

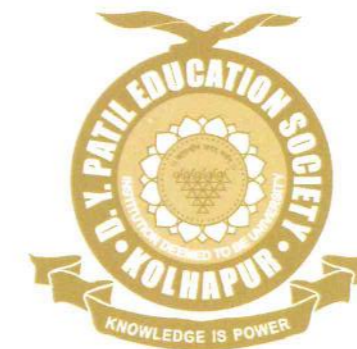
**D. Y. PATIL EDUCATION SOCIETY  
DEEMED TO BE UNIVERSITY, KOLHAPUR**

Reaccredited by NAAC with 'A' Grade

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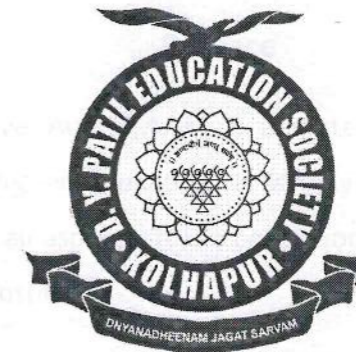
**D. Y. PATIL EDUCATION SOCIETY, KOLHAPUR  
(INSTITUTION DEEMED TO BE UNIVERSITY)**

Declared u/s 3 of UGC Act, 1956

869, E, Kasba Bavada, Kolhapur-416006

**ACADEMIC & ADMINISTRATIVE AUDIT (AAA)**

29 August, 2020



**D. Y. PATIL EDUCATION SOCIETY, KOLHAPUR**  
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**D. Y. Patil Education Society – Deemed University, Kolhapur**  
Academic and Administrative Audit

**Preface**

Academic and Administrative Audit (AAA) is a system to control and maintain high standards in the field of Higher Education. It is playing vital role in providing quality education to the learners in all aspects. It is a continuous process of self-introspection for the better growth of any institution.

**About Academic and Administrative Audit (AAA):**

Academic and Administrative Audit (AAA), are very essential for the excellence in Higher Education. These are interrelated concepts. Thus in order to have a quality oriented academic, there should be a strong administrative background.

**Academic Audit:-** Academic audit can be understood as a scientific and systematic method of reviewing the quality of academic process in the institution. It is related with the quality assurance and enhancing the quality of academic activities in HEIs.

**Administrative Audit:-** It can be defined as a process of evaluating the efficiency and effectiveness of the administrative procedure. It includes assessment of policies, strategies & functions of the various administrative departments, control of the overall administrative system etc.

**A Brief History of AAA:**

Academic and Administrative Audit is a standard strategy for quality enhancement of Institutes of Higher education. Respective state governments have introduced external quality audits in various countries as part of reforms in higher education. According to Shah and Nair, “in countries such as United Kingdom, various European countries, and in New Zealand, external quality audits have been in place since 1990s. In countries such as India, South Africa, Australia, some Middle Eastern countries, Hong Kong, Malaysia they have been in place since early 2000s”.

### **Aim and Objectives of AAA:**

**Aim:** To assess, improve and maintain high standards in various aspects in the field of Higher Education of D. Y. Patil Education Society (Institution Deemed to be University), Kolhapur.

### **Objectives:**

1. To ratify, upgrade and maintain academic standards.
2. To offer recommendations and ideas to improve quality of students' learning.
3. To strengthen the processes in quality enhancement.
4. To promote for greater integration between academic planning, research assessment and quality assurance.
5. To use expertise, knowledge, experiences of professional peers to plan future directions.

### **Necessity of AAA:**

The Academic and Administrative Audit is needed for following:

- 1) To confirm that the arrangements for quality assurance are fit for purpose and conform to the institution's role and mission.
- 2) To provide assurance that the standards of higher education (at degree level and above) align with expectations.
- 3) To ensure that students have access to appropriate learning opportunities through taught provision, private study and supported learning.
- 4) To promote and enhance high quality teaching and learning.
- 5) To confirm that students are fully supported in their academic and personal development.
- 6) To advance the highest possible levels of student achievement.
- 7) To encourage strategic developments that enriches the curriculum and enhances students' opportunities for employment and career development.

## Introduction

D. Y. Patil Education Society (Institution Deemed to be University), Kolhapur has been accredited in November 2017, achieving (Grade A) with a CGPA of 3.20 on a four point scale. As a part of AQAR, it was needed to go for Academic & Administrative Audit.

The University has constituted criterion-wise committees to prepare the data. The Chairpersons of these committees are as under:-

| Sr. No. | NAAC Criteria                         | Chairperson          |
|---------|---------------------------------------|----------------------|
| 1       | Curricular Aspects                    | Dr. Vaishali Gaikwad |
| 2       | Teaching-Learning & Evaluation        | Dr. Vasudha Nikam    |
| 3       | Research, Innovations & Extension     | Dr. C. D. Lokhande   |
| 4       | Infrastructure & Learning Resources   | Dr. Rajesh Khyalappa |
| 5       | Student Support & Progression         | Dr. Mrs. A. D. Patil |
| 6       | Governance, Leadership & Management   | Dr. V. V. Bhosale    |
| 7       | Institutional Values & Best Practices | Dr. Roma Chougule    |

The Pro-Vice-Chancellor in the capacity of co-ordinator of IQAC, conducted meetings frequently to collect and compile the data to be placed before the AAA Committee.

In order to audit the Academic and Administration activities of the University, the following Academic & Administrative Audit Committee was constituted by Hon'ble Vice-Chancellor.

### Chairperson

Dr. Shashank D. Dalvi, Vice-Chancellor, MGM Institute of Health Sciences – Deemed University, Navi Mumbai

### Members

1. **Dr. K. Venkatramani**, Former Registrar, Mumbai University, Mumbai
2. **Dr. Sudha Raddi**, Principal, Institute of Nursing Science, KLE Academy of Higher Education and Research, Belgavi
3. **Dr. Bhagwan M. Hirdekar**, Former Controller of Examinations, Shivaji University, Kolhapur and Former Registrar, Sanjay Ghodawat University, Kolhapur

Due to COVID-19 pandemic situation the Committee could not meet the University however it was decided to conduct Academic & Administrative Audit in Online Mode on August 29, 2020 using Zoom Platform. The Committee perused the documents submitted to them and also visited the University website and considered the presentations given by the Vice-Chancellor, Pro-Vice-Chancellor-IQAC Co-ordinator and further interacted.

**Report of the  
Academic and Administrative Audit (AAA)  
Committee.**

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### Acknowledgement

The members of the AAA Committee record their appreciation and gratitude to Hon'ble Dr. Sanjay D. Patil, Chancellor of D. Y. Patil Education Society – Deemed University for posing confidence in the Committee and entrusting the team with the responsibility of carrying out the Academic and Administrative Audit of the University.

The Committee wishes to thank Hon'ble Dr. Rakesh K Mudgal, Vice-Chancellor for his commitment and support and the Pro-Vice-Chancellor & IQAC Coordinator Hon'ble Dr. Shimpa Sharma for her zeal in facilitating the audit process. The Dean – Medical College Dr. Rakesh K Sharma, all the NAAC Criteria Coordinators and the Registrar Dr. Vishwanath V. Bhosale have extended all the required help for smooth conduct of the audit. The Committee thanks them as well as other members of the IQAC, officials of the University, faculty, staff who worked as a dedicated team and enabled the audit process by providing the needed information.



For and on behalf of the AAA Committee

Dr. Shashank D. Dalvi  
Chairperson of AAA Peer Committee  
&  
Vice-Chancellor  
MGM Institute of Health Sciences  
(Deemed to be University) MGM Medical College  
Navi Mumbai

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## 1. Executive Summary

1. The Government of India, Ministry of Human Resource Development, on the advice of the University Grants Commission, has declared D. Y. Patil Education Society consisting of D. Y. Patil Medical College, Kolhapur as Deemed to be University under section 3 of UGC Act 1956. Thus, the D. Y. Patil Education Society - Deemed University was established in 2005.
2. The D. Y. Patil Education Society - Deemed University owes its origin to D. Y. Patil Medical College that forayed into professional education in the year 1989 to impart high quality education in modern medicine. Over the years the university has made steady progress in terms of academic program offerings. Today, the University has D. Y. Patil Medical College, Dr. D. Y. Patil Medical College Hospital and Research Institute, D. Y. Patil College of Nursing, Centre for Interdisciplinary Research, College of Physiotherapy, School of Hospitality Studies as its constituent units. The University conducts 5 undergraduate, 22 postgraduate and Ph.D. programs under four faculty viz 1) Faculty of Medicine 2) Faculty of Allied Health Sciences 3) Faculty of Interdisciplinary Studies, and 4) Faculty of Hospitality Studies. The current student strength is 1632 and academic activities of the University are supported by 180 teaching and 405 non-teaching staff.
3. The faculty and staff have active participation with a deep sense of commitment in realizing the vision and mission of the University.
4. There is commendable adoption and extensive usage and integration of ICT in the academic and administrative functions in the University with effective implementation of LMS.
5. There is visible progress in the research activities in the university, with enhanced focus on interdisciplinary areas. During the last two years eight new externally funded projects have been granted to the university both by national as well as international funding agencies having total outlay of Rs.3.58 Crores. Additionally, the University has provided funding to the tune of Rs.1.24 Crores to augment the research activities thus supporting 21 projects. During the period under AA audit the university has entered into 14 MoUs with National and International institutions. The faculty members have published 205 research articles in journals indexed in Scopus/WoS/PubMed/UGC Care List with impact factors ranging from 0.5 to 11.45. The University also publishes its own journal '*Medical Journal of D. Y. Patil University*'.
6. 07 Patents filed by the University have been published during the period under the audit.

7. The University has been re-accredited with 'A' Grade (CGPA of 3.20) by NAAC in 2017. The University has been ranked 97<sup>th</sup> in NIRF 2018 and in 101-150 band in 2019 and 2020 rankings.
8. The Medical College Hospital is ISO 9001:2015 certified and the first self-financed medical college to install Molecular Biology Laboratory and be accredited by NABL to carry out RT-PCR testing in this COVID-19 pandemic.
9. Use of experiential learning for undergraduate students through multiple, structured community exposures is commendable including participation in Flood Relief activities.
10. The online feedback system to strengthen and monitor the University Moral Guidance Scheme is innovative and admirable.

#### Assessment Score Sheet

Based on the information submitted to the AAA Committee, presentations, review of the SSR and other documents, interaction and clarifications given by the university, based on our observations and understanding, the AAA Committee has computed following criteria-wise assessment score.

| Criteria                              | Weightage   | Criterion-wise Weighted Grade Point | Criterion-wise Grade Point Average |
|---------------------------------------|-------------|-------------------------------------|------------------------------------|
| Curricular Aspects                    | 150         | 460                                 | 3.07                               |
| Teaching-learning & Evaluation        | 200         | 680                                 | 3.40                               |
| Research, Innovations & Extension     | 250         | 850                                 | 3.40                               |
| Infrastructure & Learning Resources   | 100         | 370                                 | 3.70                               |
| Student Support & Progression         | 100         | 320                                 | 3.20                               |
| Governance, Leadership & Management   | 100         | 350                                 | 3.50                               |
| Institutional Values & Best Practices | 100         | 320                                 | 3.20                               |
| <b>Total</b>                          | <b>1000</b> | <b>3350</b>                         | <b>CGPA = 3.35</b>                 |

#### 1. Introduction

In recent years there has been an increased awareness and focus of institutions in 'Indian Higher Education Sector' on establishing high standards and benchmarks by adopting systems and practices for enhancing their performance and contribution in line with the institution's vision and mission. Colleges and universities are increasingly volunteering to subject their operations and performances for assessments and audits by national and international agencies.

Keeping pace with the 'quality movement' worldwide, India has created some of the very fine and credible quality assessment and accreditation institutions for different sectors. Such as NAAC in the educational sector, NABH in healthcare practices, NBA and NABL in laboratory practices. Over the years, these national bodies through their expertise and participatory approach to learning have been able to sensitize large number of progressive institutions to participate, learn and grow. The NAAC has advocated for establishment of an Internal Quality Assurance Cell (IQAC) thus putting in place an internal quality assurance mechanism in an institution, which is an indispensable requirement in any quality assurance scheme.

Audit, which is a scientific and systematic technique, plays a very critical role in reviewing the efficiency and effectiveness of policies, plans, programs, procedures and processes of an organization besides its performance and people. Auditing forms an essential part of various methods for reviewing the quality of academic and administrative processes in an HEI not only for quality assurance but also for overall improvement of the quality. The mid-term quality appraisal in form of the AAA is an integral part of the scheme.

#### Academic and Administrative Audit Committee

The Academic and Administrative Audit Committee constituted by the Vice-Chancellor of D. Y. Patil Education Society - Deemed University as a prelude to the preparations to get the University reassessed and re-accredited by NAAC by 2022-23. The University completed the second cycle of institutional accreditation by NAAC and received the certificate of accreditation in November 2017, securing 'Grade A' with a Cumulative Grade Point Average of 3.2 on a 4.0-point scale. The present AAA Committee Report is the first mid-term audit and appraisal submitted to the university.

The main task of the Committee was to enable the university to assure itself and its stakeholders that its policies, systems and processes for the development, maintenance and enhancement of quality in all its educational offerings are functioning effectively.

In order to audit the Academic and Administration activities of the University, the following Academic & Administrative Audit Committee was constituted.

**Chairperson**

Dr. Shashank D. Dalvi, Vice-Chancellor, MGM Institute of Health Sciences – Deemed University, Navi Mumbai

**Members**

4. Dr. K. Venkatramani, Former Registrar, Mumbai University, Mumbai
5. Dr. Sudha Raddi, Principal, Institute of Nursing Science, KLE Academy of Higher Education and Research, Belgavi
6. Dr. Bhagwan M. Hirdekar, Former Controller of Examinations, Shivaji University, Kolhapur and Former Registrar, Sanjay Ghodawat University, Kolhapur

**2. Terms of Reference for the AAA Committee**

The University invited the AAA Committee to conduct a comprehensive review of the facilities and workings of the University after its assessment and accreditation by NAAC in 2017 as a Mid-term quality assessment initiative with particular reference to changes in academic and administrative mechanisms the University has introduced during the post-accreditation period (July 2018- June 2020).

Due to COVID- 19 Pandemic and associated travel and other restrictions in Maharashtra, onsite audit was not feasible, hence the AAA Committee was provided with the soft copy of all the documents well in advance and an online audit was conducted on August 29, 2020 using Zoom platform. The terms of reference for the AAA Committee that has been defined below after preparing the self-study report (SSR) from the university as per the NAAC.

1. The Academic and Administrative Audit is expected to provide an objective insight to the university on the level of holistic quality improvements that have been implemented during the post accreditation period on all aspects of the seven criteria of assessment adopted by NAAC.
2. The audit process will involve detailed presentation by the Vice-Chancellor and IQAC Coordinator and review of documents pertaining to the information included in the Self Study Report.
3. After the presentation and review of submitted documents, each committee member shall give their observations and seek clarifications wherever required.

4. The members may request for any additional documents/clarifications that may be required for successfully completing the audit process. The audit process will also include the assessment of the action taken report provided by the university on the recommendations made by the Peer Team that conducted the previous cycle of NAAC assessment and accreditation.
5. The AAA Committee shall prepare its final report based on the documents submitted to its members, their observations, interactions/ discussions and presentations and clarifications provided by the university. The report will cover, as far as possible, all the seven criteria adopted by the NAAC on Institutional Accreditation. The report will also include an analysis of the University on its strength, weakness, challenges and opportunities. It shall also contain suggestions and recommendations if any, that the Committee may feel relevant in enhancing the quality of education provided by the University.
6. The AAA Committee shall submit the report to the Vice-Chancellor on a mutually agreed date.

**3. Preamble**

The Academic and Administrative Audit focuses on the process by which an institution monitors its own academic standards and acts to assure and enhance the quality of its teaching and support for student learning. Therefore, this Audit is based on the concept that periodic internal assessment which can effectively provide quality assurance to all the deserving learners and will eventually lead to a high level of knowledge and skills in the respective area(s) of specialization. Keeping in view this consideration, the University Grants Commission in its letter F. 7-4/99 (CPP-11) dated 06-01-2001 has made it mandatory that the Universities in the country will have to constitute an Academic and Administrative Audit Committee to undertake quality assurance for the purpose of making decisions pertaining to the quality improvement systems in the University.

Based on the information provided by the University and the presentations given by the Vice-Chancellor and Pro-Vice-Chancellor (IQAC Co-ordinator), we appreciate the various efforts taken by the University. In a nutshell, the Criterion-wise information is as follows:

## 2. Curricular Aspects

It is observed that curriculum implemented by the University, in all programs offered, are processed through the requisite and expert **Board of Studies and Academic Council**.

It is noteworthy that the involvement of senior experienced faculty as well as external experts from relevant domains ensures that local, regional, national and global **health care needs** are catered to in appropriate and judicious proportions and depth. The contributions of **academicians, industry experts and alumni** in the process of curriculum design and development provides inputs from all domains of the field to enhance the curriculum. **Regular revisions** of the curriculum ensure that the content, teaching-learning approaches and methods as well as the assessment are updated to meet changing needs. Wherever required, the CO are updated to match the needs.

We noted that the **Vision & Mission of the University** and the outcome as depicted in the **Graduate Attributes** provide the guiding principles in this effort. The Program outcomes and course outcomes thus incorporate the necessary competencies and knowledge content that are essential to achieve the comprehensive and wide-ranging goals of the individual programs.

The Program outcomes **specified by regulatory bodies** like the Medical Council of India and Indian Nursing Council have been adopted and **enhanced through deliberation** and in response to needs of changing times. Thus, inclusion of communication skills and medical ethics in program outcomes have been incorporated within course outcomes. This translated to specified number of hours of training in medical ethics and communication skills in the syllabus and time-table since 2017.

**PO & CO preparation** involved the expertise of the **IQAC and the Medical Education Unit** of the Medical College. Training of faculty to prepare the POs & CO was jointly conducted by the two bodies to optimize the time and effort devoted by them.

The AAA Committee observed that the inclusion in the curriculum of **community training, rural training** in the RCOMET program and **mandatory Community Projects** for undergraduates in medical and nursing colleges as well as participation in rural health camps, **Government programs** like Unnat Bharat Abhiyaan, Swachh Bharat Abhiyaan, Digital India Mission, Polio Immunization Program, Sarva Shiksha Abhiyaan, National Poshan Abhiyaan,

MMR Vaccination Campaign, Save the Girl Child, Betibachaobeti padhao, etc provide the platforms to achieve the Course Outcomes for fulfillment of the corresponding Program outcome.

