructuring occurred to improve cohesion and efficiency:
- Technical team has been restructured. There is now a technical committee reporting to the Director regrouping all the Technical Team Leads: Haptics, Robotics for Education, Virtual Reality and Serious Games, 2nd Foundation, Maker Space, Live in Labs and Technology for Rural Development.
Field has been restructured to cover entire India (including North East). One operational manager, 3 Central Coordinators, 8 zones covered by 6 Zonal Leads (1 CC handles one zone)

- MSW has been restructured with new rules to boost faculty commitment and cover more efficiently several administrative tasks
- Following the move to Ammachi labs new building: Office Management had to deal with several issues to maintain acceptable working conditions, meeting has been organized for cohesion (pizza party), space allocation.
- Middle management has been developed in different key departments of Ammachi labs.
- Training were successfully conducted: sexual harassment, new comer orientation meetings, Key training needs have been identified.
- Mediation and conflict management is in place.
- Some new policies have been put into implementation: all staff needs to go to the field, new NDA
- HR Faculty Office: Recruitment, annual appraisal, annual health check up, pay roll management, issuance of experience certificates, relieving orders, bonafide certificates, exit clearance and compliance with statutory bodies.

- HR for Non-Teaching Staff: Headed by a General Manager. For recruitment of staff of various cadres and to deal with day to day affairs of staff-including arranging various training programmes and refreshment programmes.

### 6.3.7 Faculty and Staff recruitment

- The Strategic HR planning Process includes assessing the current HR capacity, Forecasting HR requirements, Gap analysis, and Developing HR strategies to support organizational strategies. The knowledge, skills and abilities of staff need is identified using skills inventory for each employee for the current as well as beyond the skills needed for the particular position. An employee's performance assessment form is reviewed to determine if the person is ready and willing to take on more responsibility and to look at the employee's current development plans. HR requirements are forecasted based on the ongoing and futuristic project the lab is pursuing and will be in near future. Forecasts are mainly analysed based on how many staff will be required to achieve the deliverables, what jobs will need to be filled and what skill sets will people need. The gap between the future and the current position is analysed and HR strategies for meeting the organization's needs in the future is determined.

- On the basis of the availability of faculty requirement for new programmes new faculties in the emerging areas of study were selected and appointed in the university. Based on the educational qualification, previous experience and personal interview short listed candidates are selected.

- The university gives financial help to the existing faculty in attending various training programmes and national as well as International programmes/Conferences Symposia’s/Seminars/FDPs organized in the emerging fields of their respective subjects and thus makes the faculty apt for reaching such programmes. Moreover study leave is provided for carrying out higher studies.

- The staff requirement is assessed on the basis of the students’ strength, vacancies arising due to retirement and as per the workload norms prescribed by UGC
• The qualifications for teachers of various courses are prescribed by the UGC
• Faculty and staff are recruited as per the recommendations of the selection committee/board where representative of the management is also ensured.
• Recruitment based on requirement especially for well qualified individuals with significant preference for those with already secured funded research projects.
• New recruits encouraged to provide exposure of respective areas of expertise to students to gain advantage
• Faculty student Ratio of 1:10 is maintained
• The faculty and staff are recruited based on merit. The institute has staff from different parts of India
• Assessment of knowledge and attitude and commitment as part of evaluations
• Faculty: Man-power request from concerned HODs.
• Advertisement in website, internet and social media
• CVs pooled by Medical HR and short listing by Medical Director Office
• Scheduling interview with selection committee
• Issue of offer letters and Appointment
• Non-teaching staff: Through Interview and or written test.

6.3.8 Industry Interaction / Collaboration

The Corporate Relations wing of CIR focuses on achieving the following functions:
• To build and maintain excellent rapport with the top management of various organizations and industries and forge collaborative industry-academia alliances.
• Initiating Memoranda of Understanding with major companies, research agencies and institutions to fetch funded projects and bring about improvement in infrastructure and teaching methodologies to enhance exposure of students and faculty to industry practices and developments in technology.
• Facilitating visits by senior industry leaders for interaction with faculty and students.
• Securing sponsorships from industry for technical events like conferences, seminars, symposia, workshops and student contests through strategic relationships.
• Seeking the help of companies to spare working products / prototypes for academic demonstration purposes.
• Facilitating in-plant training, industry visits, summer and final semester internship for students across all disciplines and campuses.
• Soliciting support from highly reputed companies each year for the Corporate Action Plan with respect to engineering, management, biotechnology and other disciplines.
• CIR has signed several win-win Memoranda of Understanding (MoUs) with the industry, leading to mutual collaboration of Amrita and various companies.
• The interface with the industry is maintained by the Corporate and Industrial Relations (CIR) department for all the schools in the university. But we do have a lot of industry interaction apart from the CIR. All our students do a ten week Summer Internship Project at different organizations. Our faculty members interact with industry as consultants, trainers etc. Many industry experts come to us as Colloquium speakers where they address our students, faculty and staff members as a part of the Colloquium guest lecture series. Many of our alumni from the industry visit us from time to time and give us their inputs.
Many of them also contribute in the Alumni Boot Camps that are held once every year to help our graduating batch prepare for their placements. Some of our faculty members also take feedback for their course outlines from industry experts. Experts from the industry are also valuable members of our Board of Studies and thus contribute immensely to the administration of our School.

- The School is keen to initiate new academic and industry linkages and collaborations and bound to maintain existing tie-ups. For example, School maintains strong connections with centres such as, Indriyam Biologics Pvt. Ltd, National Institute of Infectious Diseases, Tokyo, Global Good Fund/Intellectual Ventures Lab, Seattle, Agilent Technologies, Germany, Biocon, Lupin, Wipro, THSTI, CCAMP, IIT Mumbai, etc.

- The interface with the industry is maintained by the Corporate and Industrial Relations (CIR) department for all the schools in the university. All our students do a ten week Summer Internship Project at different organizations. Many industry experts come to us as Colloquium speakers where they address our students, faculty and staff members as a part of the Colloquium guest lecture series. Many of our alumni from the industry visit us from time to time and give us their inputs.

- Colloquium were organized to give the students an exposure to the actual industrial scenario

- An alumni meet was organized with the idea of giving the students a platform to discuss the challenges in the real corporate world and to provide them with some room for networking

- Alumni regularly invited to be part of some courses to give students an actual industrial perspective.

- Final year students were taken to various Pharmaceutical Companies they visited two prestigious pharmaceutical companies – manufacturing unit of Unichem laboratories and Sanofi India pvt. Ltd. Goa.

- A committee IIIPC is constituted to initiate Industry collaboration and Mou’s. Training of M.Pharm is also initiated with Orchid Pharma, Chennai. Soft skill training as well as mock interviews are conducted for final year B.Pharm, Pharm.D/Pharm.D(PB) and M.Pharm students.

- Industry experts are frequently called to take classes on specific topics in their areas of expertise. They are also invited on a regular basis to deliver our well known Colloquium series lectures. On an average, one or two such lectures are organized every week of a regular term. This helps us to build and maintain strong ties with the industry and also gives practical exposure to our students. There is a Corporate and Industrial Relations Department which supports us in placing our students both for the summer internship projects and the final placements. We started to conduct functional area specific summits where we invited senior experts from industry and academia to interact with members of the academic and industrial fraternity around Coimbatore. Two such summits were held last year in the areas of Marketing and Human Resource Management respectively.

- Clinical trials are being conducted in various specialities and efforts are being made to have interaction and collaboration with the industry at the School of Dentistry, Kochi
• Collaboration with industry for research projects and for student internships. Students doing final year project at industry (6 months and 1yr)
• Delivered Bar Bending Simulator to L&T in Kolkata and Hyderabad. Delivered Pipe cutting simulator to L&T Bengaluru.
• Industry collaborations for internship and placement opportunities for the students through CIR.

6.3.9 Admission of Students

To ensure publicity and transparency in the admission process, a separate admissions department exists, and they advertise in local & national dailies, and in our website (www.amrita.edu). In order to ensure the quality of the students seeking admission, for Integrated chemistry course, those who have secured a plus two pass with a minimum of 50% in aggregate, a pass in the entrance test conducted by the University and personal interview of a panel of expert teaching faculty was done and on the basis of all this rank list were prepared. The eligible students are admitted based on their merit.

