



Dr. Vithalrao Vikhe Patil Foundation's

# Medical College & Hospital

Ahmednagar



## SOP For Department of Physiology

## **INFRASTRUCTURE AND FUNCTIONING OF THE DEPARTMENT**

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## VISION AND MISSION

### **Vision**

- In education, to improve the standards of teaching to both undergraduate & postgraduate students that copes with the global levels.
- In research, we work towards being a leading department where we aim to conduct researches which can solve many significant problems in our community and contribute significantly to the advancement of scientific and medical knowledge

### **Mission**

Physiology Department works to achieve the following objectives:

To provide educational services in the field of physiology:

- Teaching and practical training for undergraduate students of First Year and Second Faculty of Medicine.
- Teaching and practical training for students of various colleges benefiting from the study of physiology.
- To provide continuing medical education for doctors in various medical specialties benefiting from the physiological study after graduation.

Conducting research in the field of Medical Physiology

## **SCOPE OF SERVICES**

**Department of physiology has broadened its scope to include training in**

- **Sports Physiology**
- **Neurophysiology**
- **Diabetes, Thyroid and other endocrinology disorders**
- **Hematology**
- **Respiratory physiology**
- **Geriatric and**
- **ANS physiology**

## **ROLE OF DEPARTMENT**

**a) Physiology is the integrative study of cellular and whole-body function, and is the pivotal discipline linking other basic biomedical sciences on the one hand with experimental and clinical medicine on the other.**

**b) We are a teaching- and research-intensive department focusing on advanced studies in cardiovascular physiology, cellular and systems neurophysiology, cellular and molecular physiology, endocrinology, fetal/neonatal physiology, membrane biophysics and transport physiology, renal physiology, respiratory physiology, vision, and the interfaces between these fields.**

**c) Our Department is dedicated to understanding fundamental physiological processes and translating these to clinical care.**

**d) We are committed to help equip and infuse in our students a life-long love for learning, the excitement of discovery and a keen sense of curiosity about the chemical, physical and biological functions of life.**

**e) In research, we work towards being a leading Pre-Clinical department where we aim to contribute significantly to the advancement of scientific and medical knowledge.**

## **INFRASTRUCTURE OF THE DEPARTMENT**

Physiology department is situated on the 2 nd floor of medical college building and includes,

- **Faculty offices-**
  - HOD Office**
  - Associate professors office-02**
  - Assistant professors office-04**
  - Tutors office-04**
  - Non-teaching room-1**
- **Departmental Office,**
- **Departmental library/Seminar room**
- **Demonstration room- 02**
- **Departmental Research lab**
- **Hematology lab with preparation room**
- **Clinical lab with preparation room**
- **Store room -02**