University offers **45 programs**. In the last 2 years, total of 39 revisions have been made in 18 subjects/programs as follows:

| No. | Programme Code | Name of the Department | Year of Introduction | Date of revision |
|-----|----------------|------------------------|----------------------|------------------|
| 1   | MBBS           | Anatomy                | 1989                 | 22-11-2018       |
| 2   |                | Physiology             | 1990                 | 22-11-2018       |
| 3   |                | Biochemistry           | 1990                 | 22-11-2018       |
| 4   |                | Pharmacology           | 1990                 | 22-11-2018       |
| 5   |                | Pathology              | 1990                 | 22-11-2018       |
| 6   |                | Microbiology           | 1990                 | 22-11-2018       |
| 7   |                | FMT                    | 1990                 | 22-11-2018       |
| 8   |                | PSM                    | 1989                 | 22-11-2018       |
| 9   | Nursing (09)   | B.Sc.                  | 2006                 | 19-07-2019       |
| 10  |                |                        | 2006                 | 22-11-2018       |
| 11  | Nursing (10)   | PBBSc                  | 2009                 | 22-11-2018       |
| 12  | Nursing (11)   | MSc                    | 2009                 | 19-07-2019       |
| 13  | MSc            | Medical Physics        | 2009                 | 19-07-2019       |
| 14  | MBBS           | Anaesthesia            | 1990                 | 29-11-2019       |
| 15  | MBBS           | Anatomy                | 1990                 | 02-03-2020       |
| 16  | MBBS           | Biochemistry           | 1990                 | 02-03-2020       |
| 17  | MBBS           | Community Medicine     | 1990                 | 19-7-2019        |
| 18  | MBBS           | Community Medicine     | 1990                 | 29-01-2020       |
| 19  | MBBS           | ENT                    | 1990                 | August 2017      |
| 20  | MBBS           | FMT                    | 1990                 | 22.01.2019       |
| 21  | MBBS           | General Medicine       | 1990                 | March 2018       |
| 22  | MBBS           | Hospitality            | 2019                 | 29-Nov-19        |
| 23  | MBBS           | Hospitality            | 2019                 | 29-Nov-19        |
| 24  | MSc            | Medical Physics        | 2009                 | 19-Jul-19        |
| 25  | MBBS           | Microbiology           | 1990                 | 22-Jan-19        |
| 26  | MBBS           | Microbiology           | 1990                 | 22-Jan-19        |
| 27  | MBBS           | Microbiology           | 1990                 | 22-Jan-19        |
| 28  | Nursing (09)   | B.Sc.                  | 2006                 | 22-Nov-18        |
| 29  | Nursing (09)   | B.Sc.                  | 2006                 | 01-Jun-19        |
| 30  | Nursing (10)   | P.B.B.Sc.              | 2011                 | 01-Jun-19        |
| 31  | Nursing (09)   | Nursing                | 2006                 | 19-Jun-19        |
| 32  | Nursing (09)   | Nursing                | 2006                 | 19-Jun-19        |
| 33  | Nursing (10)   | Nursing                | 2011                 | 19-Jun-19        |
| 34  | MBBS           | Ophthalmology          | 1990                 | 19-Nov-19        |
| 35  | MBBS           | Pathology              | 1990                 | 22-Jan-19        |
| 36  | MBBS           | Pathology              | 1990                 | 22-Jan-19        |
| 37  | MBBS           | Pharmacology           | 1990                 | 22-Jan-19        |
| 38  | MBBS           | Pharmacology           | 1990                 | 29-Nov-19        |
| 39  | MBBS           | Physiology             | 1990                 | 02-Mar-20        |

### Focus on competency/ employability/entrepreneurship/ skill-development

The University presented that all programs offered by the University have a focus on competency, employability and skill development. The curriculum includes courses that address all domains of knowledge, skill, communication and attitude at undergraduate, postgraduate and doctoral levels. Experiential Learning, Simulation, Skill Lab training,

Industry Internships, collaborative teaching, research work and project work all contribute to enhancing employability and competency of the graduates and postgraduates. Earn while you Learn in the B.Sc. Hospitality studies program, which offers undergraduates a unique opportunity to work with organizations/hotels while in training and experience first-hand the industry realities. The Hospitality program (BSc Hospitality Studies) in addition to the programs in Health Sciences (MBBS, MD, MS, and Fellowships) have strong entrepreneurial potential. This is supported by activities of the Entrepreneurship Cell.

Choice-Based Credit System (CBCS)/ Elective course system is implemented, wherever provision is made by Regulatory Bodies.

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

In a bid to acquire a multidisciplinary dimension BSc in Hospitality Studies was started in 2019. Details of all new programs is shown below.

| Programme/Course | Programme Specialization                         | Dates of Introduction |
|------------------|--|-----------------------|
| Fellowship       | Fellowship in Minimal Access Surgery Gynaecology | 22-11-2018            |
| Fellowship       | Fellowship in Paediatrics Intensive Care         | 01-08-2018            |
| Undergraduate    | B.P. Th. (Physiotherapy)                         | 13-09-2019            |
| Undergraduate    | B.Sc. (Hospitality Studies)                      | 23-08-2019            |

#### Gender Sensitization and Equality

The Committee noticed that University addresses the cross-cutting issues relevant to gender in the formal curriculum as well as in the informal curriculum.

Adequate representation to women in positions of leadership and authority exemplifies the concept of gender equality. Women Development Cell and the Internal Complaints Committee undertake competitive and non-competitive, co-curricular activities that educate, improve and demonstrate the principles and practices of gender issues. The annual inter-college competition "DYP-ICONIC" also strives to address issues that are thought provoking and contextual to holistic student development.

Aspects such as **Environment** are addressed through action and education. The use of a multitude of energy conserving measures, emphasis on green campus and organization of events to highlight the same provide an education that speaks through action. In addition, introduction of 60 hours of Environment Education within the undergraduate curriculum as curricular enrichment further sensitizes and provides information on the burning issues.

**Value education modules** are included within the formal curriculum and delivered by faculty in detail. Celebrations of festivals and national days serve as reminder of national and cultural concepts of tolerance and brotherhood. The code of conduct of the university addresses

values essential to fulfilling their roles in society.

The Students Wing of the Bioethics Unit is an active body with regular activities and interaction on ethical matters. Introduction of structured ethics training within the curriculum, across all departments adds to the value education. The Bioethics Unit of the University and its' Student's Wing undertakes trainings and activities that emphasize and underline ethical concepts in different areas of education, research, society and healthcare. Ethics guidelines for research, Good Clinical Practices, Good Laboratory Practices, Plagiarism Check, Institutional Ethic Committee all provide platforms that educate, exemplify and strengthen ethical teaching and practice.

**Health determinants** such as personal, social, cultural, economic and environmental factors that affect health of an individual and impact family health are covered in the curriculum.

**Professionalism** is an essential teaching-learning for all graduates. Guest Lectures, Counselling Sessions, Seminars, Workshops, Extra-curricular activities are all conducted to impart different aspects of professionalism to the students. Communication Skills, Stress Management, Time Management and interpersonal some aspects like communication are covered. **Human Rights** are both taught and practiced in administration and healthcare situations. Rights of patients, Roles and responsibilities of doctors and patients, tolerance, equality, right to healthcare, supporting cause of 'Save the girl child', education of girls and equal opportunities across social, anthropometric and cultural divides are discussed through displays, poster competitions, rallies, classroom teaching, guest lectures, etc.

#### Students field visits / Research projects / Industry internship

The Committee is happy to note that the curriculum includes **internships & community posting** in MBBS, BSc Nursing, MSc Nursing as per regulatory council and the BSc Hospitality Studies and BPTH as per University approved curriculum. There is a well-defined place in the curriculum and the community internship/postings as well as logbook are mandatory and part of the assessed curriculum. In addition the **RCOMET program** started by the University (Rural Community Oriented Medical Training) for MBBS students gives a 4-day village exposure with family survey, health counselling, community education and first-hand experience of village social and health issues being essential components. The **Village Adoption Scheme** offers students a chance to follow the health and nutrition status of the family vis-à-vis their demographics over time and form a bond with the family members. It serves the purpose of training students and facilitating healthcare of the families.

Students from MSc Medical Physics have incorporated in their training a **series of industry visits** for practical sessions. MSc Stem Cell and Regenerative Medicine students also undergo

**industry training** as well as **field visits** to industry and research organization.

All students in the MBBS, MS/MD and MSc Nursing programs in addition undertake **research projects** as part of council/university requirements.

**BITMER certification** (Basic Introductory Training in Medical Research) of UG students incorporates two research projects submitted by each MBBS student. Annual **SMART** (Second MBBS Alliance for Research Training) for UG students and **COURT** (Campaign of University Research Training) and **ANVESAN** for PG students provide platforms to present, defend and discuss their research projects in form of poster or platform presentations. ICMR-STS projects are also undertaken by selected students.

The University has an active **NSS unit, Community Health Extension Unit, Women Development Cell** which conduct community activities involving student exposure to various social, medical and cultural aspects of healthcare. Student participation in role plays, street plays, rallies, surveys and campaigns provides education with a purpose.

Other programs have been buttressed with **field visits, community service/activities and industry visits** in addition to **structured activities** under different government schemes and program of national importance. Volunteering work and mandatory activities under the Unnat Bharat Abhiyaan, Swaccha Bharat Abhiyaan, National Leprosy Program etc.

#### Feedback System

The University has an online as well as offline system of taking feedbacks from Students, Teachers, Employers, Alumni and Professionals. Feedback collected, analysed and action taken on feedback and such documents are made available on the institutional website.

### 3. Teaching-Learning and Evaluation

It is seen that more than 41% students are enrolled from reserved categories. 32.40% students belongs to other states than Maharashtra.

The students demand ratio is almost 1:1 for the programmes other than Medical.

The constituent units take proper remedial measures and conduct the programmes as follows:

| SLOW PERFORMERS    |   |                 |                            |                   |
|--------------------|---|-----------------|----------------------------|-------------------|
| Department         | Type Of Activity                            | No. Of Sessions | Duration Of Program (Days) | Students Enrolled |
| Anatomy            | Remedial Classes                            | 12              | 12                         | 39                |
| Anatomy            | Remedial Classes                            | 23              | 23                         | 134               |
| Community Medicine | Remedial Classes                            | 8               | 60                         | 25                |
| Community Medicine | Revision Classes                            | 4               | 10                         | 70                |
| General Medicine   | Remedial Classes For UG                     | 30              | 24                         | 32                |
| General Medicine   | Remedial Bedside Clinics                    | 24              | 20                         | 32                |
| General Medicine   | Tutorials & Topic Revisions                 | 42              | 30                         | 32                |
| General Medicine   | Faculty Interaction; Psychology Counselling | 12              | 6                          | 42                |
| General Surgery    | Remedial Classes                            | 30              | 24                         | 32                |
| General Surgery    | Revision Classes - assessed                 | 24              | 16                         | 32                |
| General Surgery    | Re-Test                                     | 42              | 365                        | 32                |
| General Surgery    | Post-Test Counselling                       | 12              | 12                         | 42                |
| Microbiology       | Microbes Departmental Bulletin              | 12              | 60                         | 4                 |
| Nursing            | Remedial Classes assessed                   | 161             | 365                        | 86                |
| Nursing            | Retest & Re - Demonstration                 | 161             | 365                        | 86                |
| Ophthalmology      | Revision                                    | 5               | 5                          | 12                |
| Ophthalmology      | Remedial Classes                            | 15              | 10                         | 12                |
| Pharmacology       | Remedial Classes - assessed                 | 17              | 17                         | 30                |
| Pharmacology       | Remedial Classes - assessed                 | 17              | 17                         | 32                |
| Physiology         | Remedial Classes (post semester)            | 7               | 7                          | 117               |
| Physiology         | Remedial Classes (post semester)            | 9               | 9                          | 16                |
| Radiology          | Individual Counselling                      | 24              | 365                        | 3                 |

The average student-teacher ratio is 8.319:1 during assessing period.

Student-centric methods are used for enhancing learning experiences by *Experiential learning, Integrated/Inter-disciplinary learning, Participatory learning, Problem-solving methodologies, Self-directed learning, Patient-centric and Evidence-based learning, Project-based learning and Role play. OSPE, OSCE, Mini-CEX and 360-degree feedback have been introduced for ongoing and formative assessment.*

It is appreciable to note that the University has provision for the use of Clinical Skills Laboratory and Simulation Based Learning. Under this, the University has Basic Clinical Skills Training Models and Task Trainers for clinical skills in the relevant disciplines. There are structured programs for training and assessment of students in Clinical Skills Lab / Simulation centre and to conduct training programs for the faculty in the use of clinical skills lab and simulation methods of teaching-learning.

The Committee was happy to note that the Teachers use ICT-enabled tools for effective teaching and learning process, including online e-resources. ICT activities in the University, prominently serve the purposes like integration of various academic functions in one seamless platform to permit both faculty and students to be able to organize, assess and evaluate, to provide individual and group training of faculty and students in optimally using technology in-campus and on the web and make available learning resources to students and faculty for enhanced, flexible, in-depth and beyond-the-syllabus learning as well as innovative teaching approaches such as blended learning, online teaching.

The University uses an integrated learning platform as well as other ICT tools like email, WhatsApp, website, etc for routine TL-related tasks, additional TL activities as well as some progressive measures. The platform can be accessed by the students from any internet-device, even off-campus, using individual user id and password.

Technological infrastructure to support current and future potential use of ICT in teaching learning has been provided across all units and infrastructural facilities of the University.

Class rooms and Seminar rooms are provided with either LAN or Wi-Fi connectivity, interactive whiteboard or LCD projection facilities and audio-speaker systems.

Technology to capture lectures for later viewing is present and the Lecture recording room or Media Room provides facilities needed to record additional lectures.

Technology in laboratories/clinical training complements the traditional teaching methods to enhance psychomotor training and skills of learners.

This is in addition to use of websites, email, WhatsApp for announcements, scheduling information, daily tracking of lectures/practical/clinics taken. These help to communicate ward information and possible concerns with parents/guardians.

#### **Teacher Profile and Quality**

It is best on part of the University that, average percentage of full-time teachers against sanctioned posts during the last two years is 112.15%.

Average Teaching experience of full-time teachers (preceding academic year) is 14.8 years.

There are 110 faculty who received awards and recognitions for excellence in teaching, student mentoring, scholarships, professional achievements and academic leadership at State, National, International levels from Government / Government-recognized agencies / registered professional associations / academies during the last two years.

#### **Evaluation Process and Reforms**

The University adopts the redressal of evaluation-related grievances by Double valuation/Multiple valuation with appeal process for retotaling/revaluation and access to answer script.

Examination reforms aim to provide transparency, objectivity, fairness and efficiency of the entire system to satisfy stakeholders especially the students.

1. Transparency, credibility and reliability of evaluation procedure is ensured through systematic functioning of Board of Examination.
2. All regulations applicable to examination process are clearly defined, documented and available for stakeholder perusal.
3. Single-window system for all examination queries facilitates student needs.
4. Adopted curriculum have well defined educational objectives for each program which guide all assessment and evaluation procedures.
5. Advance and meticulous planning and notice of examination details are communicated to students through website, notice boards, WhatsApp, LMS and departments.
6. Use of technology in the exam process has improved efficiency, transparency and increased reliability of the system.
7. Quality assurance measures that have been taken to improve credibility of the system at various steps of the process:

##### **Pre-exam:**

- Moderation of question papers is followed for all departments.
- Triple examination paper sets are called for with random selection of actual set done prior to examination.
- Printing of question papers is done under strict privacy and supervision by Controller of Examinations.
- Confidentiality of examiner panel and of external examiners appointed for a given exam are some other measures taken.
- Answer sheets used have watermarks.

#### Examination:

- Strict invigilation with flying squad, CCTV invigilation, rotational seating and specific guidelines for students needing to leave the hall during examination are undertaken.
- Strict enforcement of rules is done regarding writing on question papers, carrying mobiles or other devices into the hall.
- Answer sheets are encoded as soon as they receive in examination wing and further decoded only after total marks are entered by examiners.
- Careful monitoring of extra answer sheets distributed and adequate sheets in primary answer booklet help reduce malpractice.
- All malpractice acts are dealt with as per regulations.

#### Post-Examination:

- Grievance redressal mechanisms are well defined and communicated to students. During last four years, 18 mal-practice cases were reported and same were dealt with as per bye-laws.
- Student feedback on evaluation process and question papers provides guidance and direction to the changes needed to be made for University examinations. This allows for improvement and modification of processes by the Examination Cell.
- Feedback from external examiners also supports these efforts more especially in academic and assessment details and to identify areas of strength and opportunity.
- Introduction of verification of marks, re-evaluation and supply of photocopies of answer booklets helps to redress the grievances related to examinations.

#### **Status of automation of Examination division using Examination Management System (EMS) related to Student registration, hall ticket issue & result processing:**

The University has stated learning outcomes/graduate attributes as prescribed by Regulatory bodies which are integrated into the assessment process and widely publicized through the website and other documents.

Attainment of improved standards in higher education requires clear statement of what a learner is expected to be able to do, know and value at the end of the program. Learning outcomes provide a clear statement that encompasses both the content being taught and

the characteristics that demonstrate achievement of learning. The Bloom's Taxonomy is used to write the learning outcomes with care being taken to proportionately address all level of learning in all three domains of cognitive, affective and psychomotor.

Development of learning outcomes are linked to the generation of both Program Outcomes and Course Outcomes. Program outcomes provide a direction to the nature and type of employment the graduate can anticipate. They also direct towards potential paths for specialization and improved academic qualifications. They address discipline-specific skills, generic skills and attributes that a student should be able to demonstrate on completion of the programme for award of the qualification. Program outcomes are necessarily a composite of multiple course outcomes which could address diverse areas and hence have different methods of assessment or evaluation. Course outcomes provide the context for designing teaching-learning strategies, assessing students and for regular, periodic review of course content and updating.

The graduate attributes address both discipline-specific attributes as well as global competencies that enable and strengthen professional and personal performance.

Teaching learning strategies are designed keeping in mind the various course outcomes. As a part of learning outcomes-based approach, inclusion of experiential learning modules in the form of field-based learning, projects, group discussions, reflections, internships and laboratory work are ensured. Assessment methods are planned to match the course learning outcomes defined with formative assessment being emphasized as assessment for learning. Use of viva, project work, OSPE, OSCE, simulation, dissertations, lab work, case discussions, Work-Place Based Assessment (WBPA), case presentations are some methods used for outcome-based assessments apart from traditional cognitive testing.

## **4. Research, Consultancy and Extension**

### Promotion of Research and Facilities

It is a healthy practice of the University that there is a well-defined Research promotion policy and the same is uploaded on the Institutional website.

D. Y. Patil Education Society Deemed University, Kolhapur is committed to enhancing the contribution of research to health and social care. Research is essential to the successful promotion and protection of health and wellbeing, and also to modern, effective health and social care services. At the same time, research can involve an element of risk, both in terms of return on investment and sometimes for the safety and wellbeing of the research participants.



The broad aim of research policy of the University is to ensure smooth governance and promotion of research, but also safeguarding the wellbeing of research participants/subjects. The Policy set out principles, requirements and standard. It defines mechanism to deliver them and describe the monitoring and assessment arrangements. To improve the research and safeguard of the public, policy clearly recommend for enhancing ethical awareness and scientific quality, promoting good practices.

The Policy to promote creation of favorable environment to create centres of excellence for research and development, and for dissemination of knowledge and its relevant application regionally, nationally and globally. The Research Promotion Policy is strengthened by the presence of clearly spelt out policies for Ethical Research, Intellectual Property Rights, Good Laboratory Practices and Research incentivization.