We have improved our admission process from last few years; now our application forms can be downloaded from our website and the entire admission process related documentation has been computerized. To ensure that our admission process gets wide publicity we place advertisements in major national and regional newspapers. The admission details are also updated on the University and School website. The school has a tie up with online service providers such as Shiksha.com, MBA Universe, Google search, to promote the school online and to provide the details about the School and the admission process. Facilities are provided to students to apply online through Shiksha.com. We take students only with a good CAT/XAT/GRE/GMAT/MAT score to ensure that the quality of our students admitted to the school is good. For the MS course TOFEL test is mandatory.

- Improvement in quality of applications with more number of experienced candidates and better scores in the entrance examinations
- Process improvements in the data management, written round (analytical focus and additional rounds), oral round (to check logic and out of the box thinking)
- Realistic course expectations communicated to candidates to reduce drop outs

6.4 Welfare schemes for

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Medical facilities are easily available to the staff of each school. Suitable arrangements are made to take the students to the hospital whenever advanced medical assistance becomes necessary. Teaching: Subsidized food, accommodation and health care benefits, Staff quarters, Transportation, maternity leave, sabbatical leave.
Non-teaching: Subsidized food, accommodation and health care benefits, Staff quarters, Transportation, maternity leave, sabbatical leave, orientation program for newly joined faculty, Teaching skill enhancement programs during weekly faculty meetings, Industrial visits, cash Incentive for Publications – based on Journal Impact factor, Sabbatical leave for Thesis/book writing, Reduction of workload for faculty involved in research projects

Students: Health care benefits, Motivation and support to attend conferences, Industrial visits, Job oriented training programs, Presentation skill (seminars) enhancement programs, Support for International travel to attend conference, Group Medical Insurance

Non-teaching
• Training & Skill Development
• Motivation for acquiring higher qualification
• Multi-tasking capability enhancement initiative by providing exposure in diverse technological domains, Industrial visits

6.5 Total corpus fund generated

(Note: These are funds raised through donation that are not allowed to be used directly for the attainment of the purposes, but the interest/dividend accrued can be utilized as well as accumulated)

6.6 Whether annual financial audit has been done

Yes ✓ No

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

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6.8 Does the school declare results within 30 days?

For UG Programmes   Yes ✓ No
For PG Programmes   Yes ✓ No
6.9 What efforts are made by the school for Examination Reforms?

The IQAC constantly endeavours to collect feedback from various sources on exam policies, procedures, and student performance, and based on that various meetings are arranged (department level, UG Programs Committee, PG Programs Committee, Academic Council, etc.) to discuss and make improvements. This has led to numerous reforms including changes in the grade point system (letter grades and points), requirement for award of distinction, requirements on publishing journal & conference papers, administration and evaluation of curricular projects, weights associated with evaluation components of a subject, components of continuous assessment in a course, structure of a question paper, etc. University goes for continuous assessment and open ended

- Question papers for periodical tests are generated using a software to maintain confidentiality and whetted by a panel ensuring the standard of question paper.
- Reviewing 25% of the answer scripts and retotaling of marks in every paper rule out any possible human error in evaluation.
- Online multiple choice examinations for Amrita Value Programme and Life Skills courses were introduced.
- The school has appointed one of the faculty members as an internal Dy. Controller of Examinations to oversee the examination process which includes setting up of question papers, conducting the examinations in time and declaring the results quickly. Earlier examinations were overseen by the university examination department. Managing the examination system internally has increased its efficiency.
- The second chance examination is eliminated. Students can appear for any examination displayed in the exam schedule in every semester.
- The students who are having only one arrear in the 6th semester of UG program and 4th semester of PG program (where there are theory courses) of Arts & Sciences Schools will be given a chance to reappear for the exam of 6th semester of UG / 4th semester of PG (one paper only).
- Students having attendance above 80% are awarded grace marks on a five point scale in every semester.
- The course evaluation parameters are multiple and spread throughout the course. Examination administration is done in a confidential and efficient manner. The TAP Committee members interact regularly to ensure compliance.
- Examination seating rearranged to accommodate all students in a big hall.
- Increased number of invigilators and better examination infrastructure to avoid malpractices (single tables without racks, CCTV cameras in strategic positions)
- As per the Government order, implemented electronic money transfer of remuneration for internal and external examiners.
• All the programmes brought under the AUMS – Amrita University Management System - an in-house developed online process for marking attendance, marks, eligibility, generating hall ticket etc.

6.10 Activities and support from the Alumni Association

The Alumni Association contributes various services to the institution in general and to the students opting for higher studies and getting employment in particular.

Involvement of Alumni

• Involvement in curriculum development
• Conducted seminars for the students
• Conducting interactive sessions for students and providing opportunities for students in worldwide universities
• Support for projects/ SAE activities
• Feedback for the Alumni is being continuously received for academic development and career opportunities for students
• Contributing books to the department library.
• In the department of social work a social media group is created by the alumni members and through that they shared the field experiences and career opportunities. Using the facility, the current students shared the department level activities along the alumni members.
• Information about placement/ job openings across the country
• Recommendations for curriculum modifications based on industry requirement
• Visits from Alumni to provide guidance to graduating students
• Arranging industrial visits/ educational trips
• Invited talks are arranged
• Internships for students
• Industrial visits
• Alumni entrepreneurs motivate students and help in getting admissions
• Alumni rendered demonstration lessons

• Alumni help us in placement
• Alumni facilitates us in improving the contacts with public and stake holders
• Alumni act as our ambassadors
• Alumni are invited to address the students on various occasions including on the day of admission of a new batch. At these events the alumni share their experiences of their time in ASB, They also share their experience in the industry and guide our students for future
• ASB, Coimbatore interact regularly with our alumni. From the year 2015-16 onwards we have started an annual alumni meet. It was held in August 12-13, 2017 and in September 9-10 2017. 85 alumni members participated in these two meetings. Our alumni regularly conduct Bootcamps for our graduating batch every year where they help them prepare for the final placements. Many alumni are also invited to deliver Colloquium talks before their juniors and faculty members. They also help us in placing our students both for summer internships and final placement.
• At School of Dentistry, Kochi we have an alumni association. The alumni members take part in the activities of the college like Amritasmitam, dental camps & continuing dental education programmes.
• At AIMS, Kochi, appointed a Chief Campus Coordinator for augmenting Alumni Association activities.

6.11 Activities and support from the Parent – Teacher Association

There is constant interaction between counsellors and parents which helps to provide timely support and encouragement to students in times of need. The faculty coordinators and other faculty members are often in touch with the parents. Additionally, when there is a disciplinary problem or if there is poor performance in the examinations, the parents are contacted over the phone and counselling is held with parents. The Amrita Parent Portal at the University Web Site enables the parents to assess the progress of their ward:
• Parents can contact the faculty any time
• Interactions between the parents and the teachers regarding the support & progression of their respective wards in academic & personal aspects.
• Parents who are working in core sector support the co-curricular activities through guest lectures and advise the department on matters pertaining to curriculum and career opportunities.
• Parent-Teacher meeting after the first sessional examination.
• Parent Portal to monitor the progress of their ward
• Information to parents regarding poor performance for their information and active support and guidance.

6.12 Development programmes for support staff

• Staff Development programmes (lectures/workshops/training programmes) are conducted regularly by the HR department or by individual departments. The training includes:
  • Computer training
  • Internet
  • Audio-visual aids
  • Computer aided packages
  • New laboratory practices
  • Spirituality, yoga, and meditation
  • Fire and safety
  • Office etiquette
  • AUMS
• Additionally, non-teaching staff members have been encouraged to continue for higher education (there are instances of staff moving on to MTech, MBA & even PhD programmes) or for specialized programs like Agripreneurship; some were encouraged to attend Technical fairs to enhance industry exposure
• Development programmes, workshops, conferences, symposia etc., are conducted for knowledge update and skill enhancement
• Some of the courses offered to students are also opened out to non-teaching staff
• Live demos are conducted by the industry representatives to make staff aware about the products supplied to the laboratory.
• Faculty Development Programme: Vidyamritam (EXTRA MURAL LECTURE SERIES) by industry experts and senior professors
• Training is given in yoga and meditation to relieve the stress.
• Training in Basic Life Support, Fire and Safety.
• Medical reimbursement for investigations.
• Provision of free vaccination.