## ORGANIZATION & PATTERN

PROFESSOR AND HEAD



PROFESSOR



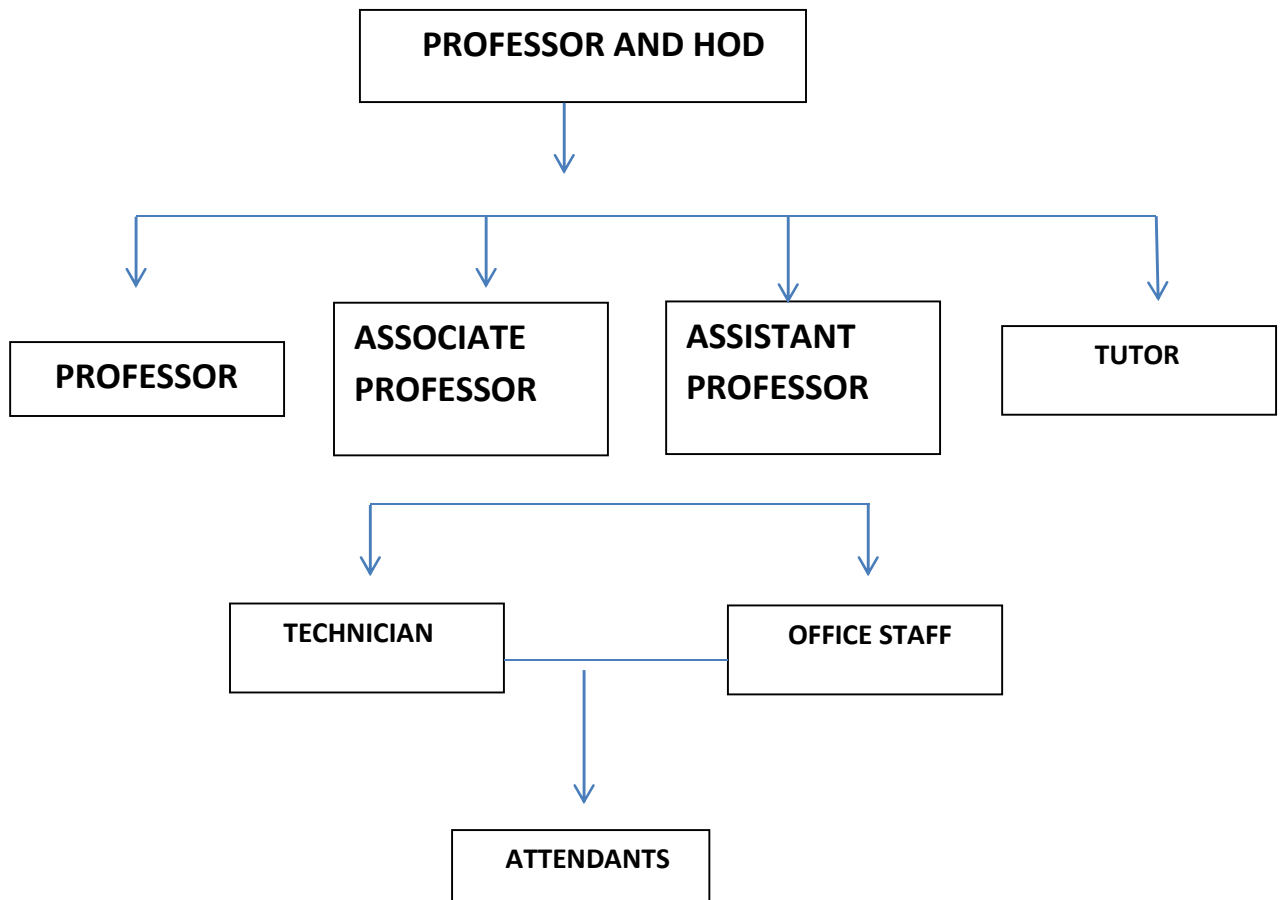
ASSOCIATE PROFESSORS



ASSISTANT PROFESSORS



TUTORS





## DUTIES AND RESPONSIBILITIES

### Responsibilities and Duties of Professor and HOD

- To perform duties given under statutory provisions of Medical Council of India, Maharashtra Medical Council, Maharashtra University of Health Sciences and Dr. Vitthalrao Vikhe-Patil Foundation (DVVPF).
- To ensure implementation of various rules, acts and laws related to Medical Education and Hospital services Acts related to various allied specialties, enacted by Government of India and State Government for the purpose of conducting various Medical Undergraduate and Paramedical courses.
- To maintain and continually improve the standards of medical education and research with reference to NAAC, MCI and other accreditation authorities.
- To implement policies laid down from time to time in order to work towards achieving the vision and mission of the Institution and the department
- Strive to keep up and improve on the reputation of the institution as a center of excellence in the field of medical education, training and research.
- To maintain disciplined, ethical, humane and courteous culture in the and around department.

### Academic Responsibilities

#### Administrative and supervisory duties:

- To perform all such duties under statutory provision of various acts laid down by the University which, govern the services of the staff working in the department. This also includes laws, acts and rules applicable and adapted by the university.
- Prepare annual budget for the department timely for smooth running of the department.
- Establishment of matters like control over staff of the department by:

a) Distribution of duties and responsibilities Administrative, Academics, and outreach

b) Discipline, Regularity and punctuality by maintaining muster roll, movement registers etc.

c) Ensure smooth functioning of the department during leaves of the staff members and vacations etc.

d) Proposals for promotion - Monitor academic performance of staff periodically and encourage them to improve and update themselves so as to achieve excellence.

e) To serve memorandum and call for explanations from undisciplined, irregular, irresponsible staff and propose suitable action against them.

f) Initiate the annual performance appraisals of staff.