#### Resources in support of research

- a) University research funds - The University has an annual research budget. The budget to be utilized for creating necessary infrastructure for research, capacity building activities for research, providing seed money for researchers, providing incentives for the researchers who published scientific papers.
- b) Seed money for researcher
- c) Incentives for publication
- d) Special leave for faculty and students
- c) Central research laboratory: The University is having the facility of central research laboratory with all necessary equipment and instrumentation for the purpose of research.
- d) Research guidance cell: The University has a research guidance cell with various research stations like epidemiology, clinical epidemiology, biostatistics, research methodology etc. Research guidance cell will provide technical assistance to researcher on solicitation. The cell will also organized capacity building activities for **researchers of the university**.
- e) Medical Journal of D. Y. Patil University (MJDYPU)
- f) Hospital and peripheral health centres: The University will provide researchers the clinical material and laboratories of hospital and health centres for undertaking research.
- g) Capacity building in research through various Induction programs of the University: The University will conduct Induction programs for new students at various levels. These induction programs include sensitize students regarding research and provide opportunity to learn the basics of research practice and methodology. The Institutional

Research Cell shall ensure that all induction programs shall be mandatory to promote capacity building of students in research

The University has provided seed money to its teachers for research during the last two years

| Principal Investigator | Duration | Sanctioned Fund Rs. | Amount provided in 18-19 Rs. |
|------------------------|----------|---------------------|------------------------------|
| Dr.Sunita Patil        | 1 yr     | 177683              | 177683                       |
| Dr.P.N.Pawaskar        | 3 yrs    | 810000              | 270000                       |
| Dr. Sudhir Sase        | 1 yr     | 65000               | 65000                        |
| Dr. CD Lokhande        | 3 yrs    | 810000              | 270000                       |
| Dr.Gunakar             | 3 yrs    | 810000              | 370000                       |
| Dr. J U Yadav          | 2 yrs    | 245000              | 135000                       |
| Dr. M G Joshi          | 3 yrs    | 967840              | 542840                       |
| Dr. V S Vatkar         | 3 yrs    | 273000              | 224000                       |
| Dr. A A Mohite         | 3 yrs    | 666225              | 666225                       |
| Dr. A S Karmalkar      | 3 yrs    | 1663000             | 1663000                      |
| Dr. A R Gune           | 3 yrs    |                     |                              |
| Dr. Umakant            | 3 yrs    | 840000              | 280000                       |
| Dr. S S More           | 1.5 yrs  | 120000              | 70000                        |
| Dr.M R Phadatare       | 3 yrs    | 999560              | 874560                       |
| Dr. Indumathi          | 3 yrs    | 1000000             | 745000                       |
| Dr. A Jadhav           | 3 yrs    | 975000              | 425000                       |
| Dr. A Kumbhar          | 9 months | 52000               | 52000                        |
| Dr. D G Harshe         | 4 months | 30000               | 30000                        |
| Dr. S Murchite         | 3 yrs    | 300000              | 100000                       |
| Dr. Taralekar          | 3 yrs    | 767640              | 632639                       |

The Average percentage of teachers awarded national /international fellowship for advanced studies / collaborative research participation in Indian and Overseas Institutions during the last two years

| S No. | Name of the teacher awarded national/international fellowship /Conference | Name of the award/fellowship/ Conference | Year of award/ Year of Participation | Awarding Agency /Source of funding              |
|-------|---|--|--------------------------------------|---|
| 1     | Dr. M. N. Ghatage   | AMASI, National Fellowships              | 05-10-18                             | Association of Minimal Access Surgeons of India |
| 2     | Dr. Vaishali Gaikwad  | AMASI, National Fellowships              | 05-10-18                             | Association of Minimal Access Surgeons of India |
| 3     | Dr. Sheetal Murchite  | AMASI, National Fellowships              | 05-10-18                             | Association of Minimal Access Surgeons of India |
| 4     | Dr.R.K.Sharma   | AMASI, National Fellowships              | 05-10-18                             | Association of Minimal Access Surgeons of India |
| 5     | Dr.Neelima Shah   | AMASI, National Fellowships              | 05-10-18                             | Association of Minimal Access Surgeons of India |
| 6     | Dr. Sangeeta Desai  | AMASI, National Fellowships              | 05-10-18                             | Association of Minimal Access Surgeons of India |
| 7     | Dr.SuruchiPawar   | AMASI, National Fellowships              | 05-10-18                             | Association of Minimal Access Surgeons of India |
| 8     | Dr. Aniket Patil  | AMASI, National Fellowships              | 05-10-18                             | Association of Minimal Access Surgeons of India |

| S No. | Name of the teacher awarded national/international fellowship /Conference | Name of the award/fellowship/ Conference | Year of award/ Year of Participation | Awarding Agency /Source of funding  |
|-------|---|--|--------------------------------------|---|
| 9     | Dr.AbhinandanKndiyal  | AMASI, National Fellowships              | 05-10-18                             | Association of Minimal Access Surgeons of India                                 |
| 10    | Dr. Manisha Phadatare   | Post-Doctoral Fellowship                 | 01-07-19                             | Swedish Government  |
| 11    | Dr.RaghvendraBohara   | Post-Doctoral Fellowship                 | 01-07-19                             | Iris Government, Galway   |
| 12    | Dr. Jaywant Gunjekar  | Visiting Fellow                          | 20-03-19                             | Dongguk University, Seoul, South Korea  |
| 13    | Dr. Jaywant Gunjekar  | Visiting Fellow                          | 27-03-19                             | Korea National University of Transportation, South Korea                        |
| 14    | Dr. Shimpa Sharma   | International FAIMER                     | 15-04-19                             | Foundation for Advancement in International Medical Education and Research USA. |

The Number of JRFs, SRFs, Post-Doctoral Fellows, Research Associates and other research fellows in the university enrolled year-wise during the last two years

| Sr. No. | Name of research fellow | Duration of fellowship (days) | Type of fellowship                         | Granting agency   |
|---------|-------------------------|-------------------------------|--|---|
| 1       | Dr Umakant Patil        | 1825                          | DAT-Inspire Faculty Fellow                 | DST   |
| 2       | Dr JayavantGunjekar     | 1825                          | Ramanujan Fellow                           | DST   |
| 3       | Mr.Abhinandan Patil     | 1825                          | SRF-DST-Inspire)                           | DST   |
| 4       | Miss Marge Supriya      | 1095                          | JRF  | SERB, DST   |
| 5       | Mr.Katkar Pranav        | 1095                          | JRF  | SERB, DST   |
| 6       | Mrs.ApurvaBirajdar      | 1095                          | JRF  | SERB, DST   |
| 7       | Mr.PadalkarNavnath      | 1095                          | JRF  | SERB, DST   |
| 8       | Mr.Sadaver Shrikant     | 1095                          | JRF  | SERB, DST   |
| 9       | Mr.Ubale Shivaji        | 1095                          | JRF  | SERB, DST   |
| 10      | Mr.MalvekarDhanaji      | 1095                          | JRF  | SERB, DST   |
| 11      | Mr.SatyajitHarugale     | 1095                          | JRF  | DYPES   |
| 12      | Mr.Pujari Sachin S.     | 1095                          | JRF  | DYPES   |
| 13      | Mr.Satish Jadhav        | 1095                          | JRF  | DYPES   |
| 14      | Mrs.Rohini Shinde       | 1095                          | JRF  | DYPES   |
| 15      | Ms.TruptiGhogare        | 1095                          | JRF  | DYPES   |
| 16      | Mr.KishorTaradalkar     | 1095                          | JRF  | DYPES   |
| 17      | Ms. Priyanka Hilage     | 1095                          | JRF  | DYPES   |
| 18      | Ms. Taihaseen Momin     | 1095                          | JRF  | DYPES   |
| 19      | Ms. Swapnali Jagdale    | 1095                          | JRF  | DYPES   |
| 20      | Mr. Pooja Patil         | 1095                          | JRF  | DYPES   |
| 21      | Ms. SayaliChougule      | 1095                          | Research Fellow                            | DYPES   |
| 22      | Mr. Suraj Khalate       | 1825                          | Sarathi National Research Fellowship       | Chh. Shahu Maharaj Research, Training & HRD Institute, Pune |
| 23      | Mr. Satish Jadhav       | 1825                          | Sarathi National Research Fellowship       |   |
| 24      | Mr. Pranav Katkar       | 1825                          | Sarathi National Research Fellowship       |   |
| 25      | Mr. Shrikant Sadavar    | 1825                          | Sarathi National Research Fellowship       |   |
| 26      | Mr. Shivaji Ubale       | 1825                          | Sarathi National Research Fellowship       |   |
| 27      | Ms. Shirin Kulkarni     | 1095                          | Research Fellow                            | DST-SERSB   |
| 28      | Mr. Vikas Mane          | 1095                          | Research Fellow                            | DST-SERSB   |
| 29      | Mr. Yogesh Chitare      | 730                           | Research Fellow                            | DYPES   |
| 30      | MS. PrityBagwade        | 1095                          | Research Fellow                            | DST- Inspire  |
| 31      | Ms. Shital Kale         | 365                           | SERB Overseas Visiting Doctoral Fellowship | SERB  |

### Departments with recognition

| Sr . N. | Name of the Department with recognition | Name of the Scheme                                  | Name of the funding/recognizingagency                          |
|---------|---|---|--|
| 1.      | Hospital                                | ICMR recognised Molecular Biology Lab for COVID 19  | ICMR, New Delhi  |
|         |   | ICTC, RNTCP/NTEP                                    | Govt. of Maharashtra   |
| 2.      | Orthopaedics                            | Poor Patients evaluation and managements of spine   | Spine Foundation Mumbai  |
|         |   | Training for students                               | Kolhapur Sports Club   |
|         |   | Training for students                               | Sarv Shiksha Abhiyaan with Zilla Parishad, Kolhapur            |
| 3.      | Paediatrics                             | IAP-CPR Training Centre                             | Indian Academy of Paediatrics, Mumbai                          |
|         |   | Immunization Programs                               | Govt. of Maharashtra   |
| 4.      | University                              | UNESCO chair in Bioethics Unit, Kolhapur-India unit | International Network of the UNESCO Chair in Bioethics (Haifa) |
| 5.      | Medical Physics                         | Research Projects                                   | BRNS, Mumbai   |
|         |   |   | DST, New Delhi   |
| 6.      | Stem Cell & Regenerative Medicine       | Research Projects                                   | DST  |
| 7.      | General Medicine                        | Research Project                                    | BRNS, Mumbai   |
| 8.      | Pharmacology                            | ICMR STS Project                                    | ICMR, New Delhi  |
| 9.      | Otorhinolaryngology                     | ICMR STS Project                                    | ICMR, New Delhi  |
| 10.     | Community Medicine                      | ICMR STS Project                                    | ICMR, New Delhi  |
|         |   | Unnat Bharat Abhiyan                                | Govt. of India   |
| 11.     | Anatomy                                 | Polio Immunisation Program                          | Kolhapur Municipal Corporation                                 |
|         |   | ICMR STS Project                                    | ICMR, New Delhi  |

### Resource Mobilization for Research

Grants for research projects sponsored by other sources

| Sr. No. | Name of the Project/ Clinical Trial/ Endowment/ Chairs      | Name of the Principal Investigator/Co Investigator | Name of the Funding agency               | Funding Amount(lakhs) |
|---------|---|--|--|-----------------------|
| 1       | Effect of a Ayurvedic formulation on Diabetes & Prediabetes | CI: Dr. Shimpa R. Sharma, General Medicine         | RUSA funds under Shivaji University, Kop | 2.0                   |

Grants for research projects/clinical research project sponsored by government funding agencies during last two years (INR in Lakhs)

| Sr. No. | Name of the Project/ Clinical Trial/ Endowment/ Chairs  | Name of the Principal Investigator/Co Investigator | Name of the Funding agency | Funds provided (INR in Lakhs) |
|---------|---|--|----------------------------|-------------------------------|
| 1.      | Development of flexible asymmetric Supercapacitor with energy density (15Whkg <sup>-1</sup> ) and power density (1,000Wkg <sup>-1</sup> ). (July 2018- July 2020)             | PI- C. D. Lokhande                                 | Medical Physics            | DST 45.73                     |
| 2.      | A strategic introduction of reduced Graphene Oxide (rGO) in Nickel Cobalt Phosphate electrodes to enhance the energy density of asymmetric supercapacitor device. ( 2019-22)  | Dr.Umakant Patil                                   | Medical Physics            | DST SERB 18.43                |
| 3.      | Polyoxovanadate Intercalated 2D Cobalt-Chromium Layered Double Hydroxide Nanosheets Hybridized with Graphene Oxide as High Energy Density Supercapacitor Electrode ( 2019-22) | PI- Dr. Jaywant Gunjekar                           | Medical Physics            | DST- SERB 24.46               |
| 4.      | Surface modified magnetic solid lipid nanoparticles for imaging and hyperthermia with dual drug therapy in colon cancer. (Feb 2017-Feb 2020)                                  | Dr. Arvind Gulbake, CIR                            |                            | DST- SERB 32.84               |

| Sr. No. | Name of the Project/ Clinical Trial/ Endowment/ Chairs  | Name of the Principal Investigator/Co Investigator               | Name of the Funding agency | Funds provided (INR in Lakhs) |
|---------|---|--|----------------------------|-------------------------------|
| 5.      | Supercapacitor with rare earth metal sulfides/graphene hybrid thin films: fabrication and performance evaluation (Jan 2017-Jan 2020)  | Prof. C. D. Lokhande<br>Dr. Manisha Phadatare<br>Medical Physics | SERB, New Delhi            | 37.40                         |
| 6.      | Freestanding 3D porous Graphene Foam (GF) electrodes decorated by Pseudocapacitive Materials (PCMs) for high energy and power density hybrid supercapacitors. (March 2017-March 2022) | Dr. Umakant M. Patil, Medical Physics                            | DST-INSPIRE                | 106.00                        |
| 7.      | Pillared Nanohybrids Based on 2D Inorganic Nanosheets for Highly Efficient and Stable Solar Assisted H <sub>2</sub> Production. (Sept 2017-Sept 2022)                                 | Dr. Jayavant L. Gunjekar, Medical Physics                        | DST-SERB                   | 110.00                        |
| 8.      | Effectiveness of Hand Washing Intervention Program to Reduce Morbidity among Primary School Children from Urban Maharashtra   | Dr. P.A. Potdar<br>FMT   | ICMR STS                   | 0.1                           |
| 9.      | Impact of household poison awareness program on knowledge and attitude among primary school children in urban Maharashtra   | Hemanshi Sirohi  | ICMR STS                   | 0.1                           |
| 10.     | Assessment of occupational health hazards and exposure to pesticides among florists through handling of flowers   | Himanshi Sharma  | ICMR STS                   | 0.2                           |
| 11.     | STS- Comparison of Hematological profile and oxidative stress in HIV patients before and after HAART  | Guide- Dr. Sunita Patil<br>Pharmacology                          | ICMR STS                   | 0.2                           |
| 12.     | Impacted wax  | Dr V. P. Varute,<br>ENT  | ICMR STS                   | 0.2                           |
| 13.     | Presbycusis   | Dr V. P. Varute,<br>ENT  | ICMR STS                   | 0.2                           |
| 14.     | Diabetic Otopathy   | Dr R. S. Mane,<br>ENT  | ICMR STS                   | 0.2                           |
| 15.     | Aural Toilet  | Dr R. S. Mane,<br>ENT  | ICMR STS                   | 0.2                           |

### Innovation Ecosystem

The AAA Committee was happy to note that, the University has taken following initiatives to promote, inculcate and nurture innovation and entrepreneurship and their outputs. The details include both the types of mechanisms and actions undertaken as well as the output in brief.

| Action   | Nature of Talent               | Details  |
|--|--------------------------------|--|
| BITMER certification [Basic Introductory Course in Medical Research] | Critical Thinking and analysis | Compulsory Research project and BITMER certification in UG for MBBS program involves research training and 2 research projects in 4th Semester (Microbiology/ Pharmacology) and 6th Semester (Community Medicine) which count for the certification.   |
| SMART [Second MBBS Alliance for Research Training]                   | Critical Thinking and analysis | Platform for MBBS Students UG - is a one-day annual program for display of debating, poster preparation and presentation and research-themed discussions. Prizes are given for best performances and presentations.  |
| COURT [Campaign Of University Research Training]                     | Critical Thinking and analysis | Platform for PG Students of Medical and Nursing College - a one-day [18th February] annual program for Poster presentation of individual research projects of PG students (MD/MS/MSc) and Platform presentations of individual research of final year PG students of MD/MS programs. Prizes are given based on judging by faculty. |

| Action   | Nature of Talent                           | Details  |
|--|--|--|
| Platform for PG students including Doctoral Students   | Innovation, Critical Thinking and analysis | Anveshan selection round is held in the University each year and PhD, MD, MS, MSc students all participate with poster presentations, judging and selection for next round. Four students were selected for the zonal rounds in regional Anveshan round in categories of Basic Science, Health Science, Engineering and Technology.  |
| 'Dnyanshodh'   | Innovation, Critical Thinking and analysis | Poster Presentation for Doctoral Students - 'Dnyanshodh' is celebrated every National Science Day and PhD students present their posters to faculty with Q&A as well as added suggestions to improve their work. Judges award deserving presentations the prizes.  |
| ICMR STS projects  | Innovation, Critical Thinking and analysis | MBBS Students are guided and encouraged to apply for the ICMR-STS projects. Those selected are supported to complete their work. Other projects are still continued as departmental projects with University support and resources.  |
| Cadaveric Bioskill Laboratory  | Innovation & Entrepreneurship              | Innovative soft embalming of human cadavers in the laboratory allows for unique operative workshops in advanced and recent surgical techniques. In this year, 13 National and International Workshops have been conducted with resource persons of national and international repute and 105 delegates from all over India. Laboratory has generated total of Rs 4.75 lakhs.   |
| Brainstorming Unit of RICH Cell, Institution Innovation Cell and the APJ Abdul Kalam Incubation Centre | Innovation                                 | APJ Abdul Kalam Incubation Centre was started by the University to further the work done in the Brainstorming Unit of the RICH Cell (2015). Two projects have reached stage of Start-Up 1. Tissue Engineered Scaffolds and 2. Artificial Bio ink for 3D printing in area of Research and Development. In addition One PhD Scholar was awarded the Start Up Hero of Maharashtra at the Boot Camp in Nagpur and two doctoral students were awarded 1st and 2nd prize in Start-Up -Health Science category. |
| Research Guidance Cell   | Critical Thinking and analysis             | Research Methodology workshop was conducted on 22nd and 23rd July 2019 for new PG students in all disciplines; PhD Scholar Ms S Kale was awarded the Fellowship by SERB-DST in category of Basic Science; Career opportunities in Clinical Research was discussed by Dr A J Reddy, CRO, Hyderabad.   |
| Patent Filing Support  | Innovation                                 | University provides financial resources to file patents and this year 7 patents were filed by the University. Training and updates on filing of patents are also conducted.  |
| Students Wing of Bioethics Unit of UNESCO Chair of Bioethics Haifa                                     | Critical Thinking and analysis             | Guest lectures, ETHIREEL, Pen-it-down events, Poster presentations, Essay competition, Reflective writings, Mime by students, participation in conferences on ethics, enrolment in international certification courses, participation in international competitions on ethical issues are all facilitated and encouraged for the student members honing their skills.  |

The University has conducted 37 activities in the last two years to promote, encourage and support high standards of values and principles in conduct of research and research related activities. These workshops or seminars are attended by faculty, doctoral students, post graduate students as well as interns and undergraduate students in some cases. This ensures the dissemination of the right practices and teachings at all levels of university functioning.

