

# DPU

## Dr. D. Y. Patil Vidyapeeth, Pune

**(Deemed to be University)**

(Re-accredited by NAAC with a CGPA of 3.62 on a four point scale at 'A' Grade)  
20<sup>th</sup> rank in Medical Category and 46<sup>th</sup> rank in University Category in India (NIRF-2019)  
(Declared as Category - I University by UGC Under Graded Autonomy Regulations, 2018)  
(An ISO 9001: 2015 Certified University)



**Dr. D. Y. Patil Medical College, Hospital & Research Centre,**

**Pimpri, Pune – 411018**

**THIRD YEAR MBBS**

**STUDENT'S HANDBOOK**

**Academic Year 2019-20**

# DPU

Dr. D. Y. Patil Vidyapeeth, Pune  
(Deemed to be University)

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Dr. D. Y. Patil Medical College,  
Hospital & Research Centre,  
Pimpri, Pune - 411018



Ganesh Puja 2019

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## Chancellor's Message



Medical education is not a bed of roses. It involves a high level of commitment and regular and sustained work. I, therefore, exhort you to be committed towards this end right from today and remain so throughout your studies.

You are among the few fortunate students who have gained admission to such a prestigious College and you are an integral part of our Institution. I wish that you make full use of this opportunity to blossom into one of the best doctors from this College.

I am confident that efforts to excel in the field of higher education and the inculcation of moral values will continue in future too with a great zeal.

Please make use of the excellent infrastructure and highly qualified and committed faculty who spare no effort in classroom teaching as well as practical and clinical teaching.

Wish you best of luck.

Dr. P. D Patil  
Chancellor  
Dr. D. Y. Patil Vidyapeeth, Pune



## Vice Chairperson's Message



It is my privilege to share my views through this handbook, the best media to connect the young minds of the Nation. As aptly said by Robert Maynard Hutchins, “The objective of education is to prepare the young to educate themselves throughout their lives”.

It gives me immense pleasure to pen a few lines of greetings and good wishes for the ‘Hand Book’ being published by the College.

In keeping with its mission of academic excellence,

Dr. D. Y. Patil Medical College, Hospital & Research Centre, Pune is always continuing its developmental activities, in all fronts, in a bid to create world class Medical College. This is reflected by the consistent expansion of infrastructure, faculty, research contributions and national and international linkages and collaborative initiatives, signaling out globally that College is focused in its activities with its thrust being on developmental activities.

I hope this handbook will cover all aspects which would help students to nourish their knowledge.

I extend my good wishes for the continued growth and good luck in your future endeavour!

Dr. Bhagyashree P. Patil  
Vice Chairperson,  
Dr. D. Y. Patil Vidyapeeth, Pune



## Vice Chancellor's Message



Dear Students,

Since its inception in 2000, DPU has carved a niche amongst the education fraternity in general and health science education in particular in Maharashtra and across India! Built on a sprawling campus spread over 50 acres, DPU has excellent and state-of-the-art infrastructure facilities conducive to higher and professional teaching-learning environment, research and outreach programs.

The main aim of DPU is to impart quality with a vision of quest for excellence, which is at par with international standards. To make it possible the curriculum is designed with hi - professional adroitness fulfilling specific goals of health sector. Moreover, teams of dedicated and experienced faculty are constantly engaged in the augmentation of student-centric learning environment through innovative pedagogy. They impart knowledge to the students that has been ingrained in the foundation of ethical and moral values and at the same time assist in boosting their leadership qualities, research culture and innovative skills.

Dr. D Y Patil Vidyapeeth has been re-accredited by National Assessment and Accreditation Council (NAAC), Bangalore with a CGPA of 3.62 on a four point scale at 'A' Grade. The Vidyapeeth has also achieved a higher position in the Institutional Ranking Framework (NIRF), conducted by Ministry of Human Resource Development (MHRD), New Delhi. It has achieved 20<sup>th</sup> rank in Medical Category, 46<sup>th</sup> rank in University Category and 70<sup>th</sup> rank in Overall Catogogy in India in NIRF 2019.

I welcome you all to this Institution of learning. At DPU, you will write your own story, and in the process, you will help write the next chapter of DPU's story as well. Best of luck!

**Dr. N. J. Pawar**

Vice Chancellor

Dr. D.Y.Patil Vidyapeeth, Pimpri, Pune



## Principal Director & CEO's Message



Dear Students,

Dr. D Y Patil Medical College, Hospital & Research Centre, Pimpri, Pune has been at the forefront of providing professional medical education in the country. Known for providing quality education, the institution has been consistently ranked among the top medical institutions in the country.

Our endeavour has always been to provide the best to the students and to prepare them to take up the challenges of tomorrow so that when they come out of the institution they are competent to handle the responsibilities of the medical profession. The institution has been attracting numerous students from India and abroad. The dedicated and skilled faculty, excellent infrastructure, library facilities, museums, laboratories and skill labs, provide hands-on experience to the students. Moreover, the campus provides excellent opportunities for the student community to interact with students of other professional disciplines and gain knowledge about different cultures, facilitating their overall development. The Hospital has excellent patient care facilities and provides the students with good opportunities to learn bedside manners and clinical skills.

Students who have graduated from this institution have been successfully practicing medicine in various states of the country and across the world.

True to our mission, we are dedicated to training competent, compassionate and caring physicians through excellence in teaching, patient care and medical research.