School of Engineering, Amritapuri:
• **ECE:**
  Staff encouraged to attend FDP and workshop conducted within Amrita and outside amrita.
• **EEE:**
  1. FDP for Technical Staff
  2. Lab oriented FDP for Technical staff in EEE
• **CSE**
  Staff members are encouraged to attend FDPs and workshops conducted within and outside Amrita.
• **CYBER**
  Eminent faculties & industry personnel visit our University to conduct workshops, seminars & talks as part of the faculty development programme.
• **WNA**
  The support staff of faculties are encouraged to participate in the workshops, lectures, conferences etc for their learning and development, and in paper publications.
  They are allowed to undergo online courses in their respective subject areas/specialisation areas.
• **AIMS, Kochi: Faculty**: Institutional sponsorship for national and international conferences, basic and advanced life support courses, Amrita Emergency Life Support course, Cochin Clinical Society meetings, Cochin Diabetic Club meetings etc.

  **Support staff**: Periodic training programmes in personal development, orientation classes, training in fire safety, emergency situation handling.

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

• Waste water treatment plants are there and treated water is used for watering plants.
• Switching over to solar power.
• Planting trees in the campus.
• Promotion of vegetable garden in the campus with the help of students, and faculty.
• Separate bins are kept in the campus for segregating waste
• Solid waste collection, segregation and management of solid wastes
• Actively participate in Amala Bharatam programmes
• Sewage water recycled, filtered and used to flush toilets
• Regular maintenance of the garden
• Vishuthaineettam - a campaign asking everyone to gift saplings of vegetables and trees.
• Establishment of bottle gardens
• Preparation of value-added products from waste materials
• Provision for Rain water harvesting
• Amrita Vishwa Vidyapeetham, Amritapuri Campus was presented with the Excellence award by the Honorable Chief Minister of Kerala, Shri Pinarayi Vijayan, at the World Environment Day celebrations, on June 7, 2018 for the sustainable initiatives in proper waste management, water management, energy management and the social responsibility initiatives, as well as other initiatives for environmental protection. Some of the key highlights of this year's initiatives include:
  • Efficiency treated water passed through ultra-filter and stored in overhead tanks and reused water for toilet flushing resulting in savings of 16000 m3 / annum.
  • Water tanks have been automated to prevent overflow, in-house devices developed by IoT Labs of Amrita Center for Cyber Security Systems and Networks.
  • Rainwater harvesting measures completed for over 13,000 m2 roof area resulting in 18,000 m3/year rainwater saving in 2017.
  • Water squeezers for food waste dewatering resulting in electricity conservation of up to 20%.
  • Poly House with concrete flooring for drying and storage of dry compost & ETP sludge and reuse the same for gardening throughout the year.
  • Increased capacity from 23 to 43 lakh litres of sewage storage holding tanks to avoid any possible environment discharge for special events for Chancellor Amma's birthday.
  • 58 KW of solar panels installed and the resultant solar installed capacity increased to 232 kW.
  • LED lights with solar panels all around the ETP area and replacement of tube and halogen lights with LED lamps across the campus resulting in 45000 kwh power saving.
  • Massive clean-up campaigns were organised on Independence Day, Environment Day, Gandhi Jayanti, Chancellor Amma’s Birthday celebrations, etc.
  • 2 lakh hours were dedicated for community outreach and social responsibility by the students, staff and faculty members of the campus with an annual commitment of over 6.5 crores.
  • SEED Programme in collaboration with MATHRUBHUMI.
  • Organic Farming.
  • Eco Friendly Cultivation.
• Effluent Treatment.
• Regular Waste Removal System.
• Water Purifying Plant.
• Composite Manure Plant.
• The Institution has a central waste management system which is of international quality.
• The institution also has an excellent water treatment plant.
• Every year saplings are distributed free of cost and staffs are encouraged to make the campus eco-friendly.

**Energy conservation**

• Planned power shutdows in hostels during periods of low occupancy
• Minimize use of air conditioners

**Hazardous waste management**
The only hazardous waste that we generate is, from the chemicals that are used during the regular lab experiments. These chemicals are collected in separate containers and discharged at the engineered land sites or collected for appropriate disposal by authorised agency.

**Department of Management, Kochi:**

• Reduction of paper usage by shifting to documentation in the soft format as far as possible

• We have a water filtration unit as our bore well water is potable, a waste water treatment plant, Incinerator, Sorting station for solid waste for segregating reusable and disposable materials in the AIMS campus where we are located.

**AIMS, Kochi:**

- Kerala State Pollution Control Award 2017 & 2018
- Segregation of wastes as per the guidelines
- Students : Green Friends Movement
- Green Campus
- Use of solar energy
- Kitchen : Use of solar energy and LPG only

**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.
• As per curriculum, the Scopus indexed publication for PG projects are mandatory. In view of that we have started our PG Students project well and before which eventually results good progress
• In B.Tech Program, individual Paper publication in International/National conference/Journal is mandatory for the award of distinction.
• It motivates the students in their involvement in final year project. Few students start their final year project even in their pre-final year. It improves the interaction between students and faculty.
• Various courses such as CNC programming using Edge CAM, ANSYS, CFD are offered during vacation for the benefit of the students.
• Twenty per cent of lab staffs are available till 7PM in their laboratories. It helps in improving the quality of the students’ project and completes their fabrication work within stipulated time.
• Training sessions are conducted for laboratory classes for weak students to enable them to have a clear understanding of the concepts.
• Offering a number of electives from advanced fields of engineering based on the interest of the student.
• Training sessions are also conducted in various laboratories for Technical lab staff in emerging areas for widening their knowledge and to help the students in a better way during laboratory sessions. And also test will be conducted at the end of training sessions.
• To upgrade the knowledge of technical staff, MS office software course is conducted during summer vacation
• Offering remedial courses for weak students to enable them to clear the subjects
• With the new innovative courses were introduced in the curriculum namely open labs, to undertake live-in labs projects and open study. The student is given with the liberty to chosen any subject offered by any department so that on interest the student can have choice based courses.
• Promoting project internships at the UG and PG level. Bridging classes through conducting training programmes for the students on the software packages to work is taken up. The student knowledge development and imparting to the society through live-in-labs is very successful in the department.
• Through introduction of open lab the student skill development on practical point is focussed which develops the miniature project models on the basis of subject platform.
• Two new lab infrastructures are developed namely Controls and Instrumentation laboratory and Power System laboratory. These two labs have initiated Ph.D scholars to register and research aspects to project for the future.
• ENGLISH: Field trips – Visiting a writer’s native place – interacting with the Residents in and around that place
• CSE has organized specialized technical training targeting MNC placements and more than 100+ students placed in high pay band companies including MNCs.
• Formation of thrust research groups: Formation of thrust research group in specialized research thrust areas has become a treasured and novel initiative. This a platform created to discuss ideas, technicalities and knowledge transfer on weekly basis. This platform
envisaged to pitch research project projects, collaborative research efforts among faculty, External Scientists, Research Scholars and Students.

- The Thrust Research groups are
  - Materials and Structures group
  - Transportation and Geo-technical group
  - Water Resources and Environmental group

- Initiatives of Cutting Edge Research approaches: Initiatives of cutting edge research approaches such as Soft computing, statistical modelling, Spatial information technology applications in core disciplines of civil engineering.

- E-learning initiatives - Online Assignments, MOOCS, Web and Video Tutorials, Spoken Tutorials and digital Libraries.

- Introduction of OBE to many civil engineering courses. This helped the tutors to improve/modify their teaching strategy to obtain the expected outcome

- A ‘state of art’ Flight simulator was purchased recently. It is being used for both demonstration and design of Avionics system and aircraft. The simulator is also used for imparting ‘flight test’ experience for final year students

- Centre of Excellence in Advanced Materials and Green Technologies, the research wing of the department of chemical engineering and materials science has continued to develop new research initiatives involving faculty from multi-disciplines.

- Faculty have active on-going projects with industries (e.g. V-Guard).

- Faculty have developed several international joint-research proposals under schemes such as EU-Horizon2020.