Due to continuous efforts of the University the Students and faculty have achieved following notable awards / recognitions received for innovation / discoveries during the last two years

| Sr. No | Title of the innovation                      | Name of the Awardee   | Awarding Agency   | Date of Award | Category- Institution/teacher/ research scholar/student |
|--------|--|-----------------------|---|---------------|---|
| 1      | Hero of Maharashtra                          | Mr. Abhinandan Patil  | Start Up India/Govt. of Maharashtra   | 03-11-18      | Research Scholar  |
| 2      | 1st Prize in Health Science Start Up         | Mr. Deepak Sawant     | Start Up India  | 03-11-18      | Research Scholar  |
| 3      | 2 <sup>nd</sup> Prize in Health Sc. Start Up | Ms. Priyanka Patil    | Start Up India- Govt. Maharashtra   | 03-11-18      | Research Scholar  |
| 4      | Anveshan                                     | Mr. Dhanaji Malekar   | Association of Universities, New Delhi & Pacific Academy of Higher Education and Research University, Udaipur | 10-11/01/2019 | Research Scholar  |
| 5      | Anveshan                                     | Ms. Sheetal Kale      | AIU, New Delhi & Pacific AHER University, Udaipur   | 10-11/01/2019 | Research Scholar  |
| 6      | Anveshan                                     | Dr. Rajat Kumar Singh | AIU, New Delhi & Pacific AHER University, Udaipur   | 10-11/01/2019 | Research Scholar  |
| 7      | Anveshan                                     | Dr. Priti Shahapure   | AIU & Pacific AHER University, Udaipur  | 10-11/01/2019 | PG Student  |
| 8      | Overseas Visiting Doctoral Fellowship        | Ms. Shital Kale       | SERB-DST  | 23-07-19      | Research Scholar  |

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

| Sr. No | Name of the start-up               | Nature of start-up       | Year of commencement | Contact information of the promoters        |
|--------|------------------------------------|--------------------------|----------------------|---|
| 1      | Tissue Engineered Scaffolds        | Research and Development | 2018                 | Mr. Ganesh Joshim Biotech Pvt. Ltd., Sangli |
| 2      | Artificial Bio ink for 3D printing | Research and Development | 2018                 | Mr. Ganesh Joshim Biotech Pvt. Ltd., Sangli |

#### Research Publications and Awards

The University has a stated Code of Ethics for research, the implementation of which is ensured through Research methodology with course on research ethics, Ethics committee, Plagiarism check and Committee on Publication guidelines

The Committee was happy to note that, the University has Patents/Copyrights published/awarded/technology-transferred at its credit during the last two years

| Year   | 2019-20 | 2018-19 |
|--|---------|---------|
| Number of Patents/ Copyrights published / awarded/technology-transferred | 11      | 6       |

#### Details of awarded/published patents:

| Sr. No | Title   | Applicant Name   | Patent No.          | Date of Filing | Date of Published | Status        |
|--------|---|--|---------------------|----------------|-------------------|---------------|
| 2018   |   |  |                     |                |                   |               |
| 1      | A method for producing polyoxovanadate intercalated layered copper hydroxide compound   | Dr. J. L. Gunjekar, Prof. C. D. Lokhande, Dr. Saji Thomas Kochuveedu, Mr. Shrikant V. Sadavar, Mr. Navnath S. Padalkar, Dr. V. V. Bhosale. | 201821018926        | 21/05/2018     | 27/07/2018        | Published     |
| 2      | A chemical synthesis process of cobalt manganese phosphate thin films on conducting substrate                                     | Dr. Umakant Patil, Mr. Pranav K. Katkar, Ms. Supriya J. Marje, Dr. V. V. Bhosale, Prof. C. D. Lokhande                                     | 201812018918        | 21/05/2018     | 10/08/2018        | Published     |
| 3      | A method of ytterbium sulphide thin coating on sold surfaces  | Prof. C. D. Lokhande, Dr. R. B. Pujari, Dr. V. V. Bhosale, Mr. A. C. Lokhande  | 201821015970        | 27/04/2018     | 22/06/2018        | Published     |
| 4      | An Improved solid state device for energy storage   | Prof. C. D. Lokhande, Dr. A. M. Patil, Mr. A. C. Lokhande, Dr. V. V. Bhosale   | 201821021727        | 11/06/2018     | 20/07/2018        | Published     |
| 5      | Chemically deposited large area and nanostructured samarium oxide thin films for energy storage                                   | Prof. C. D. Lokhande, Dr. R. B. Pujari, Dr. V. V. Bhosale, Mr. V. C. Lokhande, Mr. S. B. Ubale   | 201821022705        | 18/06/2018     | 20/07/2018        | Published     |
| 6      | Cathode for water electrolysis and manufacturing method thereof.  | J. H. Kim, Jin Hyeok, Mr. A.C. Lokhande, I. Y. Kim, D.S.Lee, Prof. C. D. Lokhande, P. T. Babar, Mr. V. C. Lokhande,                        | 0131112016056997579 | 30/11/2017     | -                 | Korean Patent |
| 2019   |   |  |                     |                |                   |               |
| 1      | Method of Constructing tissue Engineered Human Ear Pinna Prosthesis.  | Dr. Meghnad Joshi, Mr. Shashikant Desai, Miss. Swapnali Jagadale, Mr. Nilesh Bhamare   | 201921004685        | 06/02/2019     | 01/03/2019        | Published     |
| 2      | Synthesis Process of Composite Artificial Skin Bioink for 3D Bioprinting and Wound Healing Applications.                          | Dr. Meghnad Joshi, Mr. Shashikant Desai, Miss. Swapnali Jagadale, Mr. Nilesh Bhamare   | 201921004686        | 06/02/2019     | 01/03/2019        | Published     |
| 3      | Process for Embedding Oleic Acid Coated Superparamagnetic Iron Oxide Nanoparticles in Lipidic.                                    | Dr. Arvind Gulbake, Dr. C. D. Lokhande, Dr. V. V. Bhosale, Mr. Satyajeet Harugale, Miss. Tahseen Momin                                     | 201921019463        | 16/05/2019     | 21/06/2019        | Published     |
| 4      | Chemically coated ytterbium phosphate film on solid surface and energy storage application thereof.                               | Prof. C. D. Lokhande, Mr. S. B. Ubale, Dr. V. V. Bhosale, and Mr. V. C. Lokhande   | 201921042840        | 22/10/2019     | 31/07/2020        | Published     |
| 5      | A method for synthesis of dysprosium sulfide (Dy <sub>2</sub> S <sub>3</sub> ) thin film and supercapacitive application thereof. | Prof. C. D. Lokhande, Ms. T. T. Ghogare, Ms. P. P. Bagwade, Mr. V. J. Mane and Dr. V. V. Bhosale,  | 201921046414        | 14/11/2019     | 31/07/2020        | Published     |
| 6      | Method of synthesizing reduced grapheme oxide-Copper selenide films for energy storage application.                               | Prof. C. D. Lokhande, Mr. D. B. Malavekar, Dr. V. V. Bhosale, and Mr. V. C. Lokhande   | 201921046649        | 15/11/2019     | 25/09/2020        | Published     |
| 7      | Asymmetric solid state supercapacitor.  | Prof. C. D. Lokhande, Ms. P. P. Bagwade, Ms. T. T. Ghogare, and Dr. V. V. Bhosale  | 202021000458        | 06/01/2020     | 3/07/2020         | Published     |

| Sr. No | Title   | Applicant Name  | Patent No.   | Date of Filing | Date of Published | Status    |
|--------|---|---|--------------|----------------|-------------------|-----------|
| 8      | A method of preparation of an electrode based on nickel-chromium-layered double hydroxide intercalated with polyoxovanadate for supercapacitor application. | Dr. J. L. Gunjekar, Mr. N. S. Padalkar, Mr. S. V. Sadavar, Miss. R. B. Shinde, Prof. C. D. Lokhande, Dr. V. V. Bhosale                    | 202021001507 | 13/01/2020     | 31/07/2020        | Published |
| 9      | A method for coating of cerium sulfide-carbon based composite   | Prof. C. D. Lokhande, Mr. D. B. Malavekar, Dr. V. V. Bhosale, and Mr. V. C. Lokhande, Mr. V. J. Mane                                      | 202021002802 | 22/01/2020     | 21/08/2020        | Published |
| 10     | A New Chemical Method to Coat Cobalt Phosphate on to Solid Substrates.  | Dr. Umakant Patil Mr. Pranav Katkar Miss. Supriya Marje Prof. C. D. Lokhande and Dr. V. V. Bhosale  | 202021003019 | 23/01/2020     | 24/02/2020        | Published |
| 11     | A method of preparation of an supercapacitor electrode based on cobalt-chromium-layered double hydroxide pillared with polyoxovanadate.                     | Dr. J. L. Gunjekar, Mr. N. S. Padalkar, Mr. S. V. Sadavar, Miss. R. B. Shinde, Dr. R. N. Bulakhe, Prof. C. D. Lokhande, Dr. V. V. Bhosale | 202021005460 | 7/02/2020      | 31/07/2020        | Published |

Ph.D. awarded by the University in last two years.

| SrNo. | Name of the PhD/DM/M.Ch scholar  | Name of the guide        | Title of the thesis  | Year of award of PhD/DM/M.Ch |
|-------|----------------------------------|--------------------------|--|------------------------------|
| 1     | Ms.Jagruti V. Meshram            | Prof. S. H. Pawar        | "Studies of Polymer Composites Loaded with ZnO Nanoparticles as Anti-Microbial Agent for Wound Dressing Application"                     | 2019                         |
| 2     | Mr.Kashte Shivaji Bhikaji        | Dr. R. K. Sharma Dean    | "Synthesis and Evaluation of a Novel Combination Scaffold and its Application in Bone Tissue Engineering"                                | 2019                         |
| 3     | Mr.PatilAbhinandanRavsaheb       | Prof. S. H. Pawar        | "Studies on Development of Unistain Probiotics for Anticancer and Antioxidant Activity"  | 2019                         |
| 4     | Ms.PatilPriyanka Popat           | Prof. Dr. S. G. Nanaware | "Studies on Preparation and Characterization of Silk Fibroin/PVA/ZnO NPs Composites for Wound Dressing Application"                      | 2019                         |
| 5     | Mrs. GhutepatilPriti Ravishankar | Prof. (Dr.) S. H. Pawar  | "Studies on Synthesis and Characterization of MnFe <sub>2</sub> O <sub>4</sub> Nanoparticles and their hyperthermia Therapy Application" | 2019                         |
| 6     | Mr.Sawant Deepak Vitthal         | Prof. (Dr.) S. H. Pawar  | "Studies on Early Detection of Mycobacterium Tuberculosis (MTB) Using Nanotechnology"  | 2019                         |
| 7     | Dr.ArunaYashvant Yadav           | Dr.Mrs.A.D.Patil Anatomy | "A Study of Anatomical Basis of Coraco-Acromial Arch Impingement By Using Radiographs"   | 2020                         |

The Committee observed that, number of research papers in the approved list of Journals included in Scopus/Web of Science/PubMed during the last two years, are as follows:

| Average Number of Fulltime teachers | Number of Research Papers included in |               |
|-------------------------------------|---------------------------------------|---------------|
|                                     | Scopus/Web of Science/PubMed          | UGC-CARE List |
| 180                                 | 177                                   | 28            |

The Faculty of the University have published 205 research papers in the approved list of Journals notified on UGC website during the last two years.

There are 70 Books/Chapters and papers in National /International conference-proceedings published by the Faculty.

Bibliometrics of the publications having affiliation in the publication as DYPES, DU, KOP, during the last academic year based on average citation index in Scopus/ Web of Science or PubMed/ Indian Citation Index

| Title of the Paper   | Name of Author  | Title of journal                               | Year of publication | Citation Index | Number of citations excluding self-citation |
|--|---|--|---------------------|----------------|---|
| Direct growth of 2D nickel hydroxide nanosheets intercalated with polyoxovanadate anions as a binder-free supercapacitor electrode                                 | Gunjekar J.L., Inamdar A.I., Hou B., Cha S., Pawar S.M., Abu Talha A.A., Chavan H.S., Kim J., Cho S., Lee S., Jo Y., Kim H., Im H.                      | Nanoscale                                      | 2018                | 10             | 9   |
| Two-Dimensional Layered Hydroxide Nanoporous Nanohybrids Pillared with Zero-Dimensional Polyoxovanadate Nanoclusters for Enhanced Water Oxidation Catalysis        | Gunjekar J.L., Hou B., Inamdar A.I., Pawar S.M., Ahmed A.T.A., Chavan H.S., Kim J., Cho S., Lee S., Jo Y., Hwang S.-J., Kim T.G., Cha S., Kim H., Im H. | Nano Micro Small                               | 2018                | 0              | 0   |
| A study of estimation of stature by foot length among students and staff of Al-Ameen medical college, Vijayapur  | Rathod P., Goudar E.S.  | Journal of Indian Academy of Forensic Medicine | 2018                | 0              | 0   |
| A systematic review on effect of electronic media on diet, exercise, and sexual activity among adolescents   | Gaidhane A., Sinha A., Khatib M., Simkhada P., Behere P., Saxena D., Unnikrishnan B., Khatib M., Ahmed M., Zahiruddin Q.S.                              | Indian Journal of Community Medicine           | 2018                | 0              | 0   |
| A systematic review on effect of electronic media among children and adolescents on substance abuse  | Khatib M., Sinha A., Gaidhane A., Simkhada P., Behere P., Saxena D., Unnikrishnan B., Khatib A., Ahmed M., Zahiruddin Q.S.                              | Indian Journal of Community Medicine           | 2018                | 0              | 0   |
| Synthesis and characterization of zinc oxide nanoparticles by using polyol chemistry for their antimicrobial and antibiofilm activity                              | Mahamuni P.P., Patil P.M., Dhanavade M.J., Badiger M.V., Shadija P.G., Lokhande A.C., Bohara R.A.   | Biochemistry and Biophysics Reports            | 2019                | 3              | 3   |
| Facile synthesis of self-assembled WO <sub>3</sub> nanorods for high-performance electrochemical capacitor   | Shinde P.A., Lokhande A.C., Patil A.M., Lokhande C.D.   | Journal of Alloys and Compounds                | 2019                | 2              | 2   |
| New design of all-solid state asymmetric flexible supercapacitor with high energy storage and long term cycling stability using m-CuO/FSS and h-CuS/FSS electrodes | Patil A.M., Lokhande V.C., Ji T., Lokhande C.D.   | Electrochimica Acta                            | 2019                | 1              | 1   |
| Effect of phosphate variation on morphology and electrocatalytic activity (OER) of hydrous nickel pyrophosphate thin films   | Marje S.J., Katkar P.K., Kale S.B., Lokhande A.C., Lokhande C.D., Patil U.M.  | Journal of Alloys and Compounds                | 2019                | 1              | 0   |

| Title of the Paper   | Name of Author  | Title of journal                                   | Year of publication | Citation Index | Number of citations excluding self-citation |
|--|---|--|---------------------|----------------|---|
| Development & validation of the Chandigarh autism screening instrument   | Andrade C., Sahoo S., Solanki C., Narasimha V., Nagendrappa S., Harsh D., Suhas S., Dharmadhikari A., Karki U., Pinto E., Garag S., Tharayil H., Mahadevan J. | Indian Journal of Medical Research                 | 2019                | 1              | 1   |
| Shelf life stability of encapsulated lactic acid bacteria isolated from sheep milk thrived in different milk as natural media  | Patil A., Disouza J., Pawar S.  | Small Ruminant Research                            | 2019                | 1              | 0   |
| Hydrothermally synthesized Iron Phosphate Hydroxide thin film electrocatalyst for electrochemical water splitting  | Khalate S.A., Kadam S.A., Ma Y.-R., Pujari S.S., Marje S.J., Katkar P.K., Lokhande A.C., Patil U.M.   | Electrochimica Acta                                | 2019                | 0              | 0   |
| APTES (3-aminopropyltriethoxy silane) functionalized MnFe <sub>2</sub> O <sub>4</sub> nanoparticles: a potential material for magnetic fluid hyperthermia                      | Ghutepatil P.R., Salunkhe A.B., Khot V.M., Pawar S.H.   | Chemical Papers                                    | 2019                | 0              | 0   |
| Molecular targets of biofabricated silver nanoparticles in Candida albicans  | Halbandge S.D., Jadhav A.K., Jangid P.M., Shelar A.V., Patil R.H., Karuppaiyil S.M.   | Journal of Antibiotics                             | 2019                | 0              | 0   |
| Dosimetric comparison of flattened and flattening filter-free beams for liver stereotactic body irradiation in deep inspiration breath hold, and free breathing conditions     | Munirathinam N., Pawaskar P.N.  | Journal of Radiotherapy in Practice                | 2019                | 0              | 0   |
| Recent trends in siRNA delivery for treatment of colorectal cancer   | Momin T., Harugale S., Gulbake A.S., Gulbake A.   | International Journal of Applied Pharmaceutics     | 2019                | 0              | 0   |
| Evaluation of lactobacillus plantarum growth in milk of indian buffalo breeds based on its physico-chemical content  | Patil A., Disouza J., Pawar S.  | Buffalo Bulletin                                   | 2019                | 0              | 0   |
| A study of estimation of stature from forearm length   | Potdar A.B., Rathod P., Potdar P.A., Desai M.M.   | Indian Journal of Forensic Medicine and Toxicology | 2019                | 0              | 0   |
| Controlled sulfurization of MnCO <sub>3</sub> microcubes architected MnS <sub>2</sub> nanoparticles with 1.7 fold capacitance increment for high energy density supercapacitor | Pujari R.B., Lokhande V.C., Patil U.M., Lee D.W., Lokhande C.D.   | Electrochimica Acta                                | 2019                | 0              | 0   |
| Study of structural and magnetic properties and heat induction of gadolinium-substituted manganese zinc ferrite nanoparticles for in vitro magnetic fluid hyperthermia         | Jadhav S.V., Shewale P.S., Shin B.C., Patil M.P., Kim G.D., Rokade A.A., Park S.S., Bohara R.A., Yu Y.S.  | Journal of Colloid and Interface Science           | 2019                | 0              | 0   |
| Reduction Clitoroplasty by Ventral Approach: Technical Refinement  | Patil U.A., Patil P.U., Devdikar M.S., Patil S.U.   | Journal of Obstetrics and Gynecology of India      | 2019                | 0              | 0   |
| Conversion of organic biomedical waste into value added product using green approach   | Patil P.M., Mahamuni P.P., Shadija P.G., Bohara R.A.  | Environmental Science and Pollution Research       | 2019                | 0              | 0   |

| Title of the Paper  | Name of Author  | Title of journal   | Year of publication | Citation Index | Number of citations excluding self-citation |
|---|---|--|---------------------|----------------|---|
| Knowledge, attitude & practices regarding prevention of dengue and malaria among residents of urban area in Kolhapur City, Maharashtra                          | Potdar P.A.   | Indian Journal of Public Health Research and Development     | 2019                | 0              | 0   |
| Influence of bath temperature on microstructure and NH <sub>3</sub> sensing properties of chemically synthesized CdO thin films                                 | Sharma A.K., Potdar S.S., Yewale M.A., Shirgaonkar D.B., Pakhare K.S., Sargar B.M., Rokade M.V., Patil U.M. | Materials Science-Poland                                     | 2019                | 0              | 0   |
| Electrochemical properties of chemically synthesized SnO <sub>2</sub> -RuO <sub>2</sub> mixed films   | Pusawale S.N., Deshmukh P.R., Jadhav P.S., Lokhande C.D.  | Materials for Renewable and Sustainable Energy               | 2019                | 0              | 0   |
| Facile Synthesis of Nano-Diced SnO <sub>2</sub> -ZnO Composite by Chemical Route for Gas Sensor Application   | Pakhare K.S., Sargar B.M., Potdar S.S., Sharma A.K., Patil U.M.   | Journal of Electronic Materials                              | 2019                | 0              | 0   |
| Clinical implications morphometric study of the cervical spine on MRI   | More S.S., Gune A.R., Patil J.K.  | International Journal of Research in Pharmaceutical Sciences | 2019                | 0              | 0   |
| Enhanced Energy Density of All-Solid-State Asymmetric Supercapacitors Based on Morphologically Tuned Hydrous Cobalt Phosphate Electrode as Cathode Material     | Katkar P.K., Marje S.J., Pujari S.S., Khalate S.A., Lokhande A.C., Patil U.M.                               | ACS Sustainable Chemistry and Engineering                    | 2019                | 0              | 0   |
| Surface functionalization of MnFe <sub>2</sub> O <sub>4</sub> nanoparticles with ethylenediamine for hyperthermia application                                   | Ghutepatil P.R., Salunkhe A.B., Khot V.M., Thombare B.R., Pawar S.H.  | Asian Journal of Chemistry                                   | 2019                | 0              | 0   |
| Radiation shielding for helical tomotherapy vault design  | Kaur A., Pawaskar P.N., Sahani G.   | Journal of Medical Physics                                   | 2019                | 0              | 0   |
| Structural, Morphological, Magnetic and Self-Heating Studies of One-Step Polyol Synthesized Manganese Ferrite (MnFe <sub>2</sub> O <sub>4</sub> ) Nanoparticles | Ghutepatil P.R., Pawar S.H.   | International Journal of Nanoscience                         | 2019                | 0              | 0   |
| Study of awareness of cyber-security among medical students   | Rathod P., Potdar A.B.  | Indian Journal of Forensic Medicine and Toxicology           | 2019                | 0              | 0   |
| Synthesis of hydrous cobalt phosphate electro-catalysts by a facile hydrothermal method for enhanced oxygen evolution reaction: Effect of urea variation        | Katkar P.K., Marje S.J., Kale S.B., Lokhande A.C., Lokhande C.D., Patil U.M.                                | CrystEngComm   | 2019                | 0              | 0   |
| Bioinspired engineering for liver tissue regeneration and development of bioartificial liver: A review  | Kashte S., Maras J.S., Kadam S.   | Critical Reviews in Biomedical Engineering                   | 2018                | 1              | 1   |