- To achieve desired levels of academic performance by helping to organize, distribute, monitor, punctuate and also perform academic activities like

a) Conducting Graduate teaching & training activities as per schedule

b) Conducting practical's, Tutorials, Periodic tests and examinations,

c) Instructions programs for slow learners,

- Conducting University examinations - Theory and Practical

- To work as Paper setter, Moderator, examiner, CAP evaluator etc.,

- To prepare a time bound teaching and training schedule with aim of building clinical competence and strive to achieve desired objective in time for UGs

- To evaluate the progress of undergraduate students,

- Ensure regularity, punctuality and discipline amongst UG students. Imbibe work culture, cordial inter personal relations amongst them,

- Make UG students conversant with communication skills and counseling procedures.

a) Encourage students to participate in conference, extracurricular activities, at college, university & higher levels,

b) Guiding & helping faculty to develop teaching skills by allotting theory classes and practical classes under supervision of seniors.

c) Identifying weak areas of faculty in teaching, learning, research etc. and overcoming the problems by suitable counseling and guidance..

- To identify the aptitude, competencies and special interests of the faculty and give them suitable job responsibilities or value additions to their regular duties.

- To prepare and pursue proposals for qualitative upgradation of the department and the institution at large.

- To identify potential talents amongst staff and encourage them to achieve better and newer, skills through in service training, fellow ships, refresher courses through institutional resources whenever possible.

- Help faculty to achieve desired levels of performance by upgrading & updating departmental library.

- Ensure availability of medical equipment that is in good working condition. Ensure timely procurement of new equipment. Strive to fill up gaps between MCI recommendations and available equipment and instruments.

- Ensure maximum faculty is exposed to medical education training (MET) program.

- To work on college council and other committees (academic, administrative) as required by the institution.

- To organize guest lectures, live workshops, CME, Conferences by renowned professionals and also participates in such activities in other institutions.

- To ensure research work, publications, participation in Conferences, workshops, seminars etc. at Institutional, State, National and International levels and encourage the faculty to do the same.
- Be vigilant about ragging, gender harassment and welfare of physically handicapped staff and students.
- To ensure appropriate arrangement for smooth functioning of the department while proceeding on temporary duty, leave or any kind of vacation by making suitable arrangement.

### Responsibilities and Duties of Professor

- To perform duties given under statutory provisions of Medical Council of India, Maharashtra Medical Council, MUHS and VIMS.
- To abide by various rules, acts and laws related to medical Education and Hospital services Acts related to various specialties, enacted by State Government and Government of India for the purpose of conducting various Medical Undergraduates and Paramedical courses.
- To maintain and continually improve the desired standards of Medical education, Research with reference to NAAC, MCI and other accreditation authorities. To perform all such duties under statutory provision of various acts laid down by MUHS which govern the services of the staff working in the department. This includes laws, acts and rules applicable and adapted by the University.
- To maintain well-organized, courteous, ethical, and benevolent culture in the department and institution at large.

Academic Activities/ Responsibilities • To Achieve desired levels of academic performance by

- a) To help HOD to organize, distribute, monitor, punctuate and also perform academic activities like conduct UG teaching & training activities as per schedule in collaboration with HOD

- b) Conducting practical's Tutorials, Periodic tests and examinations.
- c) Instructions programs for slow learners,
- d) To conduct examinations-Theory and practical
- e) To work as paper setter, Moderator etc.
- f) To evaluate the progress of UG students, under him/her.
- g) Make UG students conversant with communication skills and counseling procedures,
- h) To work as HOD when he is on leave/vacation/out of station for duty purpose.
- i) Encourage students to participate in extracurricular activities, at College, University & higher levels
  - To identify weak areas of faculty in teaching, learning, research etc. and overcoming the problems by suitable counseling and guidance.
  - To monitoring performance (Academic) of faculty & apprising them about the areas that need improvement. Helping and guiding them bring about desired change.
  - To initiate, encourage, guide and help faculty in the department conducting research and publish research papers of high quality in journals of desired status. The research should try to be oriented to have academic and social impact.,
  - To help HOD in upgrading and updating departmental and central library
  - To help the HOD for the purchase of new equipment and keeping existing equipment in good working condition by timely repairs and servicing.
  - To carry out research work, produce publications; participate in conferences, workshops, seminars, symposia etc. at Institutional, State, National and International levels.

- While proceeding on leave of any kind or vacation after making a locum arrangement of permission from HOD

### Responsibilities and Duties of Associate Professor

#### Reports to Head of Department

- To perform duties given under statutory provisions of Medical Council of India , Maharashtra Medical Council and MUHS
- They will ensure that all teaching tasks allotted to them are carried out efficiently.
- They will assist the HOD in teaching, research and other duties.
- They will carry out any other duties allotted to them by the Head of the department.
- They will look after the general administration of the department which will include security and welfare of personnel, conferences and inspection of the department.
- They will supervise the training program of undergraduates, which will include classes, attendance, tutorials and internal assessments.
- They will supervise the maintenance of departmental office files, UG students log-books and /inspection files.
- In consultation with the HOD, will put up demands for purchase of various items for the department.
- They will assist the HOD in clearing all observations on departmental UG teaching related issues.