- Faculty are involved in community based research & development: Examples include the following:
  - Lemon-grass distillation using solar heating, at a tribal village in Wayanad, Kerala
  - Study of gender disparity with respect to visual impairment in Njarackal, Kerala
  - Profiling of water quality and low-cost treatment methods in rural areas

- Outcome-Based Education (OBE) practices have been adopted for all UG courses.

- To promote independent guided learning, some topics are learned through a new course structure “Project Based Learning” conducted across two semesters (1st semester 1 credit involving problem definition, background knowledge, and design, and 2nd semester 2 credits involving fabrication, experimentation, analysis and report writing).

- The faculty and students are participants in experiential learning through the program Live-in-Labs, which is offered as an open elective to students, and is targeted at rural development, through problem identification, socio-technical solution development, and implementation.

- Both UG and PG students have conducted their final year curricular projects/thesis at prestigious institutions in India and abroad (ISRO, ARCI, IGCAR, IITs, NUS, NTU, etc.).

- Communicative English classes to improve students communicative skills

- Unique way of conducting prayer session

- Updating knowledge in current affairs through bulletin board activities.

- Conducting camps in rural areas in collaboration with hospitals and village panchayat.
An interdisciplinary approach to tackle complex research problems has resulted in several faculty members with diverse expertise submitting research proposals which have been approved for funding e.g. Faculty teams at the School of Biotechnology with experience in Microbiology, Virology, Developmental Biology, Molecular Genetics had proposals approved for funding from the Bill and Melinda Gates Foundation as well as Tata Institute for Genetics and Society, University of California, San Diego.

Concept of faculty course preference is introduced in which faculty members were given freedom to select the courses they like to teach and thereby eliminate classes they are not capable to handle. The time table for the new academic year (starting from July 2017) will be prepared by considering the faculty preferences.

Decentralisation of the department with class coordinators taking care of miniature aspects of student – sending progress report home, conduct of class committee, attendance monitoring and the like.

**Formation of thrust research groups:** Formation of thrust research group in specialized research thrust areas has become a treasured and novel initiative. This a platform created to discuss ideas, technicalities and knowledge transfer on weekly basis. This platform envisaged to pitch research project projects, collaborative research efforts among faculty, External Scientists, Research Scholars and Students.

**Initiatives of Cutting Edge Research approaches**: Initiatives of cutting edge research approaches such as Soft computing, statistical modelling, Spatial information technology applications in core disciplines of civil engineering

**E-learning initiatives** - Online Assignments, MOOCS, Web and Video Tutorials, Spoken Tutorials and digital Libraries.

**Introduction of OBE** to all most all the courses in Coimbatore courses. This helped the tutors to improve/modify their teaching strategy to obtain the expected outcome

Training sessions are also conducted in various laboratories for Technical lab staff in emerging areas for widening their knowledge and to help the students in a better way during laboratory sessions. And also test will be conducted at the end of training sessions.

Offering remedial courses for weak students to enable them to clear the subjects

The students were encouraged to do more number of extension activities and improved their participation in MAM’s other initiatives like ACIP, Amrita Create & Live in Labs.

Curriculum Revision was done by constituting Board of Studies with the contribution of experts from the field.

Funded projects have been obtained by staff from NCW, ICSSR, UNICEF, Department of Social Defence(Tamil Nadu)

Certificate Course on Fund Raising through CSR projects will be conducted in association with Shanti Ashram, Coimbatore during August 2017

Visiting a writer’s native place and interacting personally by students of English and Humanities department

New innovation pedagogy from world No: 1 Institute in Technology like MIT is absorbed into the teaching method of CEN. Mainly, the concept “Inverted Lab” and “Flipped classroom” are being introduced. In “Flipped classroom” video materials and other learning aids are given in advance for the discussion in the classroom.

Frequent internal workshops on latest development in Technology by the internal faculty rather than inviting external faculty. (Internal faculty knowledge update is ensured by the methodology).
CEN is participating in conducting “Shared tasks” organized by internationally well-known Institutions in India and abroad. The preparation of the material for the shared task is done with the help of students. This gives them an International outlook and also opportunity to work with International experts.

Many new labs are created based on the funds from projects. Students are involved in developing the lab.

Generation of question papers from a pool of question through a software has ensured objectivity and confidentiality.

Informing the parents in case of continuous absence of a student for more than three days has reduced the number of ineligible students to write the final exam due to attendance shortage.

Faculty have done Collaborative research work with students and published research.

Improved Integrated Performance recognition system (IPRS) for faculty appraisal in place with higher emphasis on research and new university policies for research and publications.

Highly competent research department, Best research minds, Orientation for students towards research culture, Equipping students to meet the job demands.

Sameeksha 2018 conducted under the guidance of SPICMACAY gave an intensive training of different Indian cultural art forms.

Conducted seminars, workshops and expert lectures.

Organised NET Coaching for PG students

Conducted an orientation for research scholars

Conducted a session for Aims and Methods for Scholarship in Modern Languages and Literature for research scholars

**Department of Management, Kochi:** Introduction of a public speaking drive for students called the prep series. Here the students of both the batches face each other for different events. The drive is intended to help the students boost their confidence and overcome inhibitions.

**Department of Management, Kochi:** Online elective registration process. This was introduced to help the students and faculty view the details of enrolment and plan the sessions accordingly.

Students were sensitized to anti-tobacco activities in a more effective manner as No tobacco day was observed with activities like monoact, debates, lectures, oath taking and walkathon.

Systematic training in research methodology was given for faculty to increase research output.

Fast Track courses and for M. Tech and B. Tech students going on internship for final project

One year internship for M. Tech and PhD students both in reputed organizations in India and universities abroad

Students encouraged participating in Technical competitions 4. BTech and MTech students rewarded for publications

**EEE**

- Students from first year to final year students participate in international level and national level competitions
• Provide opportunities for M. Tech students to do internships in various industries and also different centres in Amrita University as part of their Dissertation.

CSE
• Provide Fast Track courses for students those who are going for internship and student exchange programme.
• Students are encouraged to participate in Technical competitions. Providing financial support for students to publish papers.
• Students are encouraged to be part of various technical clubs like FOSS, Code at Amrita, Bios etc which help the students to compete in international competitions like ACM ICPC, CTFs etc.

AMMACHI LABS
• Game based approach for Life-Skill learning, Aadarsh Gaon.
• Game based approach introduced computational principles to more than a hundred children across the length of India computational thinking and introduction to programming.
• AMMACHI Labs has devised an innovative training method for L&T construction institutes
• Awareness sessions are made livelier with street plays, dramas, games, puppet plays.
• Engaged the Live in lab students towards innovations in rural automation
• Human Robot Interaction research methodology
• First ever 3D modeled mould based technique structure for toilet, in toilet building.

CYBER
• Introduction of scholarship for bright students have helped in attracting bright quality students.

WNA
• Introduced Term semester system/Quarter system

WEGE
• Introducing field visits for MSW students as part of their course work.
• In-house developed and managed softwares
• Helpdesk software for complaint management
• ECHS Queue management system
• Pathology lesion indexing system to track cancer patients
• Media manager software for tagging and storing clinical photos and videos
• Developed software for sepsis patient details for research
• Software developed for anaesthesia case record
• Developed websites for neglected tropical diseases; Indian virus network; Amrita Diabetic Welfare Association.