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

| Title of the Paper | Name of Author                  | Name of Journal                | Year of publication | h-index | Number of citations excluding self citation | Institutional affiliation as mentioned in the publication                   |
|--------------------|---------------------------------|--------------------------------|---------------------|---------|---|---|
| Multiple Papers    | Prof. C.D. Lokhande             | based on Scopus/web of science | 2019                | 86      | 26500                                       | D. Y. Patil Education Society Institution Deemed to be University, Kolhapur |
| Multiple Papers    | Dr. Manisha Phadatare           | based on Scopus/web of science | 2019                | 14      | 770   | D. Y. Patil Education Society Institution Deemed to be University, Kolhapur |
| Multiple Papers    | Dr. U. M. Patil                 | based on Scopus/web of science | 2019                | 28      | 2453  | D. Y. Patil Education Society Institution Deemed to be University, Kolhapur |
| Multiple Papers    | Dr J L Gunjekar                 | based on Scopus/web of science | 2019                | 20      | 1720  | D. Y. Patil Education Society Institution Deemed to be University, Kolhapur |
| Multiple Papers    | Dr P N Pawaskar                 | based on Scopus/web of science | 2019                | 7       | 130   | D. Y. Patil Education Society Institution Deemed to be University, Kolhapur |
| Multiple Papers    | Prof. S. Mohan Karuppaiyil, HoD | based on Scopus/web of science | 2019                | 25      | 2430  | D. Y. Patil Education Society Institution Deemed to be University, Kolhapur |
| Multiple Papers    | Dr.Meghnad Joshi                | based on Scopus/web of science | 2019                | 11      | 297   | D. Y. Patil Education Society Institution Deemed to be University, Kolhapur |
| Multiple Papers    | Dr. Arvind Gulbake              | based on Scopus/web of science | 2019                | 17      | 763   | D. Y. Patil Education Society Institution Deemed to be University, Kolhapur |
| Multiple Papers    | Dr.Indumathi S.                 | based on Scopus/web of science | 2019                | 12      | 368   | D. Y. Patil Education Society Institution Deemed to be University, Kolhapur |
| Multiple Papers    | Dr.RagvendraBohara              | based on Scopus/web of science | 2019                | 15      | 700   | D. Y. Patil Education Society Institution Deemed to be University, Kolhapur |
| Multiple Papers    | Dr. Arpita Pandey Tiwari        | based on Scopus/web of science | 2019                | 7       | 112   | D. Y. Patil Education Society Institution Deemed to be University, Kolhapur |
| Multiple Papers    | Dr. Ashwini Jadhav              | based on Scopus/web of science | 2019                | 6       | 50  | D. Y. Patil Education Society Institution Deemed to be University, Kolhapur |
| Multiple Papers    | Dr. Shivaji Kashte              | based on Scopus/web of science | 2019                | 2       | 31  | D. Y. Patil Education Society Institution Deemed to be University, Kolhapur |
| Multiple Papers    | Dr. Rajshree Mane               | based on Scopus/web of science | 2019                | 6       | 73  | D. Y. Patil Education Society Institution Deemed to be University, Kolhapur |
| Multiple Papers    | Dr. Vasudha Nikam               | based on Scopus/web of science | 2019                | 3       | 30  | D. Y. Patil Education Society Institution Deemed to be University, Kolhapur |
| Multiple Papers    | Dr Ashalata Patil               | based on Scopus/web of science | 2019                | 5       | 19  | D. Y. Patil Education Society Institution Deemed to be University, Kolhapur |
| Multiple Papers    | Dr. Shimpa Sharma               | based on Scopus/web of science | 2019                | 2       | 10  | D. Y. Patil Education Society Institution Deemed to be University, Kolhapur |
| Multiple Papers    | Dr. Vaishali Gaikwad            | based on Scopus/web of science | 2019                | 2       | 8   | D. Y. Patil Education Society Institution Deemed to be University, Kolhapur |
| Multiple Papers    | Dr. Anita Gune                  | based on Scopus/web of science | 2019                | 2       | 24  | D. Y. Patil Education Society Institution Deemed to be University, Kolhapur |
| Multiple Papers    | Dr. R. M. Kulkarni              | based on Scopus/web of science | 2019                | 1       | 5   | D. Y. Patil Education Society Institution Deemed to be University, Kolhapur |
| Multiple Papers    | Dr. Sheetal Murchite            | based on Scopus/web of science | 2019                | 2       | 8   | D. Y. Patil Education Society Institution Deemed to be University, Kolhapur |

| Title of the Paper | Name of Author     | Name of journal                | Year of publication | h-index | Number of citations excluding self citation | Institutional affiliation as mentioned in the publication                   |
|--------------------|--------------------|--------------------------------|---------------------|---------|---|---|
| Multiple Papers    | Dr. Arun Karmalkar | based on Scopus/web of science | 2019                | 1       | 8   | D. Y. Patil Education Society Institution Deemed to be University, Kolhapur |
| Multiple Papers    | Dr Snehdeep Patil  | based on Scopus/web of science | 2019                | 5       | 300   | D. Y. Patil Education Society Institution Deemed to be University, Kolhapur |
| Multiple Papers    | Dr Rakesh Sharma   | based on Scopus/web of science | 2019                | 2       | 19  | D. Y. Patil Education Society Institution Deemed to be University, Kolhapur |

**Consultancy**

The University has well defined Intellectual Property Right (IPR) Policy. Sections of the Policy are listed below:

- I. Preamble
- II. Commencement of The Policy
- III. Definitions
- IV. Scope of the Ordinances
- V. Ownership of Intellectual Property
- VI. Creation of Intellectual Property
- VII. Responsibilities of the University
- VIII. Responsibility of the Creator of Intellectual Property
- IX. Intellectual Property Right (IPR) Cell
- X. Technology Transfer Activities
- XI. Share of The University, Inventor/Creator and Assistants
- XII. Dispute Resolution
- XIII. Miscellaneous Schedule

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

| Year                  | 2019-20 | 2018-19 |
|-----------------------|---------|---------|
| Amount (INR in lakhs) | 19.02   | 23.34   |

**Extension Activities**

It is observed during assessment that, the University has conducted Extension and outreach activities such as community Health Education, Community health camps, Tele-conferences, Tele-Medicine consultancy etc., in collaboration with industry, Government and non-Government Organisations engaging NSS Institutional clubs etc., during the last two years.

| Year                            | 2019-20 | 2018-19 |
|---------------------------------|---------|---------|
| Number of activities            | 59      | 77      |
| Number of students participated | 3213    | 1819    |

Average percentage of students participating in extension and outreach activities beyond the curricular requirement is 172.04%.

Number of awards and recognitions received for extension and outreach activities from Government / other recognized bodies during the last five years

| Name of the activity                                | Award/Recognition                | Awarding Body   | No. of Students benefited |
|---|----------------------------------|---|---------------------------|
| Blood Donation Camp                                 | Appreciation/ Recognition letter | Dr D.Y.Patil Hospital, Kolhapur   | 7                         |
| Free Rural Health Check up camps                    | Appreciation/ Recognition letter | Prem Sai Charitable Trust, Kolhapur                                       | 24                        |
| Rural Health camp at Parite                         | Appreciation/ Recognition letter | GrampanchayatParite, Tal. Karvir  | 50                        |
| Health check up and hand washing promotion campaign | Appreciation/ Recognition letter | RajarshiShahuVidyamandir, KasabaBawada, Kolhapur                          | 25                        |
| Rural Health camp at Ghotawade                      | Appreciation/ Recognition letter | GrampanchayatGhotawade, Tal. Radhanagari                                  | 35                        |
| Organ donation awareness Rally                      | Appreciation/ Recognition letter | RCSM Govt. Medical College, Kolhapur                                      | 45                        |
| Health awareness Hand wash techniques               | Appreciation/ Recognition letter | Rotary club of Kolhapur   | 35                        |
| Health checkup Blood group detection camp           | Appreciation/ Recognition letter | VidhyamandirNandwal, Tal.Karveer  | 38                        |
| Health talk on Menstrual Hygiene                    | Appreciation/ Recognition letter | Chatrapati Rajaram Highschool, KasabaBawada                               | 10                        |
| 'SwacchataAarogya' Essay Drawing competitions       | Appreciation/ Recognition letter | Vidhyamandir, Hanbarwadi, Tal. Karveer                                    | 40                        |
| NCD camp, Golibar maidan                            | Appreciation/ Recognition letter | KMC, Family welfare centre no.5   | 20                        |
| Swacchata Abhiyan                                   | Appreciation/ Recognition letter | VidyamandirNandwal, Tal.Karveer   | 35                        |
| MCH camp at village Nandwal                         | Appreciation/ Recognition letter | Reliance Foundation Mr Ramesh Khandekar Appreciation letter from Reliance | 30                        |
| Schools visit Micro                                 | Shantiniketan School             | Polio Nursing   | 0                         |
| School Health Programme                             | Appreciation/ Recognition letter | Kanya Vidya Mandir, Herle   | 45                        |
| Swachata Hi Seva (SHS)                              | Appreciation/ Recognition letter | Grampanchayat, Herle  | 45                        |

The AAA Committee was happy to note that, the University understands the Institutional social responsibility, hence the activities in the neighbourhood community in terms of education, environmental issues like Swachh Bharath, health and hygiene awareness, delivery of free/ subsidized health care and socio economic development issues were carried out by the students and staff. The details are given as follows.

**COVID 19 Pandemic Efforts:** Interns joined personnel conducting population surveys and covered over 60,000 people with filling of questionnaires, temperature checks and pulse oximetry testing. Establishing a NABL accredited lab for 24x7 COVID testing, converting to a COVID hospital, conducting regular obstetric work diverted from all other centres in Kolhapur, running Flu OPD 24x7, training in donning and doffing videos created, mitigating

myths and false beliefs of community through series of short videos made by students, diverting staff from preclinical and para-clinical departments to hospital were undertaken.

**Kolhapur Flood Relief 2019:** 6-10 member-Teams of doctors, nurses, residents, interns held total 91 health camps to provide free care and medicines to people. Daily 8-10 teams worked in flood-affected areas like Dudahli, Phulewadi, Balram Colony, Raigad Colony, Ramanand Nagar, Vasagade, Gandhinagar, etc. The logistics of 100+ people daily, medicines, and basic investigations were borne by University. Interns worked with the KMC to take surveys and provide direction to relief measures. The hospital has provided all possible support in this flood relief activity.

**Rural Health Camps:** are regularly conducted in the region. Students participation provide appreciation of social, economic and cultural factors that impact health care.

| Year                    | Type of Camp                                      | No of Camps | Beneficiaries |
|-------------------------|---|-------------|---------------|
| 2018                    | Rural & Semi-urban Health Camps                   | 52          | 23389         |
| 2019                    | Flood Camp - independent                          | 79          | 8706          |
|                         | Flood Camp collaboration with Reliance Foundation | 12          | 3248          |
|                         | Rural Health Camps                                | 25          | 4639          |
| <b>Total in 2 years</b> |   | <b>168</b>  | <b>39982</b>  |

**Rural Community Oriented Medical Training (RCOMET):** Students get 4 days of rural exposure in groups of 30-35 students under the guidance of faculty from Department of Community Medicine and Medical Social Workers. Community education through talks, posters, role plays and Health Camps are part of this program. Last 2 years has seen 247 students attend these camps.

**Village Adoption Scheme (VAS):** Each batch of students is given one family per student from nearby village to adopt. The student keeps in touch with the family over the course of the program, interacts, understands different realities and provides support and assistance in health-related matters under guidance of a faculty.

**Swaccha Bharat Abhiyaan – SWACHHATA HI SEVA (SHS):** Gram SwacchataAbhiyaans have been conducted in villages of Ghotawade, Herle, Isphurli, Hanbarwadi, etc in Kolhapur district by the NSS volunteers and students/interns from dept. of Community Medicine. Students participate in cleaning drives and distribute cloth bags in exchange for plastic bags to village households.

**Unnat Bharat Abhiyaan :** Under the UBA, villages of Ghotawade, Isphurli, Nandgaon, Girgaon and Shirolu have been adopted. Each village has a committee led by a faculty and a PRO/MSW who help to plan, co-ordinate the activities which include health education, access to



healthcare, hygiene and sanitation and to bring science, technology and innovation to the village. **Detailed surveys** of households are conducted in all five villages by students. Students also participate in **Health care activities** (Multidiagnostic camps, Special camps for school children & Free medicine distribution), **Health awareness activities** – Nutrition education, Prevention of diseases through Health talk, Skit plays, awareness rallies and pamphlet distribution in the villages and **Sanitation and hygiene promotion** like Personal/hand hygiene, Menstrual hygiene & Swacchata abhiyaans. **Essay & drawing competition** on “swacchata & arogya”, **Demonstrations** of Hand washing in school children, **Plastic waste free campaign** & Importance of Water conservation & Rainwater harvesting are some activities students participate in with Skit play by NSS Students. **Science camp for school children**– various activities like science toys demonstration, science quiz, Demonstration of cardiopulmonary resuscitation etc. **Evidence of Success:** Feedback and interviews of participants have revealed positive impact on knowledge regarding various health problems and awareness about environmental sanitation and issues like addiction and its impact on health.

#### Collaboration

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

| Year                               | 2019-20 | 2018-19 |
|------------------------------------|---------|---------|
| Number of collaborative activities | 59      | 71      |

The University Authorities are very keen to have presence of functional MoUs with Institutions/ industries in India and abroad for academic, clinical training / internship, on-the-job training, project work, student / faculty exchange, collaborative research programmes.

Those are as follows:

| Sr. No | Organisation  | Date of MoU signed | Purpose/Activities                        | Number of students/teachers participated under MoUs |
|--------|---|--------------------|---|---|
| 1.     | Yonsei University, Seoul, South Korea   | 19-07-18           | Academic, Collaborative and Research      | 1   |
| 2.     | Cambridge Institute of Technology, Bengaluru  | 15-10-18           | Academic, Collaborative and Research      | 2   |
| 3.     | Ampliphone, India   | 14-11-18           | Academic, Collaborative and Investigatory | 7   |
| 4.     | Institute of Chemical Engineering Industry & Dept of IT Convergence, Korea National University of Transportation, South Korea | 11-01-19           | Academic, Collaborative and Research      | 20  |
| 5.     | Korea National University of Transportation, South Korea  | 11-04-19           | Academic, Collaborative and Research      | 1   |
| 6.     | University of Nigeria, Nsukka, Nigeria  | 15-04-19           | Academic, Collaborative and Research      | 6   |
| 7.     | Jaysingpur College, Jaysingpur  | 28-05-19           | Academic, Collaborative and Research      | 20  |

| Sr. No | Organisation                           | Date of MoU signed | Purpose/Activities                          | Number of students/teachers participated under MoUs |
|--------|--|--------------------|---|---|
| 8.     | Mahidhol University, Bangkok, Thailand | 19-07-19           | Academic, Collaborative and Research        | 5   |
| 9.     | Stem Plus Biotech Pvt.Ltd.             | 03-08-19           | Academic Research and Innovation Incubation | 39  |
| 10.    | Reliance Foundation                    | 15-03-19           | Rural Health                                | 18  |
| 11.    | Health Mind, Bangalore                 | 29-06-19           | Research support                            | 23  |

## 5. Infrastructure and Learning Resources

### Physical Facilities

The AAA Committee found that, the University and its constituent units have adequate physical facilities, those are listed below:

| Regular Teaching-Learning facilities                 | Nos. |
|--|------|
| Classrooms   | 20   |
| Laboratories   | 40   |
| Seminar Halls  | 38   |
| Classrooms with LCD facilities                       | 16   |
| Classrooms with Wi-Fi/ LAN                           | 8    |
| Seminar halls with ICT facilities                    | 38   |
| Library & Reading Room                               | 1    |
| <b>Facilities for Clinical Teaching</b>              |      |
| Clinical Skills Laboratory                           | 2    |
| Cadaveric Bio-skill Laboratory                       | 1    |
| Hospital - 810-bed, tertiary referral, ISO certified |      |
| <b>Facilities for Clinical-Community Teaching</b>    |      |
| Rural Health Centre                                  | 1    |
| Urban Health Centre                                  | 1    |
| Primary Health Centres                               | 2    |
| Adopted Village                                      | 1    |
| <b>Facilities for Enhanced Teaching/Learning</b>     |      |
| Yoga Laboratory                                      | 1    |
| Animal House   | 1    |
| AV-Relay from Operation Theatre                      | 1    |
| Hospital Reading Room                                | 1    |
| Video Recording Room/Media Room                      | 1    |
| Digital Library                                      | 4    |
| <b>ICT Facilities</b>                                |      |
| ERP/LMS  | √    |
| Smart Boards   | 5    |
| Visualizers  | 2    |
| WiFi Campus  | √    |
| Dept digital library                                 | 10   |
| E-Resources  | 110  |
| Subscriptions to databases                           | 3    |

In addition to this, the University has adequate facilities to support physical and recreational requirements of students and staff- sports, games (indoor, outdoor), gymnasium, auditorium, yoga centre etc. and for cultural activities. The details are as follows:

The University has provided following adequate facilities

- o Indoor games – Badminton, Table Tennis, Carom, Chess
- o Outdoor games – Cricket, Volley ball, Foot ball
- o Athlete running track – 200 meters
- o Well-equipped gym for girls and boys in UG and PG Hostels
- o Auditorium
- o Outdoor Stage – for concerts, functions, flag hoisting

In addition, apart from teaching the principles and medical benefits of yogic practices, meditation is introduced to students in the first year. Development of a Yoga lab has generated renewed interest in the practice of Yoga.

**Availability and adequacy of general campus facilities and overall ambience.**

The campus is placed on 27 acres with landscaped gardens to enhance the ambience. The maintenance of the campus has seen it short-listed twice for the Swaccha Bharat Campus awards in last two years.

The University has full-fledged estate office headed by qualified engineer who maintains infrastructure and a Horticulturist as garden supervisor.

The campus has a canteen for general use and a café in the PG hostel. Coffee dispenser machine is available near ICU for relatives. Drinking water is provided from the AquaGuard on each floor.

Hospital has an ATM for convenience of patients, relatives as well as staff and students. Ramps, railings/banisters and lifts are available for differently-abled individuals.

Solar panels on the hospital roof provide all hot water needed by the hospital, Interns hostel, PG hostel as well as feeds the grid.

STP is present on the campus and the recycled water is used to irrigate the gardens. Compost pits provide manure to the gardens. Use of cow dung slurry provides quick and high quality manure.

Rain-Water Harvesting is practiced to conserve the rain water and recharge the ground water.

Oxygen nodes and high-oxygen delivering plants are scattered across the campus for benefit of all visitors, employees and patients.

A temple dedicated to Gajanan Maharaj is present on the campus. Adequate car parking and covered two-wheeler parking is provided. Security at the hospital is trained in Code Pink and Code Red drills.

Signages and signposts are adequately placed to provide direction, guidance to visitors. Boards explaining feedback policy, patient rights and responsibilities, enquiry counters, hospital facilities, available government schemes, etc. are clearly displayed.

The institution has separate hostels for Post Graduate Residents, Interns and UG Students. There are 2 UG Boys Hostel and one UG Girls Hostel. Transport facility from hostel to college and hospital is provided to students.

The Committee was informed that, percentage of expenditure incurred, excluding salary, for infrastructure development and augmentation during the last two years:

| Academic Year  | 2018-19   | 2017-18   |
|--|---|---|
| Library  | 2585050 (Twenty Five Lac Eighty Five Thousand Fifty)                              | 82,54,882 (Eighty Two Lac Fifty Four Thousand Eighty Hundred Eighty Two)          |
| New Equipment for Laboratories   | 65617797 (Six Crore Fifty Six Lac Seventeen Thousand Seven Hundred Ninety Seven ) | 1,83,12,369 (One Crore Eighty Three Lac Twelve Thousand Three Hundred Sixty Nine) |
| Other expenditure on creation of Capital Assets (excluding expenditure on Land and Building) | 20906658 (Two Crore Nine Lac Six Thousand Six Hundred Fifty Eight)                | 2,00,76,960 (Two Crore Seventy Six Thousand Nine Hundred Sixty)                   |

**Clinical, Equipment and Laboratory Learning Resources**

We observed that, there is adequacy of facilities for clinical teaching learning including equipment as per the norms of the respective apex authority.

The focus of education in the health sciences programs is to ensure that the graduate is skilled, competent and equipped to take on the role and responsibility of the profession after graduation.

The Teaching Hospital is the seat of clinical teaching-learning for medical, nursing and physiotherapy students as well for the students of the skill-based certificate courses and Medical Biochemistry. The hospital is a 810-bedded tertiary referral, ISO certified institution with 14 specialty services, 15 superspecialty services, 13 state-of-the-art Operation Theatres, 30-bedded Casualty, 59-ICU beds and independent 8-Dialysis beds, and Pharmacy. The Blood Bank has facilities for blood components separation viz., preparation of Packed Cells,

Platelets, Fresh Frozen Plasma and Cryoprecipitate. It also has adequate blood storage facilities to the tune of 1000 units and all units are tested as per guidelines of the apex body.

The hospital has the latest equipment in the laboratories, casualty, wards and ICUs in keeping both with regulatory requirements and needs/demands of patient load. In the last two years the ICUs, OTs and clinical laboratories have been completely renovated with latest equipment. The RT-PCR Molecular Biology Laboratory is NABL Accredited.