### Responsibilities and Duties of Assistant Professors

#### Reports to Head of Department

- To perform duties given under statutory provisions of Medical Council of India, Maharashtra Medical Council and MUHS.
- They will assist the Head of the dept. in the program of the various courses conducted at the college.
- They will perform any other duties allotted to them by the Head of department
- They will be nominated by HOD to be OIC Library, museum, seminar rooms
- They will be nominated as OIC updates / Seminar / CMEs. He will work under guidance from HOD
- An assistant professor, so nominated by the HOD, will be responsible for the training program, lecture classes, setting of question papers, marking of answer sheets and tabulation of results for internal assessment.

#### Responsibilities and Duties of Tutor-

Reports to Assistant Professor, Associate Professor and Head of Department

- Role and Responsibilities: Academic

a) Tutor is a link between the faculty and students.

b) He will be fully responsible for the teaching for under graduate students. They are required to participate in:

Conducting Tutorials, practical's Periodic tests and examinations,

Inter-disciplinary teaching,

c) Special Instructional programs for slow learners,

d) Any other academic work given by the Head of the Department and Institutional Head

e) To demonstrate practical procedures to UG Students.

### Responsibilities and Duties of Lab Technician-

- Sets up and prepares class demonstrations and experiments working from knowledge of the subject area, reference materials, course outline, and without specific instructions.
- Orders, receive, supplies the stocks materials and equipment for laboratory use.
- Issues and maintains records on materials loaned to students, instructors, and other departments;
- Demonstrates and provides instruction to students in proper use and care of laboratory materials and equipment; assists in maintaining security of laboratories, laboratory equipment, supplies, and materials.
- Prepares and dispenses solutions and chemical materials used for lab classes which may include reagents, chemicals, acids, stains and unknowns.
- Prepares stains, solutions, and preservatives by mixing, bottling, and labeling.
- Cleans up after each lab session by washing, and if necessary, sterilizing tools, equipment and supplies.
- May calibrate, maintain, and perform repairs on scientific equipment and supplies.
- May assist faculty in assembling printed class materials.
- May supervise and assign work of student assistants.
- May maintain expenditure records and provide data for budget estimates.
- Monitors production of, collects, and processes hazardous waste materials and toxic chemicals resulting from lab classes, collects and properly stores biohazard waste.



### Responsibilities and Duties of Department clerk

- Daily UG attendance.
- Assisting in conduction of exams.
- Maintenance of records in department.
- Maintenance of UG internal assessment files
- Circulation of academic circulars to the faculty members

## **LIST OF RECORDS AND REGISTERS**

- a. Faculty Attendance register
- b. UG Attendance register
- c. Movement register
- d. Instrument register
- e. Hematology lab register
- f. Clinical lab register
- g. Museum register
- h. Library register
- i. Maintenance register

## **MAINTENANCE OF THE DEPARTMENT**

### **STANDARD OPERATING PROCEDURE**

The procedures adapted for maintenance of physiology department.

Policies regarding general departmental functioning, class rooms, laboratories, library and departmental offices/rooms

1) General departmental functioning

2) Class Rooms

3) Physiology laboratories

4) Departmental library

5) Departmental offices and rooms

## **STANDARD OPERATING PROCEDURE**

### **GENERAL DEPARTMENTAL FUNCTIONING**

- a) The faculty members are required to sign biometrics before 9:10 am and while leaving the department at 5.00 pm.
- b) The teaching and non-teaching faculty members are required to sign the departmental register before 9.30 am daily. Those having lectures at 9 o clock they should sign the register and go for the lecture or for any other work of the institution and while leaving the department at 5.00 pm .
- c) Faculty should not leave the department without head of the department permission.
- d) Any sort of leave should be informed to Head of the Department and in absence of HOD leave should be informed to Head in charge.
- e) The faculty members are required to carry out their duties as per the defined protocols provided to them.
- f) The faculty members should get involved in daily programs of the department.
- g) The faculty members are required to attend interdepartmental academics activities as per scheduled timetable.
- h) The faculty members are required to attend departmental meetings with the head of the department.
- i) It is required for all faculty members to apply for leave with prior intimation.
- j) Senior faculty members are required to sensitize there juniors and the students for research activities in particular and they are required to publish at least one article in one academic year as per norms.
- k) All teachers as a part of the department are required to follow the fruitful communication skill with their colleagues& students for achieving best outcomes and for departmental functioning.