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

• 1. Automotive emission Analyzer system purchased on 10-03-2018 Amount Jap YEN 23,30,000
2. AVL smart sampler - 10-03-2018 Amount Euro 1,41,913
University Contribution Rs.1.475 Cr
FIST Contribution Rs.1.475 Cr
Various training programmes for Government functionaries were conducted funded by UNICEF, NCW and NCPCR
Faculty Members have published 2 Papers 1 paper has been accepted
Project applied by Faculty and sanctioned by UNICEF, NCW and NCPCR

<table>
<thead>
<tr>
<th>Plan of Action</th>
<th>Action Taken Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Setting up labs for Teaching: Embedded Systems, Computer Architecture</td>
<td>1. Labs have been set up as planned for teaching.</td>
</tr>
<tr>
<td>2. Setting up research facility in Image/Video Processing, Computational</td>
<td>2. Nearly 100 students are involved in developing innovative applications in the</td>
</tr>
<tr>
<td>Thinking</td>
<td>research facilities</td>
</tr>
<tr>
<td>3. ICPC Training for First year B.Tech</td>
<td>3. ICPC training was conducted for the first year B.Tech students of CSE and 20</td>
</tr>
<tr>
<td></td>
<td>students have been selected for next levels of training to participate in ICPC</td>
</tr>
<tr>
<td></td>
<td>regional competitions 2017.</td>
</tr>
<tr>
<td>4. Specialized training for to students for participation in international</td>
<td>4. Deloitte innovation award in Smart Hackathon in 2017. Large number of students</td>
</tr>
<tr>
<td>contests and competitions</td>
<td>have participated and secured notable positions in various international/technical</td>
</tr>
<tr>
<td></td>
<td>contests and competitions like Google Summer of Code, ACM ICPC regionals, Bosch</td>
</tr>
<tr>
<td></td>
<td>Inscribe etc</td>
</tr>
</tbody>
</table>

- Promoted the faculty members towards more research publications and project proposal submissions.
- Increased the industry and foreign collaborations.
- Promoted international faculty exchange programmes to be attended by the faculty.
- Created consortium projects among the IIT’s for the project execution supported by the Government Agencies.
- Training programmes were initiated for educating the simple experiments of the lab for the school students by the non-teaching faculty members.
- Three TAG groups were formed in the department to improve the research activities of faculties and students.
- OBE is introduced to many of the civil engineering courses to improve the teaching learning process.
- Outreach to Govt. R&D institutions – this has resulted in BTech and MTech student internships and projects
- Training Students- Mock interview, Communication skill
• Conduction of Campus Interview
• Existing infrastructure and space was reorganized to create new research laboratories with specialized focus in areas of Bioinformatics, Microbial Genetics and Developmental biology
• A total of 8 Ph.D. students at different stages of the Ph.D. program have been inducted as Teaching Assistants in the B.Sc. and M.Sc. programs to assist in hands-on training of the practical as well as the final semester research projects for both B.Sc. and M.Sc. students. This strategy has been very successful with a number of projects yielding Scopus indexed publication even at the B.Sc. level.

• **School of Arts and Science, Mysuru:**

<table>
<thead>
<tr>
<th>Plan of Action</th>
<th>Achievements</th>
</tr>
</thead>
</table>
| - In view of the additional programmes introduced and the increased strength of the school, infrastructure facility need to be augmented:  
  - Purchase of chairs at the cost of upto Rs.7,00,000/-  
  - Upgradation and extension of CC TV Cameras to the tune of Rs. 3,00,000/-  
  - Free 24x7 Wi-Fi connectivity in the campus extended to both staff and student  
  - Augmentation of Computer Labs with about 36 thin client systems with an estimated budget of about Rs.5,00,000/-  
| - Following augmentation initiatives were taken up during the academic year 2017-18.  
  - 300 chairs costing Rs. 6,20,017/- were purchased.  
  - CCTV cameras were upgraded to the tune of Rs. 95,025/-  
  - 24 X 7 Wi-Fi connectivity is extended in the campus  
| - Purchase of high end desk top systems to cater to research purposes  
| - Installation of fire wall for better cyber security  
| - Up-gradation of EPBX with PRI cards for easy quick and improved connectivity  
| - Appointment of additional teaching & non-teaching staff  
| - To introduce Integrated BSc – B.Ed. programme  
| - SOPHOS hardware fire wall was purchased and put in place.  
| - 16 teaching and 4 non-teaching staff were appointed  
| - Preparation for introducing B.Sc B.Ed and B.Sc with two combinations of triple main model is made with required infrastructural augmentation – classrooms, furniture, audio-visual equipment and setting up of Physics & Chemistry labs, appointment of faculty members for Physics, Chemistry and Mathematics  
| - Completion of ladies hostel  
| - The first block of the ladies hostel with an accommodation capacity of 190 students is completed and occupied. |
Department of Management, Kochi:

<table>
<thead>
<tr>
<th>Plan</th>
<th>Action Taken</th>
</tr>
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<tbody>
<tr>
<td>To increase the number of colloquia held during the year, for better</td>
<td>More number of colloquia were scheduled during the Orientation programme (to help induct the first year students) and during the</td>
</tr>
<tr>
<td>industry exposure before the students start appearing for placement</td>
<td>first term (to prepare the second year students for placements)</td>
</tr>
<tr>
<td>interviews.</td>
<td></td>
</tr>
<tr>
<td>To introduce an online database of leave information for the faculty</td>
<td>The new online format was created during the year. The admin department updates the leave data on a real time basis and the employees can view</td>
</tr>
<tr>
<td>and staff.</td>
<td>(but not edit) the same at any point of time</td>
</tr>
<tr>
<td>To handle more number of courses internally and reduce the over</td>
<td>The number of courses handled by internal faculty were increased. Newly added faculty members were sent for workshops and FDPs to take up other</td>
</tr>
<tr>
<td>dependence on visiting faculty.</td>
<td>courses during the coming academic year.</td>
</tr>
<tr>
<td>Engage full time faculty members in all areas of specialization.</td>
<td>All streams of specialization have full time internal faculty</td>
</tr>
<tr>
<td>To introduce an internal newsletter for enhanced knowledge sharing.</td>
<td>Not achieved. Would be undertaken during the coming year.</td>
</tr>
<tr>
<td>To have a dedicated area for CIR and placement activities like mock</td>
<td>A new area was developed to suit the needs of the CIR department for their activities</td>
</tr>
<tr>
<td>interviews and GDs</td>
<td></td>
</tr>
<tr>
<td>To organize a soft skills workshop for faculty and non-teaching staff.</td>
<td>Not achieved. To be organized during the coming academic year.</td>
</tr>
<tr>
<td>To organize an environment awareness programme.</td>
<td>Organized an event called PRANA- Plant a Sapling. Saplings were planted and supplied to nearby schools. The Chief Guest for the program was Mr. C. N. Mohanan (GCDA Chairman) and the Guest of Honor was Mr. Abdul Ghani also known as the Green Man of India.</td>
</tr>
</tbody>
</table>

School of Business, Coimbatore:

- Six seminars/workshops were held during the year.
- Eight new elective courses were started in the last academic year. The course outlines of these courses were reviewed by the respective areas and then the concerned faculty members presented the course before the entire faculty body, before being approved by the PGP Committee.
School of Dentistry, Kochi:

1) NABH accreditation work preparation in progress. EDR system being developed. Infection control team set up for monitoring and evaluation of infection control practices. Measures undertaken to improve infection control in camps.

2) Staff provided intensive training in research methodology to increase research output with emphasis on publishing papers with a higher impact factor.

3) More guest lectures, Continuing Dental Education programmes, webinars and workshops. Increased participation from postgraduates in outreach programmes.

4) Students sensitized to Values-based case studies. “Values-based” lectures delivered to students and students encouraged to participate in activities benefitting the society. Public Health documentaries screened for enlightening students on various social issues. Students appraised of monthly health related information.

5) World car free day observed with vigour. No tobacco day was observed with various activities like debates, monoact, lectures, oath taking and walkathon.

6) The curriculum for Dental operating room assistant (DORA) programme was updated to incorporate the latest trends in dentistry.

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

- Social Communication Lab teaches students to imbibe techniques that can be used in Community activities.
- Book review activity was conducted every week for UG and PG Students.
- Research day is organised for every M.Tech programme with poster presentations.
- Smart kitchen garden/ALIVE.
- Open Lab for Innovative product development including the concepts of computational thinking and design thinking.
- Project based learning.
- Active involvement of good students in funded projects.
- Internships at good research institutions etc.
- Unique and collaborative approach to multi-disciplinary research by the faculty.
- Projects with techno-social focus and impact.
- Content enrichment classes.
- An extremely strong and well-qualified faculty line-up with expertise in broad areas resulting in comprehensive coverage for students in all programs. The depth of academic exposure coupled to diverse interest areas from computational Neurobiology to Advanced Cell and Developmental Biology results in all ground grooming of the student community. The results of this strategy are obvious in the superior track record of the institution in industry placements as well as student recruitment to advanced research.
laboratories like NCBS, IISc, TIFR in India and premier universities in USA and Europe.

- A focus on value based education with the impetus for students and staff alike to pursue goals that are aligned towards research and development for societal benefit result in an unique environment that is inspired by creativity and motivated towards excellence.