The Radiology Department is equipped with a 3 Tesla MRI, 128-Slice CT Scan, USG, Dopplers with 3D, 2D Echo with Doppler, DSA in addition to Digital X-ray, Mammography, C-Arm and Portable X-Ray machines.

The Casualty is equipped with 30 beds all provided with suction and oxygen facilities, two nursing stations and immediate access to radiological investigations, Septic OT, Labour Room.

The Operation Theatres are designed to demonstrate the zones mandatory for infection control with dirty & clean corridors, CSSD, Student viewing gallery. Modular OTs allow for joint replacement surgeries and complicated surgeries with excellent results. The ICUs include the Medical ICU, Surgical ICU, Neonatal ICU and the Paediatric ICU. These are equipped with the latest equipment to ensure optimization of effort and best-possible outcomes. The Wards are naturally ventilated, spacious and aesthetically pleasing as well as functionally convenient.

Clinical Teaching is also conducted in the Cadaveric Bio-Skill Laboratory where soft-embalmed cadavers provide opportunity for operative techniques and new procedures to be learnt in the lab before attempting them on patients. The Clinical Skill Lab is a vital training ground for students on basic clinical skills like intubation, phlebotomy, securing IV lines, blood pressure examination, central line insertion, suturing and knot tying, laparoscopic instrumentation, normal and difficult labour, resuscitation & CPR/COLS, BLS, ACLS, clinical examination, arrhythmia management, etc.

Students are also exposed to clinical practice and skills in the RHTC, UHC, PHCs and Health Camps.

There is availability of infrastructure for community based learning like Satellite Primary Health Centres, Rural Health Centre and Urban Health Centre for training of students and Residential facility for students / trainees at the above peripheral health centres / hospitals.

The molecular lab in the Hospital has NABL accreditation. Also Hospital is ISO certified. There is a component blood bank approved by the DGHS, Government of India.

### **Library as a Learning Resource**

#### ***Library is automated using Integrated Library Management System (ILMS)***

The Committee appreciated that the library is automated using the Integrated Library Management System that is a module within the ERP used in the University. The integrated system has replaced the earlier software used – Vidyasagar. Automation was started in 2015 and upgraded in 2017.

The digital library computers are managed with Windows-2010, DNS and DHCP servers networked with 1 GB LAN and anti-virus system managed centrally. Firewall and Password encryption ensure security of all contents. The internet in the library also has a bandwidth of 1GBPS.

All the inventory of the library has access through the computers and availability can be ascertained. This makes available learning resources to students and faculty for enhanced, flexible, in-depth and beyond-the-syllabus learning

E-Resources include subscription to ProQuest Journals and e-MUHS resources. ProQuest Ebrary provides complete medical e-books collection. The University has access in the Shodhganga repository.

Library has reprographic facilities which includes six printers, two scanners and fax machine.

Digital Library is present in the College Building as well as in the Hospital premises and there are a total of 55 computers with internet connectivity and access to the e-resources.

The library houses some unique older editions of medical text books in addition to the latest editions of books used by students and faculty. The recent global trends of e-Resources is reflected in the holdings of the library with e-Journals and e-Books available in adequate numbers.

Weeding is regularly done to ensure that older unused editions of textbooks, damaged books are removed from the shelves. In addition, books that are not issued by users in over a year are relegated to the back shelves. Library is automated using Integrated Library Management System (ILMS).

Digital database is automatically updated as per the subscription and thus shows increase in number of available resources with time.

| SrNo. | Library Service Type   | Total |              |
|-------|------------------------|-------|--------------|
|       |                        | No.   | Value (2019) |
| 1     | Text Books             | 16355 | 12837802     |
| 2     | Reference Books        | 4265  | 5484187      |
| 3     | e- Books               | 12757 | 862580       |
| 4     | Journals               | 66    | 329226       |
| 5     | e-Journals             | 6050  | 1515000      |
| 6     | Library Automation     | 2     | 1000000      |
| 7     | Weeding (Hard & Soft ) | 760   | 8600         |
| 8     | Digital Database       | 2     | 2589817      |
| 9     | CD & Video             | 332   | 0            |

Average annual expenditure for purchase of books and journals is as follows:

| AY                                       | 2018-19  | 2017-18  |
|--|--|--|
| Average expenditure on library resources | 25.85050<br>(Twenty Five Lac Eighty Five Thousand Fifty) | 82.54882<br>(Eighty Two Lac Fifty Four Thousand Eighty Hundred Eighty Two) |

### IT Infrastructure

The Committee found that, there are 54 classrooms, seminar halls and demonstration room with ICT facilities. 93% of Classrooms, seminar halls and demo rooms are with ICT facilities.

Computer availability for students are regularly updated to ensure security, and privacy. Firewalls prevent access to harmful or denied sites and applications. Regular revision of the firewall, audit of usage of the bandwidth and counselling to misguided students ensures that the facility is used judiciously. WiFi password encryption, prevention of use by outsiders, sectional passwords for areas of confidentiality like finance, examination, management etc are also followed. Restricted access to servers and non-authorized terminals, active and experienced IT team limit any misadventures.

#### IT facilities:

| Computers | Computer Lab | Internet | Browsing centres | Computer Centres | Office | Departments | Bandwidth (GBPS) | Others |
|-----------|--------------|----------|------------------|------------------|--------|-------------|------------------|--------|
| 321       | 4            | 1        | 4                | 4                | 70     | 59          | 1                | 3      |

#### Facilities for e-content development

The University has a Media Centre with facilities for recording, LCD and Visualizer facility. Out-of-syllabus lectures by faculty, guest lectures are recorded here and uploaded on the LMS for advanced learners.

Audio-Visual Centre is established during seminars, conferences and for AV relay of surgery from the operation theatres to lecture halls or conference auditoriums. The AV Centre allows

for innovative teaching-learning efforts and enhances the yield from workshops and academic events.

All e-content that is generated from the use of the above facilities is retained with the Department. A copy is made available with the Library and it is also available on the Learning Management System for the students and other faculty to refer as per need.

The LMS thus also serves as a repository of these e-resources in addition to its other roles.

### Maintenance of Campus Infrastructure

Average percentage of expenditure incurred on maintenance of physical facilities and academic support facilities

| Assigned budget on academic facilities | Expenditure incurred on maintenance of academic facilities | Assigned budget on physical facilities | Expenditure incurred on maintenance of physical facilities |
|--|--|--|--|
| 3260.24                                | 2997.09  | -1572.43                               | 1062   |

Policy details of systems and processes for maintaining physical and academic support facilities

The University is mindful of the need to be watchful and proactive in maintenance of its infrastructure and facilities. All immovable and movable major assets of the University have been insured. The Estate Office headed by an Engineer oversees the monitoring, maintenance and repairs of all infrastructure in addition to renovations and modifications in existing facilities. Annual Maintenance Contracts are made for all major equipment and electric installations and are part of negotiations made by the Purchase Officer and Finance Department. The IT Department is manned by experienced personnel in the field who ensure the monitoring, maintenance and repairs of the WiFi, Lease line, Digital Libraries, Computers, Laptops, LCDs and other ICT related equipment. Major work for repairs or software problems are outsourced if beyond the ability of the IT persons in the University. Separate personnel are assigned for different buildings like the medical college, nursing college, hospital and university. The Landscaped gardens are maintained by the Garden Unit. Composting, Bio-waste disposal through recognized vendors, Sewage Treatment Plant, E-waste disposal, Biogas units help in recycling waste in the campus. Round the Clock security in the campus ensures no miscreants enter or damage the campus including the temple, sports complex, research facilities and academic areas. The hospital is also manned by security 24x7. Hospital Quality Assurance Cell and the Hospital Infection Control Committee also contribute in monitoring and upgradation recommendations of the hospital area. Standard Operating

Procedures have been created for use of Central Research Lab, RICH Cell, Psychology Lab as well as for various equipment. Trained technicians supervise the use of all equipment by students till they are deemed competent to handle them independently.

Departmental subcommittees exist in where the need is felt. Speedy provision of material, repairs and cleaning equipment is done through online indenting through the ERP. A separate person is appointed to oversee the working, condition and infrastructural needs of the morgue. Housekeeping staff under their Supervisor keep the bathrooms, toilets, corridors and rooms clean with daily cleaning, garbage disposal and use of disinfectants. Sports Director appointed by the University is in charge of all sports equipment, gymnasium, sports ground, etc. and monitors and supervises the utilisation. Regular IT audit, Green Audit, Academic and Administrative Audit are done. Environmental Policy, Gender Policy, Quality Policy, Ethic Policy in addition to SOPs ensures that personnel are aware of regulations and quality matters.

## 6. Student Support and Progression

The AAA Committee was happy to note that, there are number of students benefited by scholarships/free-ships during the last two years, which is as follows:

| Name of Scheme                             | No. of Students | Amount (Rs.) |
|--|-----------------|--------------|
| Concession in Fees by Institution          | 49              | 17645000     |
| Prime Minister Scholarship Scheme          | 2               | 54000        |
| SERB Overseas Visiting Doctoral Fellowship | 1               | 200000       |
| ICMR STS Project                           | 4               | 10000        |
| NSS Swachha Bharat Internship              | 3               | 90000        |

The University has implemented a variety of capability enhancement and other skill development schemes, those are listed below:

| Sr No. | Name of the capability enhancement scheme | Date of implementation | Number of students enrolled | Agencies involved   |
|--------|---|------------------------|-----------------------------|---|
| 1      | Soft skill Development                    | 15/01/2018             | 735                         | Department of Community Medicine  |
| 2      | Marathi Communicative Language Class      | 01/07/2018             | 69                          | Dr.D.G.Ghodke MA MEd DKASC College Ichalkaranji   |
| 3      | Remedial Coaching                         | 01/07/2018             | 459                         | Faculty of Health Sciences and Faculty of Allied Health Sciences                        |
| 4      | Yoga and Meditation                       | 01/07/2018             | 1565                        | Department of Physiology – Yoga Laboratory. Daily practice by all concerned Departments |
| 5      | Personal Counselling Mentoring            | 01/07/2018             | 568                         | UMGS, SGP, Student Counselling Centre   |

| Sr No. | Name of the capability enhancement scheme | Date of implementation | Number of students enrolled | Agencies involved   |
|--------|---|------------------------|-----------------------------|---|
| 6      | Ethics and Professional Development       | 01/07/2018             | 868                         | UNESCO Chair of Bioethics, Haifa Kolhapur India Unit, Ethics Module   |
| 7      | Research Capability                       | 01/07/2018             | 817                         | Research Guidance Cell, APJ Abdul Kalam Incubation Centre, Institutional Innovation Cell, BITMER, SMART, COURT, ANVESAN |

### No. of students qualified in state/ national/ international level competitions during the last Two years:

| Year | Name of the award/medal   | National/ International | Awards for Sports | Awards for Cultural | Student ID number | Name          |
|------|---|-------------------------|-------------------|---------------------|-------------------|---------------|
| 2018 | First Prize- UNESCO Chair of Bioethics for Short Film on World Bioethics Day 2018 | International           |                   | 1                   | 17003             | Aditya Dube   |
| 2018 | First Prize in Essay Competition  | National                |                   | 1                   | 16141             | Kalaivani B   |
| 2018 | Third Prize in E Poem at DYPICONIC 2018   | National                |                   | 1                   | 17040             | Shubham Gupta |
| 2018 | Third Prize in Photography at DYPICONIC 2018                                      | National                |                   | 1                   | 15059             | Kalaivani B   |
| 2018 | Third Prize in E Poster Competition at DYPICONIC 2018                             | National                |                   | 1                   | 16141             | UnwanKazi     |
| 2018 | Second Prize in Maharashtra IntermedicoDhanvantariChashak                         | National                | 1                 | 0                   | 0                 | Cricket Team  |
| 2018 | Best Bowler at Maharashtra IntermedicoDhanvantariChashak                          | National                | 1                 | 0                   | 17097             | Prasoon Kumar |
| 2018 | Best Fielder at Maharashtra IntermedicoDhanvantariChashak                         | National                | 1                 | 0                   | 15062             | Dhanraj Kane  |
| 2019 | Best Photography at Maharashtra VISMAY 2019 GMC Miraj                             | National                | 0                 | 1                   | 16093             | Pranav Patil  |

### No. of students qualified in state/ national/ international level examinations during the last Two years:

| Year | Name of the scheme              | Number of students who have passed in the comp. exam |
|------|---------------------------------|--|
| 2018 | Pre NEET Preparation (PNP) MBBS | 9  |
| 2019 | Pre NEET Preparation (PNP) MBBS | 34   |
| 2019 | NHM                             | 11   |
| 2018 | DHS                             | 7  |
| 2018 | DMER                            | 2  |
| 2018 | ESIC                            | 1  |
| 2018 | RSO Preparation Exam            | 1  |
| 2018 | PG-NEET                         | 28   |
| 2019 | PG-NEET                         | 48   |

We are satisfied that, there were 132 outgoing students who got placed/self-employed during intervening period.

There were 91 outgoing students progressing to higher education.

### Student Council and its activities for Institutional development and student welfare

Students are represented in University bodies such as the Academic Council, Board of Studies, Internal Complaint Committee, Anti Ragging Committee, University Unit of UNESCO

Chair of Bioethics, NSS Unit. Student Council is an integral part of campus life and activities. The Hostel Committee is also constituted with a majority of students.

The Student council has joined by a Student Nurses Association (SNA) of the D. Y. Patil College of Nursing which is the local chapter of the national body of the same name. Student Council had 10 members of which seven were girls including the Cultural Secretary and Magazine Editor. Subcommittees formed were Sports Indoor, Sports Outdoor, Art and Craft, Orchestra, Fashion and Literature. The SNA constitution mandated by the central SNA has a faculty as President and 23 student members including the Vice-President, General Secretary, Treasurer, Sports and cultural secretary and class representatives.

Activities undertaken by the Student Council are as follows:

1. Celebration of Republic Day and Independence day with organisation of events, discipline and planning, reception of Chief Guest, felicitation of dignitaries short entertainment module, flag hoisting, all done by the students
2. Welcome party Freshers' Day hosted by senior students at start of academic year
3. Annual Social gathering held for 7 days with literary, arts sports and cultural events called Psychedelia 2019
4. Annual Sports meet with indoor and outdoor sports
5. International Nurses Week as a remembrance of Florence Nightingale birthday
6. Release of Annual Student Magazine with contributions from students
7. Traditional Day
8. Teachers Day
9. Farewell Programs for graduating batches of MBBS, BSc Nursing and MD or MS
10. Convocation Parade Salaami
11. Address to new students during Orientation

In addition, the student council participates and facilitates involvement of students in various activities of the Community Health Extension Unit, NSS, Community Medicine Department by organising rallies, skits, street plays on social themes such as gender sensitization, organ donation, tree plantation. Students contribute to organisation of health camps in villages and participate in health surveys of the villages adopted by University. Also Council members and or deputed students are given opportunity to be anchor and master of ceremonies at various State, National and International Conferences, seminars and workshops organized in the University.

Students are nurtured during their Council membership to acquire leadership skills. They are given budgets to conduct the programs, held accountable for regular meetings and accounts

of finance, supported when asked to and are encouraged at all times to think out of the box. Trying and getting community involvement in their activities is another facet of their growth as leaders of tomorrow.

Number of sports and cultural activities / competitions organized by the Institution during the last Two years

| ACADEMIC YEAR 2018-2019  |               |                    |
|--|---------------|--------------------|
| Activity   | Level         | No. of Participant |
| DYPICONIC 2018<br>CULTURAL<br>1. Essay<br>2. Poem<br>3. E – Poster<br>4. Photography<br>5. Short Film  | National      | 63                 |
| CULTURAL 2018<br>1. Drama<br>2. Fashion show<br>3. Dance<br>4. Singing   | Institutional | 140                |
| ARTS 2018<br>1. Scribbled stories<br>2. Food mania,<br>3. Canvas painting,<br>4. Bottle decoration,<br>5. Mask making,<br>6. Digital art,<br>7. Best out of waste<br>8. Rangoli,<br>9. Mehandi<br>10. Tadoo art,<br>11. Vegetable and fruit craft,<br>12. Jewellery making,<br>13. Origami, caricature,<br>14. Sketching,<br>15. Calligraphy | Institutional | 129                |
| SPORTS 2018<br>1.Badminton<br>2. Table Tennis<br>3 Carrom, 4.Basketball, 5.Kabbadi,<br>6.Relay race,<br>7.Indoor<br>8.Football<br>9.Cricket,<br>10. Volleyball 11.Throw ball<br>12.Minimarathon  | Institutional | 514                |

| ACADEMIC YEAR – 2019-2020  |               |                    |
|--|---------------|--------------------|
| Activity   | Level         | No. of Participant |
| Mini Marathon<br>Badminton<br>Table Tennis<br>Volley Ball<br>Throw Ball.<br>(25th to 29th August 2019) | Institutional | 129                |
| DYPICONIC 2019 -CULTURAL<br>1. Essay<br>2. Poem<br>3. E – Poster<br>4. Photography<br>5. Short Film    | National      | 27                 |
| CULTURAL/LITERARY<br>Rangoli<br>Video messages<br>Debate   | Institutional | 48                 |
| World Bioethics Day 2020<br>Competition  | Institutional | 18                 |
| UNESCO WBD 2020  | International | 3                  |

### Alumni Association

The Committee noted that, the Alumni Association was registered with the Charity Commissioner of Kolhapur on 31.12 2009 registration no. MAHA 26500Kop. The President, Treasurer and Secretary and all other office bearers are alumni from the University and they oversee all activities of the association. The University supports and facilitates all activities of the AA and encourages interaction between AA and present students.

Alumni website has been created to enable working and interaction between alumni <https://alumni.dypatilunikop.org/>. The Alumni Association provides a platform to all alumni to stay in touch with each other, to get in contact with old batchmates and students, organize visits to the university or colleges and keep in touch with current students. All new graduates and post graduates are encouraged to register with the AA. Alumni involvement and contributions to the institution have been both formal/structured offline as well as informal interactions and associations. Some significant contributions are mentioned below:

**Networks:** The experience, networks and expertise of alumni is available to fresh graduates as they make their way in the world. Alumni are spread all over the globe and have made their mark in fields such as robotic surgery, joint replacement surgery, laparoscopy, endoscopy, arthroscopy, infertility, neurology, nephrology, urosurgery, cardiothoracic surgery, cardiology and many more. Nursing graduates are serving community both in India and abroad. PhD scholars are well placed in India and abroad in premier research institutions.

**Academic Input:** In the last year, five alumni from different fields have visited the University to address present students on topics as diverse as Marathon running to medical advances, from research to career opportunities. Over the years, alumni have contributed their expertise in form of guest lectures, resource persons in conferences and workshops and small group interactions with post graduate students in different specialties.

**Get-togethers:** Program-wise and Batch-wise get-togethers, department get-togethers, discipline-based meets and excursions for alumni are other activities organized. Over the eight years the AA has held the Silver Jubilee of Medical College get together which was a grand success.

**Donations:** Over the last few years, alumni have donated to the colleges pedestal fans, books, cupboards, etc. The last year saw the donation of a Table Tennis Table in the Medical College and a Music Mixer for functions in the Nursing College. Financial donations have created a corpus of Rs. 7.00 lakhs which are to be used at the discretion of the association members.

Alumni Association has provided contribution in the areas like Financial / kind, Donation of books /Journals/ volumes, Students placement, Student exchanges and Institutional endowments

## 7. Governance and Leadership

The University has clearly stated vision and mission which are reflected in its academic and administrative governance

### Vision

To become a world class dynamic institution of education research & training to develop globally competitive, professional and socially responsible human resource.

### Mission

To ensure globally relevant quality higher education and skill enhancement for providing required trained manpower to the nation & the world.

To promote symbiotic relations with industry, academic and research institutions and community to meet the expectations of various stakeholders.

To engage in interdisciplinary research and innovate for furtherance of knowledge, technology and growth.

To put in place dynamic technocracy for effective use of emerging trends in curriculum development, andragogy, evaluation and system management.

To provide an environment for holistic evolution of the learners as human, socially responsible and conscious of sustainable ecosystem.

### Goal

University to be recognized as one of the top institutions of higher learning in the next decade and achieve global recognition.