- l) Technical staff is required to assist faculty in assembling printed class materials.
- j) Technical staff will Sets up and prepares class demonstrations and experiments working from knowledge of the subject area, reference materials, course outline, and with specific instructions by head of the department.
- k) Clerical staff is required to maintain daily UG attendance, leave records of faculty and Circulation of academic circulars to the faculty members and display of weekly academic schedule for students to notice board of the department.
- l) Attender appointed for the physiology Department are required to come at 8:00 am in the morning and will do their routine activity like opening the offices , laboratories, and departmental library and its cleaning and dusting .
- m) They should close all the offices, laboratories, museum and departmental library at 5:00pm and deposition of keys under supervision of clerical staff.

#### **STANDARD OPERATING PROCEDURE-**

##### **CLASSROOMS**

- a) All Class Rooms are cleaned every day before and after the classes commence.
- b) The Class Rooms are well ventilated and lighting facilities are regularly inspected BY class room in charge.
- c) Class room in charge (Technical staff) will check the availability of class rooms for the lectures and practical's during the preparation of weekly departmental time table for the MBBS, BPTH and NURSING STUDENTS.
- d) Class rooms are ICT enabled .LCD projectors and Wi- Fi facility are used to aid and improve the teaching-learning process in all the classrooms and in charge will regularly inspect and assured its proper functioning.
- e) Engineer from maintenance department for maintenance of ICT facilities in class rooms (call on-234)

## **STANDARD OPERATING PROCEDURE –**

### **LIBRARY**

- a) The departmental library is open for all faculties and UG students of Department of Physiology during college hours.
- b) All users are required to sign the register kept with the clerk of the department who has been designated as custodian of the library.
- c) Irrespective of the status of the faculty member or the student seniority; all are required to take permission before withdrawing the books for reading purpose and put signature and relevant details of the book / journal in the register.
- d) After reading the books, on return sign the register with due time and date.
- e) No-one is allowed to borrow the books for reading purpose outside the departmental library.
- f) Custodian is instructed to inform HOD the names of the faculty members / students who are breaking library rules.

### **SOP FOR E-LIBRARY**

- a) E-Library is available and accessible in the central and departmental library.
- b) The password is kept open in the library and with the custodian and can be utilized for academic purpose.
- c) The facilities LAQ's, SAQ's and MCQ's are available on E-Library, various text and journal extensions, textbook and journals are available on E-Library. The list of which is available with the librarian.
- d) Individual having their own laptop may access this facility for E-Library and home /office for self-use.
- e) In case of any difficulties in operation one can approach In charge of central library on extension No. 314 during college hours.

## **STANDARD OPERATING PROCEDURE-**

### **DEPARTMENTAL LABORATORIES**

- a) DOAP sessions and practical are conducted in the laboratories.
- b) Technical staff will Sets up and prepares class demonstrations and experiments from knowledge of the course outline and per specific instructions from the Head of the Department.
- c) Students will check the laboratory schedule a day earlier, read up the relevant topic from the practical book.
- d) Wearing of apron is mandatory in the laboratories.
- e) Students should bring the appropriate journals when attending a practical class.
- f) Technical staff will Demonstrates and provides instruction to students in proper use and care of laboratory materials and equipment; assists in maintaining security of laboratories, laboratory equipment, supplies, and materials
- g) All students will take care for maintaining the laboratories in a clean, tidy, safe condition. Eating, drinking and cell phones are not allowed in the laboratories.
- h) Pay due attention to the practical demonstration given by your teacher before each experiment.
- i) Apparatus required for performing experiments will be delivered only after signing in the record register with laboratory technician.
- j) Check the apparatus being issued to you. If there is any breakage or damage to the apparatus, it must be reported to the technician before starting the experiment. After completion before returning they shall be cleaned properly.
- k) The students must know the aims and objectives of the experiment; perform the experiment in orderly manner.