**School of Arts and Science, Amritapuri:**
Innovative practices are presented as examples of the University’s continuous efforts towards quality improvement in applied research, teaching, and administrative aspects.

1. **Peer Evaluation**
   
   **Title of the Practice:** Peer Evaluation in Amrita School of Arts & Sciences, Amritapuri
   
   We conduct peer evaluation of the lecture classes of all faculty members twice in a semester. The lecture of each faculty member is evaluated by two other faculty members of the department. All the members of the department are involved in the process.
   
   **Objective of the Practice:** The objective of the ‘best practice’ is to improve the quality of the lecture classes and also to point out and rectify defects, if any, so as to make the classes more effective.
   
   **The Context:** The young faculty members get good opportunity to share the experience of senior faculty members in teaching. This will help them to develop a good teaching methodology. The weakness or defects, if any, can be rectified. The overall performance of the Department can be improved. A cordial relation among the faculty members can be developed.
   
   **The Practice:** Two members of the faculty will make the evaluation of the lecture class of each faculty member. Prior information will be given to the members. Also all the members will involve in the process of evaluation. The evaluation team will submit a report of the evaluation to the Head of the Department. The Head of the Department will make detailed discussion with the concerned faculty about the report. This will enable the faculty to take necessary changes, if any, in the teaching method.
   
   **Evidence of Success:** The regular increase in the TEI score of most of the teachers is a clear evidence for the success of the practice.
   
   **Problems:** For the implementation of the ‘best practice’ no special resources are required. As all the faculties of our institution whole heartedly welcome the practice, no problem is encountered in its implementation.

- Excellent Teaching Pedagogy and curriculum practice. As a best practices faculty members are associated with students for project / conference / seminar. Students are presenting and publishing papers with faculty in conferences and journals.

- Colloquia Series: Conducting value & skill oriented workshop for students on regular basis. Excellent location Advantage: Dept. of management have a location advantage for inviting guest speaker and visiting faculty

**School of Arts and Science, Kochi:**

- Vidyamritam: Extra Mural lecture series by academic & industry experts
- Swasti- Psychological counselling by Faculty from AIMS.

**Department of Management, Kochi:**
• Written recognition to deserving students who contributed to the institution in one way or the other

**School of Business, Coimbatore:**

1. The six credit Business Research Project (BRP) module. As a part of this all the MBA students are required to pick a research topic and write an academic paper on that topic under the guidance of a faculty mentor assigned to them;
2. We have a six term core course dedicated to education for life component of our University’s mission called the Self Awareness and Personal Growth that also includes compulsory Yoga classes. Along with this we have a core course on Business Ethics and another core course on Environmental Management. We are perhaps one of the very few Business Schools with such a strong emphasis on values based education.

**School of Dentistry, Kochi:**

1) Tribal outreach Programme (Amritasmitham).
2) Knowing the Legend Programme.

**School of Engineering, Amritapuri:**

**EEE**

- Organizing International Conference Tap Energy every two years which help to interact with international and National experts.
- Lab FDP in the beginning of all semesters to get familiarised with all experiments by all faculty members and Project Demo and Poster Presentations for B.Tech and M.Tech students of EEE Dept.

**CSE**

- Offering industry based electives.
- Conducting mock interviews and providing technical sessions to equip the students for placement.
- Encouraging students to do inter disciplinary projects.
- Students get opportunity to work on projects of National Technical Research Organisation (NTRO) with stipend.
- Students are encouraged to be part of various technical clubs like FOSS, Code at Amrita, Bios etc which help the students to compete in international competitions like ACM ICPC, CTFs etc.

**AMMACHI**

1. Every employee spends in field activities 2 weeks per year.
2. Introduced discussions on every Wednesday to bring in all the folks of lab and create a new pool of ideas. 'New Trends hour', where all discuss, learn and update every week. You may come up with any topic that deserves to be shared among the team so that all can gain new perspectives and pass on knowledge. It can be an article that you read, an excellent research that you came to know, an experience that you had, or even a crazy idea that you just invented!! Anything that could potentially trigger a good thought would qualify for this.
3. Monday is dedicated for paper writing day.
CYBER
Introduction of scholarships, Giving training through contests such as Capture The Flag (CTF) ethical hacking contest.

WEGE
Every member of the center is expected to spend time in villages for 2 weeks.

AIMS, Kochi:

- Well established and streamlined teaching programme, periodic assessment, conduct of examination and declaration of results.
- 100% Hostel facility and ragging free atmosphere
- Single campus with all student centric, patient & bystander friendly facilities.

7.4 Contribution to environmental awareness / protection

- Students are encouraged to submit their assignments as soft copies.
- We are trying to reduce carbon footprints in the office
- Insist on double side printing whenever hard copy generation is required.
- Tree plantation was conducted along with Amrita SeRVE
- Playground for children planted with lawn grass to prevent soil erosion by wind and water
- Planted more than 100 trees in the campus as a part of campus greening activity
- Two check dams were built across the streams running through the campus to prevent surface water runoff and thereby helping recharge of ground water
- Environmental Day Celebration.
- Maintaining greenery in front of their house and in the neighbourhood.
- Encouraging planting saplings every year and maintaining them.
- Awareness programme for the eradication of plastic usage.
- Awareness programme for the school children to maintain cleanliness through role play.
- Organised ABC in a school of a village.

Amrita Vishwa Vidyapeetham, Amritapuri Campus was presented with the Excellence award by the Honorable Chief Minister of Kerala, Shri. Pinarayi Vijayan on World Environment Day celebration of June 7, 2018. The award included a cash award of Rs. 1 lakh, a trophy and a certificate. The award was bestowed for the sustainable initiatives in proper waste management, water management, energy management and the social responsibility initiatives, as well as other initiatives for environmental protection.

Some of the key highlights of this year's initiatives include:

- Efficiency treated water passed through ultra-filter and stored in overhead tanks and reused water for toilet flushing resulting in savings of 16000 m3 / annum.
• Water tanks have been automated to prevent overflow, in-house devices developed by IoT Labs of Amrita Center for Cyber Security Systems and Networks.

• Rainwater harvesting measures completed for over 13,000 m² roof area resulting in 18,000 m³/year rainwater saving in 2017.

• Water squeezers for food waste dewatering resulting in electricity conservation of up to 20%.

• Poly House with concrete flooring for drying and storage of dry compost & ETP sludge and reuse the same for gardening throughout the year.

• Increased capacity from 23 to 43 lakh litres of sewage storage holding tanks to avoid any possible environment discharge for special events for Chancellor Amma's birthday.

• 58 KW of solar panels installed and the resultant solar installed capacity increased to 232 kW.

• LED lights with solar panels all around the ETP area and replacement of tube and halogen lights with LED lamps across the campus resulting in 45000 kwh power saving.

• Massive clean-up campaigns were organised on Independence Day, Environment Day, Gandhi Jayanti, Chancellor Amma’s Birthday celebrations, etc.

• 2 lakh hours were dedicated for community outreach and social responsibility by the students, staff and faculty members of the campus with an annual commitment of over 6.5 crores.

• Efforts and works are dedicated to convert campus as plastic free zone and School of Ayurveda started the same citing an example and working model to other campuses of the university.

• Amritapuri campus are observing World Car-Free Day on 22nd September every year by conducting a bicycle rally and 10 km road run from Karunagappally to the campus. The highlight of the day is that no one would come to the campus by private car or bike on that day. Day scholars shall avail of public transport facilities or use bicycles to reach the campus. The objective of the campaign is to promote the use of public transportation, car sharing emission–free vehicles as an effort to address the crisis of environmental pollution. Contributing towards a ‘Greener Tomorrow’ is drawn inspiration from Amma’s words on our duties and responsibilities towards the protection and preservation of our Mother Nature.

• Students of various departments participated in SEED programme in collaboration with Mathrubhumi in campuses of Kerala

• Reduction of paper usage by shifting to documentation in the soft format as far as possible

• We have a water filtration unit as our bore well water is potable, a waste water treatment plant, Incinerator, Sorting station for solid waste for segregating reusable and disposable materials in the AIMS campus where we are located.

• Tree planting campaign. Distribution of saplings to patient and public

• Amala Bharatham (Cleanliness) campaign.
- Field visits by the students to water treatment, sewage treatment and solid waste management unit.