In conformity with the Mission statement, the University offers programs in Health, Allied Health, Hospitality and interdisciplinary sciences which have inbuilt employability and, provides primary to tertiary level health care facilities at free of cost to the poor patients and for others at affordable cost. It is also undertaking interdisciplinary research in the thrust areas identified by the various central funding agencies. The extensive use of technology in its academic and administrative activities is another feature of the University and has developed interface with the industry to bridge the knowledge gap.

The University, right from its inception has adopted learner-centric approach in all its academic and administrative activities.

The University has plans to start following programmes

- a. Superspecialty programmes – Nephrology, Cardiology
- b. Certificate Paramedical Programmes
- c. PG diploma in Nanotechnology
- d. Diploma and M.Sc. in Family Rx Counselling
- e. Disaster Management
- f. P. T. Unit
- g. Yoga
- h. Environmental
- i. Geriatric Medicine
- j. Respiratory Lab

#### **Effective leadership**

The University has duly constituted statutory bodies and their composition is as per the UGC (Institutions Deemed to be Universities) Regulations, 2019. The meetings of these Authorities and Bodies are held regularly as per the schedule given in the said Regulations.

The University promotes a culture of participative management. The faculty and the officers have proportionate representations on Board of Management, Academic Council, Planning and Monitoring Board, Boards of Studies and Finance Committee. Their representation on these authorities and bodies ensure participation in decision making at various levels. Student representation on Academic Council, Board of Studies, Anti-Ragging Committee, Internal Complaints Committee and the Medical Education Unit is ensured. Besides, the faculty, students and staff are members of various committees related to co-curricular and extra-curricular activities.

The University grooms leadership at various levels by following the principle of decentralization of authorities with sense of responsibility and accountability. In case of finance, the Board of Management on the advice of Finance Committee has delegated its powers at various levels. The Authorities and Bodies take the policy decisions related to academic and administration and are implemented by the officers down the line.

The administrative functionaries like Registrar, Finance Officer, Controller of Examinations and Dean of the Medical College works independently under the supervision of Vice-Chancellor.

The University encourages its academic department to function independently and autonomously.

Departmental sub-committees are formed by the departments to permit participatory deliberations.

All Departments submit their annual report detailing their activities and outcomes as assessed by them. Results of the various departments are monitored and any aberrations are brought up for deliberation.

Statutory & other Committees/Cells/Units in the University are:

- 1) Board of Management
- 2) Academic Council
- 3) Planning and Monitoring Board
- 4) Finance Committee
- 5) Board of Studies
- 6) Board of Examination
- 7) Publication Board
- 8) Research & Recognition Committee
- 9) Board of Post- Graduate Teaching and Research
- 10) Editorial Board
- 11) Internal Quality Assurance Cell (IQAC)
- 12) Institutional Ethics Committee
- 13) Institutional research Committee
- 14) Internal Complaint Committee
- 15) Anti-Ragging Committee
- 16) Community Health Education Unit

#### **Strategy Developments and Deployment Institutional Strategic plan**

The University has adopted following methodology for developing the strategic plan:

##### 1. Method for developing strategic plan

The leadership of the University at various levels works as a team and therefore togetherness prevails on the campus. The sponsoring society, Vice-Chancellor and other administrative functionaries are working together for the furtherance of the objectives of the University and have adopted participatory management. The governance system of the University is essentially based on UGC (Institutions Deemed to be Universities) Regulations, 2019. The constitution and composition of the Authorities & Bodies and their powers & functions are also as per the said Regulations. The internal co-ordination and monitoring mechanisms ensure effective implementation of decisions.

##### 2. Mechanism of its deployment

The policy decisions are taken by the Authorities and Bodies and are effectively implemented by the officers of the University. The University has four main Divisions namely General Administration, Academic, Finance and Evaluation. These divisions are further divided into sections and units depending on the needs of the administration.



The Chancellor by virtue of his position is a head of the University and presides over the convocation ceremony.

The Vice-Chancellor by the virtue of his position is principal academic and executive officer of the University and presides over the meetings of all the Authorities and Bodies of the University. He is supported by the Pro-Vice-Chancellor, Registrar, Controller of Examinations, Finance Officer, Dean of the Medical College and Medical Superintendent of the hospital.

The decisions related to academics are taken by the respective Boards of Studies and placed before the Academic Council for its approval and after getting the approval of Board of Management, they are implemented. The Finance Committee prepares the budget estimates, income-expenditure & balance sheets and it is placed before the Board of Management for its approval. Planning and Monitoring Board is responsible for preparing short-term and long-term perspective plans of the University.

### 3. Monitoring and assessment of deliverables.

The organizational needs of the system are identified by obtaining feedback from the various stakeholders. The feedback obtained is analysed and outcome is placed before the respective Authorities & Bodies. This exercise aims at finding the gaps in organizational needs and improving the quality of the governing system.

The University has adopted participatory approach in the day-to-day administration thereby all the stakeholders get opportunity to participate in the decision-making at various levels. The faculty, students and staff have representation on various Authorities and Bodies, which ensures a sense of belonging. The feedback is obtained from the stakeholders on various aspects of the functioning of the University and outcome is placed before the respective Authorities and Bodies. This entire exercise aims at enhancing and sustaining the quality of the governance system.

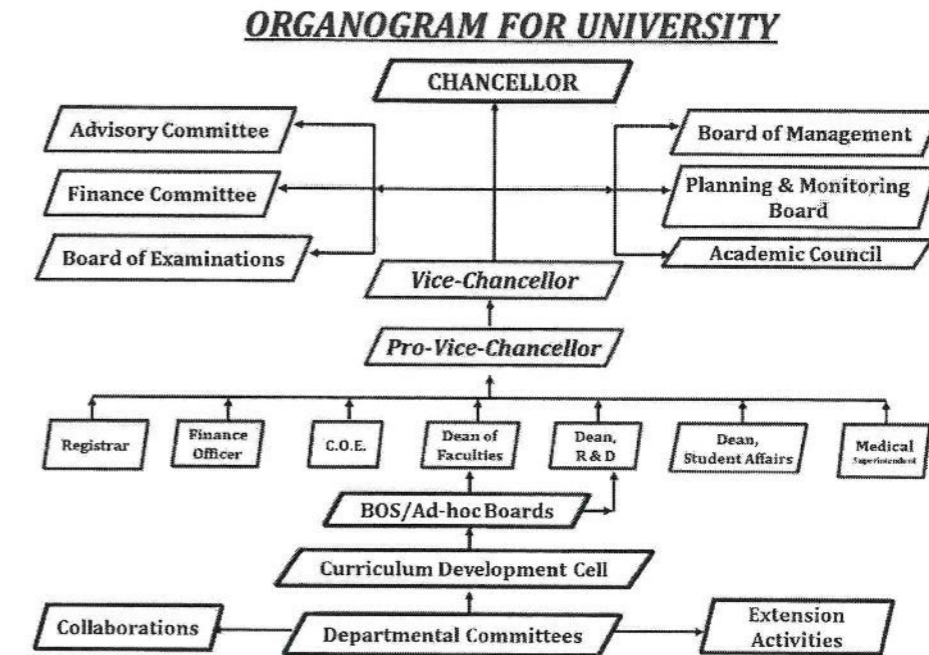
The ultimate goal of the university is to be recognized as one of the top institutions of higher learning with a global acceptance in academics and research activities.

It also aims to exert efforts in co-curricular and extra-curricular activities so that the outgoing graduates of the university have distinct graduate attributes and character to meet global standards.

To achieve the goals, the university is continuously striving to refine its teaching-learning process, training of the students, students' evaluation, research and extension activities to enhance and sustain their quality. The University provides an opportunity for the

faculty to acquire greater competencies through faculty development programs.

The AAA Committee noted that, the University ensures effective and efficient functioning of its bodies and authorities as follows:



The University has implemented e-governance in the areas of operation like Planning and Development, Administration (including Hospital Administration, & Medical Records), Finance and Accounts, Student Admission and Support and Examination

### **Faculty and Staff Empowerment Strategies**

The Committee noted that, the University has taken following initiatives/measures to enhance the professional competencies/working of its faculty and support staff:

#### **Faculty:**

- Adequate resources for teaching-learning process.
- Study/duty leaves for up-gradation of skills, presentation at seminars, etc.
- Holding and providing financial support to organize regularly conferences, seminars, workshops by the departments.
- Financial support to present papers at conferences at State, National and International level.
- The MEU department regularly organizes training and re-training programs for the faculty.
- Deputation of faculty for training programs organized by other health sciences universities.
- Sponsored and invited lectures/workshops on newer teaching methodologies, research methodologies, computer skills is a regular feature.
- Incentive to the faculty for publication of their research papers in a high impact factor journal
- University bears all costs of filing for patents by researchers/faculty
- Provision of Aprons/Lab Coats/Blazers to all faculty

### Non-Teaching Staff:

- Sensitization lectures on gender equality, patient rights, confidentiality are held.
- On the job training in newer developments in fields of computers, internet use are given.
- Events & competitions for staff in Posters, essay, rangoli, art, etc are organized

### Impact:

- Updated and competent professionals in all areas of patient care.
- Provision of advanced options to patients such as endoscopic surgery, pain management, painless labor deliveries
- Adoption of newer teaching methodologies with use of ICT.
- Increased number of research papers and projects and more number of persons involved in research activities.

There were 22 professional development / administrative training programmes organized by the Institution for teaching and non-teaching/technical staff were conducted during the last two years.

There were 688 entries of teachers undergoing Faculty Development Programmes including online programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course and any other course year-wise during the last two years

### Performance Appraisal System

The Committee was apprised by the University that, student appraisal methods are being taken to enhance the overall functioning of the University.

### Outcome:

The faculty, at the end of academic year is required to fill-up the self-appraisal reports. The same is reviewed by the respective Heads of the Departments who add the supervisory comments. This is submitted via the IQAC to the Dean/Principal of the Colleges and then the report is submitted to the Vice-Chancellor. If necessary, outcome is communicated to the respective faculty.

At the end of academic year, online feedback from the students on the teaching of the faculty is obtained. The feedback is analysed and outcome is communicated to the faculty.

The outcome of the various appraisal methods gives scope to the faculty to improve their performance in teaching-learning process and research. It is also used for their Career Advancement Scheme (CAS).

The outcome of appraisal methods helps to identify the extra ordinary talent and skills of the faculty in their area of expertise and their competencies to handle various issues such as inter personal relationship, eloquence, etc. to identify future successive leaders for the institution.

### Financial Management and Resource Mobilization

The University mobilizes its resources from funds generated mainly from students' fees, interest on corpus fund, development fund, and research grants from govt. agencies and income from hospital receipts. The institution is self-financing in nature. The funds generated are mainly used for maintenance and development of the Institution.

The Financial Estimates for each financial year are undertaken. Higher Education Activities, Research & Development and the Perspective Plan are placed before the Finance Committee and approved by the Board of Management.

### Optimal utilization of funds is ensured through,

1. Budgetary provisions
2. Quarterly auditing
3. Annual external Audits
4. Sanctioning of new procurements by relevant authorities/bodies
5. Regular inventory maintenance and checking
6. Adequate provision for developmental activities
7. Provision of funds for research funding and support

Academic support for library, teaching tools and aids, faculty training ensured.

### Institution conducts internal and external financial audits regularly

### Internal Quality Assurance Mechanism

The University has a streamlined Internal Quality Assurance Mechanism. The University strives to institutionalize the QA strategies and processes. These efforts can be broadly grouped as

1. Strategic or Organizational Level – dealing with quality policy, objectives and management
2. Tactical or Functional Level – dealing with facilities, training & operation
3. Operational Level – dealing with SOPS, worksheets, monitoring etc.

The activities to plan, implement, monitor and execute all the quality assurance mechanisms are coordinated by the Internal Quality Assurance Cell.

**Strategic Level:** At this level, following have been conceptualized and established:

| Quality Policy & Management           | Audits                               | Offices                                |
|---------------------------------------|--------------------------------------|--|
| 1. IQAC                               | 1. IT Audit                          | 1. IQAC Coordinator                    |
| 2A. Hospital Quality Assurance Policy | 2. Green Audit                       | 2. Research Director                   |
| 2B. Hospital QA Committee             | 3. Gender Audit                      | 3. Associate Dean – Academics -1       |
| 3. Feedback Policy                    | 4. Annual Quality Assurance Exercise | 4. Associate Dean - Academics -2       |
| 4. Website Policy                     | 5. Academic and Administrative Audit | 5. Associate Dean Students Affairs     |
| 5. IT Policy                          | 6. Energy Audit                      | 6. Associate Dean Research             |
| 6. Ethics Policy                      |                                      | 7. Coordinator for Fellowship Programs |
| 7. Research Policy                    |                                      |  |
| 8. Research Incentive Policy          |                                      |  |
| 9. Consultancy Policy                 |                                      |  |
| 10. Environmental Policy              |                                      |  |

**At the Functional Level,** quality assurance in different spheres is guided, monitored and enhanced through the working of various bodies and committees are governed by SOPs and participative management. The IQAC coordinates the activities of the non-statutory bodies.

| Statutory Bodies                            | Non-Statutory Bodies/Committees |                                   |
|---|---------------------------------|-----------------------------------|
| Board of Management                         | IQAC                            | Community Health Extension Unit   |
| Planning & Monitoring Board                 | Website Committee               | Entrepreneurship Cell             |
| Academic Council                            | Medical Education Unit          | Campus Placement Cell             |
| Board of Studies                            | Women Development Cell          | Gender Sensitization Committee    |
| R & R Committee                             | Anti-Ragging Committee          | Consultancy Cell                  |
| Board for PG Teaching & University Research | Internal Complaints Committee   | Institutional Research Committee  |
| Board of Examinations                       | Students Council                | Institutional Ethics Committee    |
| Finance Committee                           | NSS Unit                        | Library Committee                 |
| Grievance Redressal Committee               | Research Guidance Cell          | APJ Abdul Kalam Incubation centre |

**At the Operational Level,** the University through the IQAC ensures the activities and updating of documents and information gathering as depicted below:

| Activities & Documents       | Data & Feedback              | Training & Workshops           |
|------------------------------|------------------------------|--------------------------------|
| Revision of Vision & Mission | NIRF Ranking                 | QA Trainings                   |
| HOD Presentation             | AQAR Submission              | Update training for ICT        |
| GCP Guidelines               | UGC Annual Review            | NABH Training                  |
| GLP Guidelines               | University Website           | GCP Training                   |
| NABH Accreditation           | Alumni Website               | NABL Training                  |
| Online Feedback Forms        | Facebook Page                | BLS                            |
| Data Collection Forms        | Twitter Handle of University | Guest Lectures, Seminars       |
| RCOMET Program               | Student Feedback             | LMS Trainings                  |
| BITMER Certification         | Alumni Feedback              | Research Methodology workshops |
| Value-added courses          | Employers Feedback           | Bioethics 3T workshops         |
| DYP ICONIC National event    | Faculty Feedback             | e-Learning                     |
| Student Guardianship Program | UMGS Feedback                | Artificial Intelligence        |
| Village Adoption Scheme      | Hospital website             |                                |

**IQAC Structure:** The IQAC follows the guidelines of NAAC and UGC in its constitution, with External invited members and representation of Sponsoring Body, Management, Faculty, Students and invited guests. The Vice Chancellor Chairs the IQAC and Coordinator/Director/Member Secretary is a senior faculty member.

**IQAC Function:** The IQAC meets regularly at least 4 times a year to discuss matters placed on the agenda (declared earlier) or with permission of the Chair. The decisions of the IQAC that impact existing policy or call for new policy are placed before the statutory authorities of the University. Other decisions could be placed before Heads of Departments, Academic Co-ordinators, MEU, Dean, HQAC, Examination Cell or the Registrar of the University. Feedback collected and analysed by IQAC is presented to the BOM.

**Initiatives of IQAC in last two years:**

| Sr. No. | Item /Title of the quality initiative by IQAC in AY 2018-2019                                  | Date      | Duration | Number of participants/beneficiaries |
|---------|--|-----------|----------|--------------------------------------|
| 1.      | Research Incentive Policy revised  | 30-Jul-18 | 30       | 200                                  |
| 2.      | Annual Quality Assurance Exercise 2018 within University with External Peer Team               | 29-Nov-18 | 365      | 9999                                 |
| 3.      | NABH Training by NABH Trainer for nonteaching and teaching staff.                              | 04-Oct-18 | 2        | 35                                   |
| 4.      | GCP Training for teaching and non-teaching staff by Recognized Trainers.                       | 15-Sep-18 | 1        | 40                                   |
| 5.      | NAAC Pilot Study in collaboration with NAAC for new Manual of Health Sciences for Universities | 05-Jan-19 | 30       | 40                                   |

| Sr. No. | Item /Title of the quality initiative by IQAC in AY 2018-2019                                     | Date      | Duration | Number of participants/beneficiaries |
|---------|---|-----------|----------|--------------------------------------|
| 6.      | Make the University into a seat of Quality Continuing Professional Development                    | 01-Jul-18 | 365      | 9999                                 |
| 7.      | Establishment of APJ Abdul Kalam Incubation Cell in University                                    | 03-Aug-18 | 365      | 250                                  |
| 8.      | AQAR 2017-2018 submitted online   | 31-Dec-18 | 1        | 9999                                 |
| 9.      | Participation in NIRF 2019 ranking  | 16-Dec-18 | 1        | 9999                                 |
| 10.     | MOU with Health Minds Co. Ltd Bengaluru for research guidance and education of students & faculty | 29-Jun-19 | 1095     | 440                                  |

| Sr. No. | Item /Title of the quality initiative by IQAC in AY 2019-2020                               | Date                        | Duration | Participants/beneficiaries |
|---------|---|-----------------------------|----------|----------------------------|
| 1.      | Improved AQuA-X conduct and assessment based on feedback                                    | November 2019               | 2        | 175                        |
| 2.      | University Website re-designed and updated  | July 2019                   | 365      | 12                         |
| 3.      | Hospital Website creation   | February 2020               | 160      | 8                          |
| 4.      | Establish Entrepreneurship Cell   | November 2019               | 365      | 160                        |
| 5.      | NABH Accreditation efforts  | 2018-19                     | 365      | 28                         |
| 6.      | Foundation Course design & timetable  | August 2019                 | 30       | 150                        |
| 7.      | Need analysis for new Programs to be started [aborted due to lockdown]                      | -                           | -        | -                          |
| 8.      | Consultancy Training for faculty  | 28-29-01-2020               | 30       | 50                         |
| 9.      | CISP Implementation Monitoring with MEU   | 6-8 <sup>th</sup> June 2019 | 60       | 30                         |
| 10.     | Entrepreneurship Development Cell created   | December 2019               | 90       | 30                         |
| 11.     | Audits for IT, energy, Green & AAA  | February 2020               | -        | -                          |
| 12.     | UBA coordination with Science Day camp of INYAS   | February 2020               | 2        | 200                        |
| 13.     | Alumni Tracking & Website updating to be streamlined. Alumni data collection to be improved | December 2019               | 180      | 1000                       |
| 14      | NSS Best Student Criteria defined   | Nov 2019                    | 20       | 100                        |
| 15      | Performance linked incentives to students for extra-curricular activities                   | -                           | -        | -                          |

Quality assurance initiatives of the Institution include Academic and Administrative Audit (AAA), Annual Quality Assurance Exercise (AQuA-X) and initiation of follow-up action, Conferences, Seminars, Workshops on quality, Collaborative quality initiatives with other Institution(s), Orientation programmes on quality issues for teachers and students, Participation in NIRF process and quality audit by recognized State, National or International agencies ( ISO, NABH, NABL Certification)

#### Impact analysis of the various initiatives

It is observed that, the University has taken various steps to analyse the impact of various initiatives.

**Steps of Impact Analysis – a continuous process:** IA is a continuous process of multiple steps that merge in time as well as sequentially depending on project/system being studied. The steps for ascertaining the impact analysis are

1. Project development – goals, aims and objectives, measures and markers of effectiveness/success, benchmarks of measures need to be defined
2. Information/Data gathering – continuous input on various aspects of system collected. Methods of collection, validity of collection formats, credibility of data collected, data entry reliability and confidentiality are to be considered.
3. Data Criticality and application – Identification of relative importance of datasets, differential handling, prioritisation of data utilization are studied.
4. Data Analysis – reliable data analysis based on the parameters of effectivity/success initially identified is essential. Studying data patterns for unexpected or changing trends is also done.
5. Analysis Reporting- Relevant stakeholders acquainted with the reports generated to determine the actions to be taken. The report must answer questions generated by objectives and their quality achievement.