- l) Working area on the work table must be clean; equipment's should be placed in proper manner & handled carefully.
- m) During hematology practical's use of spirit swabs before taking prick is essential to prevent infection.
- n) Do not throw any used cotton, pieces of paper and needles into the sink.
- o) Pricking needles and lancet should first burn in needle burner and then dispose it into white transparent container.
- p) Cotton swabs and pieces of papers are required to dispose in yellow container.
- q) Technical staff will Cleans up after each lab session by washing, and if necessary, sterilizing tools, equipment and supplies.
- r) Lab attender will clean up the surfaces of hematology experimental table with absorbent material, and then add 1% hypochlorite, after 20 min mop it and then clean it with plain water. Dispose this absorbent material into red container.
- s) During clinical physiology practical's students should bring instruments like stethoscope, Knee hammer and pocket torch.
- t) Maintain the humanity and compassion with the provided subject.
- u) Before starting the practical explain the procedure to the subject
- v) Do not indulge in useless gossip; you can discuss your difficulties with technician or teacher.
- w) Writing of Journals with Correct diagrams & in good handwriting is essential.
- x) After completion of experiment, complete the concerned topic & get it checked by the concerned teacher.



## Chemicals

Sr.No	Chemicals
1.	WBC Diluting fluid
2.	RBC Diluting fluid
3.	N/10 HCL
4.	Leishman's Stain
5.	Eosinophil Diluting fluid
6.	Reticulocyte oil fluid
7.	Blood grouping Antisera

### PROCUREMENT OF EQUIPMENT/ CHEMICALS / GLASSWARE

- a) The Technical staff informs the teacher- in-charge about the stock of chemicals, glassware and equipment.
- b) Requisition from department for requirement of equipment/ Chemicals / Glassware in every academic year is send to purchase department by head of the department
- c) Order is placed through Principal's office.
- d) The equipment and chemicals are entered in the main stock register of the department by the technical staff along with bill number

### ISSUE OF GLASSWARE/EQUIPMENT'S TO STUDENTS

- a) Glass apparatus are issued to the students by the technical staff
- b) A breakage register is maintained in each lab where broken equipment is recorded with the students and teachers signature.
- c) Chemical prepared in each lab is also maintained in a register.
- d) Record of apparatus issued on daily basis is recorded in a separate register.

### MAINTENANCE OF EQUIPMENTS

- a) Dusting of equipment and working area are carried out on a regular basis.
- b) Maintenance of equipment is carried out every six months.
- c) Working condition of equipment is routinely checked by technical staff under the guidance of head of the department

## **STANDARD OPERATING PROCEDURE-**

### **TEACHING PROGRAM**

- a) Before starting the UG Academic session the teaching schedule will be discussed and allotted to concern teachers under the guidance of head of the department
- b) Master time table (term wise) will be prepared for the same undergraduate academic session.
- c) During the actual academic session clerical staff will prepare and display weekly teaching schedule on departmental notice board under the guidance of head of the department
- d) It is required that clerical staff will maintain the attendance register of the undergraduate students for teaching sessions and exams conducted by the department.
- e) Teaching staff will Conduct Graduate teaching & training activities as per schedule
- f) Teaching staff will also conduct practicals, Tutorials, Periodic tests and examinations in the department
- g) Teaching staff will Conduct University examinations - Theory and Practical as per schedule of university
- h) Instructions programs for slow learners will be arranged.
- i) Head of the department will ensure regularity, punctuality and discipline amongst UG students. Imbibe work culture, cordial inter personal relations amongst them.
- j) Teaching Faculty will assist the HOD in clearing all observations on departmental UG teaching related issues.

## STANDARD OPERATING PROCEDURE-

### LEARNING AND EVALUATION

- The time bound teaching and training schedule with aim of building clinical competence and strive to achieve desired objective in time for UGs.
- Learning and communication skills of UG students will be developed by
  - a) Encouraging students to participate in conference, extracurricular activities, at college, university & higher levels.
  - b) Identifying weak areas of students in learning and research etc. and overcoming the problems by suitable counseling and by guidance.
  - c) Organizing guest lectures, live workshops, CME, Conferences by renowned professionals.
  - d) Conducting seminars, integrated teaching, small group learning, problem based learning and early clinical exposure secessions.
  - e) Arranging model and chart making and presentation competition at the institution and intercollege level

The progress of undergraduate students will be assessed and evaluated by

-Essay questions, clinical problems, modified essay questions (MEQs) checklists, OSCE, student projects, MCQs, Critical reading papers, rating scales, extended matching items, tutor reports, portfolios, log book, audit, simulated patient demonstration, video assessment, simulators, self-assessment, peer assessment

Dr. Sunita Nighute

Place- Ahmednagar (Maharashtra)

Prof and HOD

Department of Physiology

DVVPF'S medical college