- Kerala State Pollution Control Award 2017 and 2018

- Students “Green Friends” Movement.

- Waste Management: Segregation according to the Hospital norms.

- Incinerators for proper waste disposal.

- Campus: Lot of trees and greenery

7.5 Whether environmental audit was conducted? ✔ □

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

School of Education, Mysore:

Strengths

- Academic flexibility.

- Improvement of ICTS facilities.

- Good rapport with the local institutions and Universities.

Weaknesses

- Inclination towards research activities to be improved.

Opportunities

- Faculty members are encouraged to publish papers in Scopus journals

- Financial support is also extended to attend the same

- Students can access internet in the library.

- Faculty members are encouraged to register for their Ph.D. work.

Challenges

- Academic year is not matching with other degree programmes.

- Placement of students

- Employment opportunities to be increased for the student teachers after the completion of the programme.

School of Biotechnology, Amritapuri:
• **Recognition of University- Industry Collaboration** -
  Amrita Vishwa Vidyapeetham and Wipro Limited, a leading global information technology, consulting and business process services company, jointly won the Aegis Graham Bell Awards (AGBA) 2017 in the Innovation in mHealth category. They were recognized for their joint initiative- ‘Redefining Primary Comfort Using mHealth’ at the eighth edition of the Aegis Graham Bell Awards.
  The School of Biotechnology, Amrita Vishwa Vidyapeetham, in collaboration with Wipro, has developed a mobile health solution using a novel glucose monitoring system integrated with a cloud-based monitoring application for providing more efficient and effective diabetes care. The initiative was supported by Biotechnology Industry Research Assistance Council (BIRAC), Government of India.

• **MoUs with**
  o ID Genomics, Seattle, USA
  o Global Good Fund/Intellectual Ventures Lab, Seattle, USA
  o TIGS,
  o C-CAMP, Bangalore, India

• **Our students got admission into various reputed Universities:**
  o University of Oxford, UK
  o Amrita BRITE internship at National Ilan University, Taiwan. Amrita BRITE (Bachelor's Research Initiative Towards Excellence) is a unique initiative of School of Biotechnology, Amrita Vishwa Vidyapeetham in which undergraduate students are exposed to research projects.
  o Integrated MSc-PhD program at TIFR, Hyderabad, India

• Student publications in high impact journals including high impact Nature publishing group’s *Scientific Reports*.

• Invitation to the Dean, Dr Bipin Nair as a keynote speaker to University of Cambridge, UK

• Selection for Bill and Melinda Gates Foundation award in collaboration with Columbia University, New York and University of Durban, South Africa.

**PHARMACY, KOCHI:**

**Strength:**

• All the departments have PHD holders.
• Well-equipped research laboratories like pilot plant, research lab, instrumentation room etc.
• Commendable number of Research publications in the last couple of years in various reputed journals.
• The Pharmacy practice department has a dedicated patient counselling center which provides unbiased, updated clinically relevant information and contributes towards reduction in medication errors.
• On call services to the oncology patients as well as patients on oral anticoagulants is highly appreciable and periodic prescription auditing to promote rational drug use.
• Hard working, research oriented faculty imparting research interest in students
• Young faculty members with full of enthusiasm
Weakness:

- Lacks intensive Industrial collaboration.

Opportunity:

- Students get opportunity to actively participate in various clinical pharmacy services
- Placement for students in industry / Pharmacy
- Availability of advanced research facility in the health science campus.
- To tap the potential of young faculty members in research
- Interdisciplinary research has good scope.
- Innovative programmes with other schools.

Threats:

- Student population is not diverse enough for employment opportunities in industry.
- Unavailability of research grants.
- Tight control by statutory bodies limiting the scope for timely revision of syllabus and curriculum.

School of Engineering, Amritapuri:

Strengths

- Highly Qualified and well trained Faculty from diverse areas of ECE committed to imparting their knowledge to students and making them competent to enter either core ECE industry or to pursue higher studies in universities of repute both in India and abroad.
- Developing a culture involving research among students
- B.Tech Students pursuing higher education
- Instilling the spirit of competitiveness among students especially in the technical front.
- Research Lab Facility for BTech and MTech Students
- Students are encouraged to be part of various technical clubs like FOSS, Code at Amrita, Bios etc which help the students to compete in international competitions like ACM ICPC, CTFs etc.
- Emphasis and focus on faculty & student -Research and publications
- Filed 18 patents and have been granted 6 patents
- Regularly updated curriculum by the International BoS
- Continuous progressive evaluation of students
- Strong industry linkages leading to internships & placement offers for our students.

Weaknesses

1. Lack of PG programs other than M.Tech in VLSI. Although we have qualified faculty in all areas, we have not been able to start a viable PG program in any other areas yet.
2. Although 100% of eligible students are being placed in companies every year, the number of students getting placed in core companies needs to be improved significantly. This has been in large part due to the fact that the pay-package given by core companies in the first year or two is usually lower than the corresponding software companies.

3. Although several projects aimed at bringing benefit to society have been taken up by faculty and demonstrated, there has been no encouragement or financial support from the government side towards these objectives.

4. Lack of adequate Government funding for research

**Opportunities**

1. Improvement in hardware-kits in labs for doing high level research

2. Although we have several on-going funded projects, we need to generate more funding which helps towards generating more PhD students and gives more opportunities for faculty to be involved in research.

3. Encouraging more students to pursue higher education and research aimed at innovating technologies for societal benefits.

4. Conducting more national level Faculty Development Programs/Conferences

**Strengths**

1. Highly Qualified and well trained Faculty from diverse areas of ECE committed to imparting their knowledge to students and making them competent to enter either core ECE industry or to pursue higher studies in universities of repute both in India and abroad.

2. Developing a culture involving research among students

3. B.Tech Students pursuing higher education

5. Instilling the spirit of competitiveness among students especially in the technical front.

6. Research Lab Facility for BTech and MTech Students

7. Students are encouraged to be part of various technical clubs like FOSS, Code at Amrita, Bios etc which help the students to compete in international competitions like ACM ICPC, CTFs etc.

8. Emphasis and focus on faculty & student -Research and publications

9. Filed 18 patents and have been granted 6 patents

10. Regularly updated curriculum by the International BoS

11. Continuous progressive evaluation of students

12. Strong industry linkages leading to internships & placement offers for our students.

**Weaknesses**

- Lack of PG programs other than M.Tech in VLSI. Although we have qualified faculty in all areas, we have not been able to start a viable PG program in any other areas yet.

- Although 100% of eligible students are being placed in companies every year, the number of students getting placed in core companies needs to be improved significantly. This has been in large part due to the fact that the pay-package given by core companies in the first year or two is usually lower than the corresponding software companies.

- Although several projects aimed at bringing benefit to society have been taken up by faculty and demonstrated, there has been no encouragement or financial support from the government side towards these objectives.

- Lack of adequate Government funding for research

**Opportunities**

- Improvement in hardware-kits in labs for doing high level research
• Although we have several on-going funded projects, we need to generate more funding which helps towards generating more PhD students and gives more opportunities for faculty to be involved in research.
• Encouraging more students to pursue higher education and research aimed at innovating technologies for societal benefits.
• Conducting more national level Faculty Development Programs/Conferences

**AIMS, Kochi:**

- Clear vision & mission to provide health care of the highest quality to all and promotion of value based quality education and research.
- Contribution of the highly qualified and experienced faculty.
- Time bound planning of admission, teaching and training schedule, timely conduct of examinations, declaration of results and issue of degree certificates.
- In the healthcare sector, state of the art equipments for investigations, diagnosis & treatment and the expertise
- Comprehensive Health care single campus - comprising School of Medicine, School of Dentistry, School of Pharmacy, College of Nursing, School of Management and all other allied student centric facilities.

**Weakness**

- Increasing demand for vehicle parking space for the faculty, staff, PG Residents and stakeholders.

**Opportunities**

- Area developmental activities: Kochi Metro Rail Project; up-gradation of nearest Railway station; proposed railway under passage connecting the city.
- Global reputation, highly sophisticated and state of the art equipments, MOUs with various international universities, international elective trainees, international faculty cooperation in new techniques in surgical procedures.