**Impact Analysis Procedure:** Once the report is generated further analysis includes

1. identification of possible mechanisms/processes/systems to be modified/changed/introduced
2. deliberation on the possible implications of making the change
3. study associated/dependent systems that may be impacted by proposed change
4. enumerate tasks, list requirements, assign responsibility and provide logistics for implementation.

#### Impact Analysis Outcomes

| Heading             | Analysis Outcome   | Change implemented  |
|---------------------|--|---|
| Student Performance | Regular Meetings of the mentoring system are held with mentors either always or mostly as reported by 62.3% alumni and often by 17.5% of alumni.   | Online reporting of Meetings to be submitted by both mentor and mentee to monitor records and regularity.   |
| Teaching Learning   | 1. Continue online courses and introduce certifications (90%)<br>2. Continue blended learning methods even after lockdown is over (93%)<br>3. Some teachers are simply reading from their powerpoint slides during online classes – 40% students mainly from a single program.<br>4. Of students, 60% felt teachers needed more training for online use. | 1. Proposed to design some purely online modules for certification and present them to Academic Council for approval. Two university faculty are preparing first two such modules.<br>2. Medical Education Unit apprised of this and requested to take suitable steps<br>3. Sub-analysis of data identified the programs and steps to rectify the same were taken with teacher training and counselling measures. |

| Heading                | Analysis Outcome   | Change implemented  |
|------------------------|--|---|
| Assessment & LO        | 1. Form filling for university exams was not satisfactory according to 20% students.<br>2. of the 676 responses, 7 students were unhappy with invigilators attitude to toilet-breaks<br>3. Of 676 responses, 12 students claimed paper were out of syllabus. | 1. Examination Section informed to facilitate online application of hall ticket for subsequent examinations<br>2. Examination Manual prepared. Care taken to specify the bathroom-privileges and precautions to be taken thereof.<br>3. Examination papers checked by senior faculty to identify out-of-syllabus content and found OK. Report submitted to Examination Section. |
| Research               | Funding to be given even to students for research projects subject to approval by IRC and IEC  | Proposed to modify Research Incentive Policy to allow for funding for PG students and UG students for research.   |
| Feedback               | 61.4% alumni reported that student feedback implemented & action taken communicated to student body always/mostly  | Resolved to inform students of all changes implemented based on feedback through LMS.   |
| Administrative Reforms | Student feedback on academic or administrative matters of department or college is taken always or mostly as reported by 64.1% of alumni and often by 16.7%.   | Communication to University Office and Heads of institutions to deliberate with students on reasons for feedback while considering.   |

## 8. Innovative Practices

### Institutional Values and Social Responsibilities

Measures initiated/adopted for the promotion of gender equity

Institution has initiated several measures for promotion of gender equity which are assessed, monitored and enhanced based on regular Gender Audit conducted with External Peer member participation. This underlines the firm belief and conviction that gender equity, absence of gender discrimination, support for gender equality are essential for the progress and development of any organization, society or nation.

- Representation of women is proportionate and respected
  - 34% of all senior leadership positions are held by women in both teaching and non-teaching areas
  - Women are adequately represented in all bodies and Committees of the University for academic, research, administrative and planning concerns.
- Women Development Cell established in 2015 represents the thoughts, needs and ideas of the women in campus. The Cell has representation from all units of the University and from teaching and non-teaching employees.
  - The WDC regularly undertakes activities like guest lectures, competitions, social and cultural events both within the university and in the community to uplift the cause of women.
  - Faculty and Staff participate in the Women's Day Rally along with Students.

- They also participate in various competitions and events in the capacity of organizers/resource persons in the local community of Kolhapur.
  - Five of our staff/faculty have been felicitated by the community for their contribution to the cause of women up-liftment with awards such as Maa Durga Award, Women Empowerment Award, etc.
  - The WDC has educational health-related and social-issues related meets with the local Mahila Bachhat Gat
  - Participation in Save the Girl Child activities
- Internal Complaints Committee (erstwhile sexual harassment Committee) has been operational for over 5 years with regular meetings, activities and efforts to raise awareness. To prevent sexual harassment of women at workplace, and to protect the rights of its women employees and prevent their exploitation, the University has developed a policy for prevention of sexual harassment. Some activities have included:
    - Guest Lectures from Vishakha Cell
    - Self-Defense training for women
    - Awareness drives in campus
    - Poster competitions and displays on relevant issues
    - Training of ICC members on latest guidelines and directives
  - Separate common rooms, washrooms and cubicles are provided to faculty and students.
  - The most appreciated effort of the institution is towards the policy of "Save the girl child" through the hospital.
  - Availability of maternity leave and flexi time-table for feeding mothers, special preference to attend the conferences/seminars/workshops are some other facilities made available to them.
  - Ensuring accompanying faculty for field visits, rural projects or health camps always includes one women faculty.
  - Girl students are provided with sanitary facilities in the bathroom and common room to ease their challenges during menstruation days
  - Students participating in inter-collegiate events are always accompanied by the female teachers and given logistic support of transport and security.

### Environmental Consciousness and Sustainability

The University has facilities for alternate sources of energy and energy conservation measures like Solar energy, Biogas plant, Wheeling to the Grid, Sensor-based energy conservation and Use of LED bulbs/ power efficient equipment.

The University has facilities for the management of various types of degradable and non-degradable waste like Solid waste management, Liquid waste management, Biomedical waste management, E-waste management, Waste recycling system and Hazardous chemicals and radioactive waste management.

**The University has water conservation facilities available like** Rain water harvesting, Borewell /Open well recharge, construction of tanks, Waste water recycling and distribution system in the campus.

**The University initiated Green campus activities which include** Restricted entry of automobiles, Battery-powered vehicles, Pedestrian-friendly pathways, Ban on the use of Plastics and Landscaping with trees and plants

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

- **Voting Awareness:** Lecture on importance of voting, mechanisms of e-voting, and need to cast the vote responsibly are conducted. Student participation in rallies in the community to increase awareness of need to vote was done.
- **Support local Administration:** The NSS unit, Community Health Extension Unit and Community Medicine Department contribute to data collection, survey drives, vaccination promotion drives, cleanliness drives, awareness efforts of the district administration emphasizing responsibilities of every citizen to support Government Efforts. The efforts like Flood Relief activities and health facilities to affected people were appreciated by authorities.
- **National Pride:** Celebration of national days, skits and role plays on historic events, competitions on patriotic songs, respect for the national anthem and national song are important parts of university activities. Every University function like Foundation Day, Annual Day, Convocation is started by singing the National Anthem and ended singing the National Song.
- **Patriotism:** Celebration of Flag Day, contributions to Army funds, visit to local military units, ambulance & medical back-up for events of these units, sending letters/cards/messages to jawans, exploration of careers in defence services are some activities conducted.
- **Inculcating a sound value system among students:** The value system forms an integral part of curriculum development, teaching-learning process, research and extension activities.
  - The students during RCOMET/UBA/internship programs visit villages to understand need to uplift rural people in certain aspects

- Visits to old age care centres & orphanages, rallies on social issues, blood donation camps, etc. give exposure to their social responsibilities.
- Value based enrichment courses on ethics and the AETCOM module promote sound social value systems.
- The NSS Unit undertakes extension outreach activities related to social and healthcare problems for the neighbourhood communities.

All these efforts of the University help to inculcate value system, curiosity, qualities of care & kindness and universal brotherhood amongst its students.

- **Medical Humanities:** Various issues related to medical humanities are incorporated in the under-graduate and post-graduate curriculum. The Department of Community Medicine teaches sociology. Interns posted in the RHC and PHC get exposed this dimension of medical profession.
- **Law and Legal requirement:** The importance of knowing, correctly interpreting and following the legal requirements of all aspects of professional and personal life is conveyed to students. Guest lectures by respected members of the legal and medico-legal professions add to the formal curriculum of Forensic Medical and Toxicology to educate students in this regard.
- **Responsible Professionals:** Medical ethics, professionalism, communication skills and attitudes are taught to the students at various levels and on several fronts.
  - The curricula design provides for adequate emphasis on the patient safety, confidentiality and their rights and education.
  - Orientation courses organized includes topics on professional ethics, ethical clinical practice, patients' safety and their rights. Such orientation programs benefit them immensely and reinforce ethical values, patient's safety and confidentiality in research and clinical practice.
  - Lectures are taken on patients' rights, responsibilities and doctors' code of conduct for under-graduate and post-graduate students. Concepts of valid consent, confidentiality, privacy, beneficence and non-maleficence as applied to practice are taught.
  - Use of evidence based medicine, respecting patient autonomy and respecting all people are important teachings in this regard.
  - Extracurricular and co-curricular activities by NSS and other bodies are based on themes that promote professionalism and the virtues that support it.

The University Handbook provides for code of conduct for students, teachers, administrators and other staff. The contents are MHRD Notification, Message from Founder President, University Song, Message from President, About University, Programs Offered, Graduate Attributes, Orientation Programs, Beginning Steps, Student Support, Hostel, Student Conduct, Student Activities, University Publications, Research, Research Facilities, Funding, Hostel Rules and Regulations.

Programs conducted for this are orientation and induction programs each year. The mentoring platforms provide continuous reinforcement of the conduct expectations from students. Review of faculty performance, swift response to potentially disruptive behaviours and counselling of faculty and students are some other efforts in this direction.

The University celebrates/organizes various national and international commemorative days, events and festivals.

- Celebration of Republic and Independence Day, National Youth Day, Doctors Day, Dr. Ambedkar and Mahatma Gandhi Jayanti, National Unity Day and likes are celebrated each year to create patriotism.
- Local festival of Ganesh Chaturthi is celebrated by staff and students from all religions and backgrounds in campus to create value system.
- Department of Community Medicine regularly organized WHO/ICMR programs like World Health Day, Doctor's day, National Pulse Polio program, Breast-Feeding day etc. to create medical humanities.
- Students Councils and relevant Committees are involved actively for smooth organization and large participation of all students and employees is seen, to create responsible professionals.
- The University support Students Council in organization of the week-long annual social gathering, annual sports events, Art and Craft exhibition with monitoring of the conduct of students during organization and execution of the events.
- Science Day celebration, Celebration of Ganesh Festival, Celebration of various National Days related to health programs, National Health Programs through NSS unit, etc. are some other programs celebrated.
- National Sports Day is celebrated by organizing student sports competitions. Annual Sports of the constituent units of the university are also celebrated by individual units.
- Foundation Day of the University is celebrated each year on 1<sup>th</sup> September with invitation to Chief Guest from the region to address students and provide inspiration for their future life.

## Best Practice

### Best Practice No.1 - YOGA PRACTICE IN LEARNING ENVIRONS

1. **Title of practice:** Yoga practice in learning environs
2. **Objectives of the Practice:** To inculcate in students the habits of self-control, discipline and improve knowledge and adoption of Indian cultural practices through introduction of Yoga practices within the teaching-learning spaces of the University.

3. **The context:**

Today's learner operates and performs in a fast-paced and exacting society with the potential stresses of continuously evolving technologies, increasing competitiveness, rapid knowledge escalation and need for regular updating of skills. This is in addition to personal and life goals that merge with the professional in the continuum of their careers.

Skills of self-control, self-discipline and the ability to handle stress in addition to improving attention and mental wellbeing are some traits that Yoga can actualize with ease and no financial outlay. These are in addition to benefits to physical health.

If students are acquainted and trained in simple yogic practices the skills will stand them in good stead for a long time. Also, it will provide a realistic and first-hand experience of the benefits of yoga which potentially could persuade therapeutic options offered to patients.

4. **The Practice**

The benefits of Yoga are universally acknowledged and scientifically proven. The need for more and more youth to garner the benefits of this ancient practice was realised.

The following practices were put in place within the University:

1. Faculty were trained in simple yogic practices by a faculty member who is also a recognised teacher of the Patanjali Yog Samhiti. Two training sessions were taken for a group of one faculty member from each department.
2. All departments spend 10-15 minutes at the start of their practical class when students are taught and then asked to practice simple postures, meditation and breathing exercises as per yogic system.
3. In the hospital students spend 10 minutes before the clinics in different departments to practice yogic exercises or meditation with deep breathing exercises.
4. For those keen on learning more, the Yoga Lab offers the equipment, space and training within the campus.

#### 5. Evidence of success:

- a. Students and faculty are continuing with this practice for last 2 years within the limitations of space and time. Dharana, Pranayam
- b. Some departments included asanas in their yoga sessions
- c. Feedback from students has been positive about the practice being conducted.
- d. Students have been motivated to participate in a study being conducted by the Yoga Lab on Yoga
- e. The establishment of Yoga classes for the ante-natal mothers in the hospital has become a success
- f. Students and faculty participate in the International Yoga Day celebrations at the hospital, nursing college and university each year.

#### 6. Problems encountered and resources required:

No real problem was encountered. However, few teachers took some time to adjust to this new practice and become comfortable with doing the yoga exercises with students.

7. Resources required: Capacity building amongst faculty, willing faculty and space for those faculty/departments who also included asanas in their yoga sessions.

### Best Practice No.2 - LMS FOR ADMINISTRATIVE EFFICIENCY

#### 1. Title of practice: LMS for administrative efficiency

2. **Objectives of the Practice:** Optimal utilization of available ERP to assure quality and enhance efficiency of the administrative work within the University and its constituent units.

#### 3. The context:

Teaching faculty in Health Sciences institutions are entrusted with academic, clinical, research and administrative duties. Ensuring quality in these multiple areas in addition to personal and professional development mandate a need to overcome challenges of time and prioritization. In addition, quality assurance transactions increase need for documentation and record keeping. To facilitate ease of routine, banal and yet elemental obligations of administrative duties, ICT through the ERP offers an efficient and transparent alternative.

Use of ICT also reduces the amount of paper that is used at all levels which

#### 4. The Practice:

ERP with a Learning Management System was introduced in 2017 in a phased-manner with different modules introduced to relevant users. However, well acknowledged challenges of familiarity with software, software customization, setting up tailored systems, individual proclivities for computers had to be overcome. Several steps were taken for the same:

1. Capacity building of faculty through multiple training sessions by experts
2. Responsiveness of software developers and engineers to faculty problems was ensured to allow for ease of participative development of the final module
3. Prompt resolution of identified problems was made for user-related challenge in form of guidance, hands-on training and repeat trainings
4. Prompt modifications of software to suit institutional needs was undertaken through the team of developers and IT experts seated in-house.
5. Introduction of different functions of a given module in a phased and progressive manner reduced the disquietude of sudden change.
6. Individual logins are given to each faculty which gives them access to their password-protected accounts. Administrators and authorities have access to only those relevant sections of individual faculty accounts that are related to departmental work.
7. Identification of those functions for individual faculty or departments that were linked to necessary outcomes such as leave sanctions, salary linkage to online-attendance, indent of stationery or laboratory chemicals was done. This ensured higher willingness to use the ERP/LMS by faculty and staff.
8. Leave functions have been transferred to the ERP. Advance applications for leave are made online and if recommended by HOD, forwarded to Head of Institution for approval. In the event that the HOD does not make his or her recommendation within 48 hours, the leave application is forwarded directly to Head of Institution to be disposed off at discretion
9. Duty Leaves for attending conferences, presenting papers/posters, taking examinations are also made on the ERP. Final sanction of the approved leave is done when the faculty uploads the certificate of attendance, paper presentation and any distinction or award conferred on the faculty.
10. Indent for items of regular use in departments is also made online through the demand note in the ERP.



11. Attendance of all faculty is taken through biometric system which is linked with the ERP. This has made computation of salary simpler, transparent and made faculty more accountable for adhering to timings, applying for leave, etc.
12. Circulation of notices, circulars, teaching schedules, minutes of meeting, news about departmental activities and reports are done through the ERP/LMS.

**5. Evidence of Success:**

1. Faculty profiles are uploaded and available on the LMS module of the ERP with regular updates by the individual faculty providing the authorities with a depository of all academic and research work done by faculty over time. This facilitates generation of data, submission of official data to authorities etc.
2. All leaves are now applied, recommended and approved entirely through the online system. This ensures leave calculation is transparent and fair and record-keeping is precise.
3. Records of conferences attended, papers presented are transparent. Also, deficient or excess duty leave being taken can be identified.
4. Online indenting saves paper and allows for inventory control. Monitoring usage of individual departments and different heads of expense allows for improved managerial and fiscal accountability.
5. Faculty grouses with salary computation have reduced drastically.
6. Efficient of information flow, transfer of data and response to queries within departments has been enhanced.

**6. Problems encountered and resources required:**

**Problems encountered:** These were mainly in two areas

- a. Qualms of faculty to shift from habituated paper-based system to the online mode for administrative work
- b. On-going need for customization of software as usage of the modules increased.

**Resources required:**

- a. A flexible and modifiable framework of software being used
- b. IT team willing and able to make modifications as per need
- c. Regular and continued training, guidance and hands-holding of users by IT experts
- d. Patience and belief in faculty and staff.

Readiness for online learning is not a success factor. The system has many features like chat and forum but most of the faculty and students use the LMS as a basic content management system. Motivating the students and faculty to use the system is important. Investigating the impact of the LMS characteristics in the system success is necessary.

## 9. Recommendations

Based on the Academic & Administrative Audit conducted by the Committee, our recommendations are:

| No           | Criteria I  |
|--------------|---|
| 1            | PO, PSO, CO details & Listing not mentioned   |
| 2            | IQAC Role in Curriculum Development   |
| 3            | Courses integrating crosscutting issues - format suggested  |
| 4            | Is Feedback analysis presented to academic body by IQAC?  |
| 5            | Nurse Practitioner's Course in critical care nursing-PG residency program                                   |
| 6            | Nursing Syllabus revision once in 4 years   |
| 7            | Start Simulation lab; visit National Simulation Ref. Centre   |
| Criteria II  |   |
| 8            | Mechanism of Assessment of learning level after admission to be described in detail                         |
| 9            | Outcome of Remedial measures to be described in detail  |
| 10           | Communication to Stakeholders to be described in detail   |
| 11           | Student Centric methods, ICT toolsto be described in detail   |
| 12           | Performance Appraisal System for Faculty: describe in detail  |
| 13           | Discuss Student Satisfaction Survey in IQAC/Acad.Council  |
| 14           | Quantify improvement in pass percentage of students   |
| 15           | Student entrepreneurship to be described in detail  |
| 16           | How COVID-ready is University   |
| 17           | Co-hosting for elective student placement - can be undertaken   |
| Criteria III |   |
| 18           | Research Policy – describe in detail  |
| 19           | Incubation Cell– describe in detail   |
| 20           | Consultancy Policy - describe. Also, quantify monetary funds raised and mention non-monetary contributions. |
| 21           | Extension Activities – describe in detail   |
| 22           | Centre of Excellence for Research to be identified  |
| 23           | Define Thrust areas for medical research and describe   |
| 24           | Need to increase research output- Nursing articles, projects; enhance cumulative index of faculty           |
| 25           | MOU by Nursing College to increase  |

| Criteria IV  |  |
|--------------|--|
| 26           | Recreational facilities to be described in more detail                     |
| 27           | Library resource Centre can be enhanced                                    |
| 28           | IT Audit to be conducted   |
| Criteria V   |  |
| 29           | Alumni Association activities & documentation could be improved            |
| 30           | Norms for constitution of student council to be specified                  |
| 31           | Highlight Student Support System in more detail as good work is being done |
| Criteria VI  |  |
| 32           | Quantify how many IQAC resolutions are upheld and add in report            |
| 33           | Elaborate mention of meetings of bodies with ATR to be included            |
| 34           | Documents of all activities to be validated by head of institution         |
| 35           | IQAC reports to go through Academic Council                                |
| 36           | IQAC Meetings could follow fixed annual pattern with reference to Agenda   |
| 37           | University Website to be dynamic   |
| 38           | Regular checking of UGC, MCI, INC, etc sites to be done on daily basis     |
| Criteria VII |  |
| 39           | Think of innovative best practices   |

Dr. Shashank D. Dalvi  
Chairperson

Dr. K. Venkatramani  
Member

Dr. Sudha Raddi  
Member

Dr. Bhagwan M. Hirdekar  
Member