**Threats**

- Emergence of many ‘High-Tec’ Government & Private hospitals & Clinics in the State, especially in the city of Kochi pose a challenge to patient numbers.
- Retaining our highly trained faculty and staff, especially technical staff in paramedical areas.

**8. Plans of school for next year**

There are general plans related to curricular enhancements, new programs, program renewal, increase in intake, faculty and staff development (integrated performance appraisal and compensation), research and consultancy (research output linked with incentive and reward schemes, performance appraisal, specific research targets, new centres & labs, seed grants, etc.), facilities and infrastructure enhancements, etc.
Besides regular proposed department activities, we organize to give separate training to lateral entry PG programme students as bridge courses.

Introducing mini project to UG students from science courses.

Augmentation of infrastructure

Planning to conduct a Invited talks by eminent professors and conduct seminars and effective workshops for students

Joint academic programmes with industries of relevance and institutions of importance at national and international levels

Super-Integrated Ph.D. Programmes tailored to address the needs of the industry with Technical and financial participation (entry after +2 level)

Setup a centre of excellence in niche areas.

More joint proposal

NBA accreditation for B. Tech and lab approval.

M. Tech program under Aerospace department to be presented for approval.

A recent DST-FIST grant was used to purchase a Field-Emission Scanning Electron Microscope (FE-SEM) – this will be leveraged for boosting our research in frontier areas of materials science and chemical engineering.

More international and national research proposals will be submitted, in highly interdisciplinary areas (in three major focus areas: water, waste, energy).

Better Class-room infrastructure.

Implementation of revised curriculum for next year.

Planned to initiate activities through placement cell.

More number of faculty members to register for Ph.D

Number of Scopus Indexed publications to be improved

Research in area of Active Genetics with the focus on tackling the problem of multi-drug resistance (MDR) in collaboration with TIGS UCSD, USE and University of Washington, USA.

Advancing capabilities in Analytical Chemistry with increased focus in providing advanced training in academic programs with extensive coverage of Proteomics & Metabolomics.

Extensive use of surrogate animal models for application oriented research using the Drosophila and C-elegans.

Focus on training for enhanced employability with specialized skills and in-depth knowledge of niche areas including Systems Biology and Computational Neuroscience.
Increased focus on problem solving with mini projects at earlier stages of B.Sc. and M.Sc. programs.

Animal house in School of Ayurveda

Increasing the plants in the herbal garden.

Inviting external experts to conduct NET coaching classes to our students.

To conduct an International Conference on ‘Ecology and Cultural Consciousness’

To extend Ph.D programme to full time candidates

To work constantly towards up-gradation of research quality through journal publications with higher impact factor

To focus more attention on submission of proposals for funded projects

To explore possibilities of tie up with industries for providing students with technical know-how in emerging areas

To start a new department of Pure Sciences with the introduction of B.Sc and B Sc B Ed programmes

To convert the School of Education into a Department under the School of Arts & Sciences at Mysore Campus

To add another computer lab with a capacity of 36 systems

To conduct National and International level conferences in the emerging and interdisciplinary areas in collaboration with relevant professional bodies

To plan more frequent institutional social responsibility related activities which will motivate, inspire and sensitise students towards societal concerns

To plan activities that will help students realise the need for practical applications of theoretical awareness about environmental concerns

To encourage students to register for online courses enriching them with learning beyond curriculum –MOOCs like SWAYAM, NPTEL, Courseera etc.

We need more full –time faculty for core subjects

Develop further the Analytical lab initiated jointly by students and faculty

Online trading workshop

Lecture series for BBA Logistics Management

Proposal submitted to the ICSSR partial funding on –“Four Days Training course on Research Methodology”

Sasthramritam (National Science Day Celebration)
 Change the format of Asthra- the department’s flagship event (DoM, Kochi)
 Include a viva component for elective courses
 Increase consultancy assignments
 Enhance the quality of placement training and increase the average offered salary
 Speed up the setting up of Good Manufacturing Practice (GMP) facility
 Complete and initiate plans for Good Laboratory Practice (GLP) animal facility
 Initiate the construction of new building construction for Centre for Nanosciences and Molecular Medicine
 Initiate plans and construction for CRTDH research hub for Nano electronic products
 Initiate and evaluate product oriented course for M.Tech in Nanotech and Renewable Energy
 To increase the PhD faculty to 75-80%.
 Recruit faculty in areas like molecular pharmacology, Pharmaceutical regulatory affairs etc.
 Interfacing with industry for student training as per current requirement
 Initiate more funded projects in areas of patient outcome improvement
 Initiate collaborative programmes with schools of business(Pharmaceutical Management), nursing(Certificate courses for Nurses), Ayurveda (Ayurveda Pharmacy), law(Pharmaceutical Regulatory Affairs) etc.
 Establish research Collaborations with Pharma industry as well as reputed universities abroad.
 We want to include more and more online learning resources into our different course curricula.
 To excel in undergraduate and postgraduate training and be identified as Institution of Excellence
 To explore avenues for international student/Staff exchange programme
 Conduct more quality programmes for staff and students so as to encourage creativity and critical thinking.
 To further improve the quality of oral health care delivered and make it more cost effective.
 To get more funded research projects and collaborate with other premier institutes at national and international level. Explore avenues for funding the annual tribal outreach programme.
• A magazine in the name of dental school to be published.
• Proposal to start research laboratory for plug-in e-vehicles with Smart Park facility:
• E-Content for Vocational and Life Skills Education:
• Courses considered priority for NSDC and MSDE
• Developing content for Nation building in the following sectors (Solar installations, Construction, Telecommunication, Transportation, Primary health care)
• Redesigning primary education through immersive vocational environments (Phase 1)
• Research in Policy and Practice:
• Skills Development and the Changing World of Work
• Exploring the concepts behind vocationalization of primary education and immersive learning environments
• Peer teaching for learning to foster empathy and compassion
• Research, Development and Manufacturing of UAV’s (Unmanned aerial vehicles) and UGV’s (Unmanned ground vehicles) (Phase 1):
• Certification and training in piloting and programming these machines
• Augmented Humans (Phase 1): For the purpose of skill development and human potential:
  • Exoskeletons
  • Underactuated devices
• Conducting field studies on teaching skills using technologies to inform design for low skilled workers
• Peer teaching in ICT enhanced classroom settings
• Immersive haptic simulators solutions for the industry and informal sector for skill training
• Research and development integrating findings from Neuroscience and Physical skill training (Phase 1)
• Serious Games: Design and use of technologies including VR and AR in the following areas
• Disaster Risk Awareness and Response training (in collaboration with CWEGE
• Rural Technologies: Conducting participatory design and development of technology solutions for common challenges faced in rural areas using:
  • Robotics
• Automation
• AI

21st Century Skills Workshop Curriculum (Phase 1): Design high impact, short term, multi disciplinary, integrated interventions combining high technology along with social and emotional learning (SEL) and values for middle and high schools students. R&D will integrate social problem solving, empathy and altruism, introspection, and value based life skills through:

• Maker skills
• Computational thinking and programming
• Robotics
• Makerspace

Innovation Spaces: Creating and designing static and mobile spaces for design, creativity and innovation

Skill Development Deployment Centers (in collaboration with CWEGE):

101 villages in 26 states in India (deployment of all technologies developed)

Skill Development Centers for Syrian Refugee women in: Egypt & Lebanon

Implementation of technologies developed in collaboration South Africa in community colleges

Setting up DDUGKY centers in the NE and Jharkhand

Expand from 27 to 75 villages including 12 in NE

Start Computer center in all villages

Govt. Liaisoning & Tie ups [income generation/market linkages-gainful employment with industries/self-business

Defining Process/Practices & Facilitating Implementation

National Development Workshop

Conduct of MCI Assessment for Second Re-recognition for MBBS Degree.

Getting re-recognition for M.Ch. in Plastic Surgery & recognition for increased seats in DM Endocrinology programmes.

Postgraduate Programmes – increase in annual intake – Paediatrics, Psychiatry, Community Medicine, Emergency Medicine, Orthopaedics, Gastroenterology, Neurology, CVTS, Neurosurgery & Plastic Surgery.

Achieve at least one publication per faculty per year.

Encouragement and more motivation for student research
Completing of the ongoing construction activities to meet the space requirement for developmental activities.

Name: Prof. Prashant R Nair

Signature of the Chairperson, IQAC