Dr. Amarjit Singh  
Principal Director & CEO



## Director Academics' Message



The student handbook is intended to provide a brief, concise and understandable overview of some of the most important opportunities and expectations that anchor on progress.

I extend a very warm welcome to you all! I am glad that you have taken the right decision of joining Dr.D.Y.Patil Medical College, Hospital and Research Centre, Pune for your further studies. I am sure that it will prove to be an intense, challenging and rewarding learning experience for your professional and personal growth.

During your journey of becoming a doctor it is not only gaining knowledge, skill and abilities but also learning what it means to be a professional. You need to combine knowledge with clinical judgment to become a caring and competent physician. We are here to support and encourage you.

I wish you good luck and success in your Career.

Dr. P. Vatsalaswamy  
Director Academics



## Dean's Message



It gives me immense pleasure to pen a few lines of greetings and good wishes for the 'Hand Book' being published by the College. I hope this publication will cover all aspects which would help students to nourish their knowledge. Yes, I firmly believe "Knowledge is Power".

You will be proud to know that this institution has made legendary strides since its inception in 1996. It has achieved phenomenal success in a very short time.

Academic excellence and professionalism displayed by the Graduates and Postgraduates from this College have won them accolades globally. The College strives hard to help you to achieve your goal of becoming dedicated and compassionate Doctor.

I wish you very happy times at this great temple of learning.

Dr. J. S. Bhawalkar

Dean



## OUR VISION

- Single window delivery of health care services
- Total quality management in service & education Unique work culture in alleviating human sufferings
- To train general, specialized, allied & supportive professionals
- To meet regional & national health care needs Work relentlessly to contribute to global health care, knowledge & skills
- Be efficient, effective, community acceptable, and excel in service, education & research
- To impart knowledge & interact with organizations Of similar interest
- To induce paradigm shift in Community attitude that many human diseases are Preventable, curable & affordable
- Foster global competencies, inculcating value System among learners
- Promote technology of relevance
- Reach the unreachable with awareness, education & service
- Serve the underserved
- **Excellent health care education & service systems For community development**

## **Vision – 2025**

"To develop knowledge center  
this will be recognized for its  
academic pursuit not only in  
India but also globally”

## **OUR MISSION**

- Learner centered health care education
- Community oriented research
- Patient centered service
- Strong community relationship
- Community oriented extension services
- Referral service center
- Serve the underserved
- Professionalism in education, service and
- Management to meet regional and national needs
- Strategic future oriented planning
- Inter organizational linkage
- Unique organizational culture
- Excellent health care education & service systems for community development



Dr. D. Y. Patil Vidyapeeth, Pune  
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## **GRADUATE ATTRIBUTES**

- Communication skills
- Enthusiasm for research
- Problem solving skills
- Critical thinking
- Exemplary leadership
- ICT awareness
- Social commitment
- Respect for cultural differences
- Global competencies



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## **MBBS PROGRAMME OUTCOMES**

No.	By the end of the programme , the MBBS Graduate will have/be:
PO 1	Knowledge and Skills
PO 2	Planning and Problem solving abilities
PO 3	Communication
PO 4	Research Aptitude
PO 5	Professionalism and Ethics
PO 6	Leadership
PO 7	Social Responsibilities
PO 8	Environment and Sustainability
PO 9	Lifelong Learner

## **Dr. D.Y. Patil Vidyapeeth, Pune**

### **Goals and Objectives**

- To create institutions for higher education at undergraduate, postgraduate and research degree levels as per the need of the society, in the areas of health, engineering and technology; arts; fine-, performing- and applied arts, science, commerce, education, architecture, pharmacy, management, hotel management and catering technology, travel and tourism, finance, law, agriculture, co-operation, rural development, and such other branches or specializations of learning, as may be considered appropriate from time to time, fully confirming to the concept of the University, namely, University Education Report (1948) and the Report of the Committee on Renovation and Rejuvenation of Higher Education in India (2009) and the Report of the Review Committee for Deemed to be Universities (2009).
- To carry out instruction and training, distinguishable from programmes of ordinary nature, for making distinctive contributions in the areas of specializations as may be determined from time to time.
- To create or establish institutions for high quality teaching and research; for advancement of knowledge and its dissemination through various research programmes undertaken in-house by substantial number of full time faculty / research scholars in diverse disciplines.
- To conduct all the activities, programmes, courses of studies, research, development, examinations, evaluations and those related to smooth functioning of the Institute
- To create, conduct and carry out instructions and training in any of the above-mentioned areas, as may be determined from time to time by formal, non-formal, distance, correspondence, open and / or any other mode of learning or instruction.
- To provide for field research, extension programmes and extra-curricular and / or extra-mural studies that contributes to the development of society.
- To establish and conduct the colleges and institutions of higher education and of specialized studies, in India or abroad, independently or in collaboration with other organization or organizations.
- To promote curricular, co-curricular activities, sports activities, etc. for the overall personality development of the students.
- To extend the benefit of knowledge and skills for the development of individuals and society by associating itself with local and regional problems and development.
- To establish and conduct centres of social changes and extension, provide for health care, promote awareness about personal, community and social health, hygiene and well-being particularly amongst villagers and industrial workers.
- To make special efforts to promote national integration and preserve cultural heritage, in general, and of India in particular.
- To generate, promote and preserve a sense of self-respect and dignity among citizens in general, and among weaker sections of society and women in particular.
- To promote freedom, equality, social justice and secularism as advocated and enshrined in the Constitution of India, and to promote the spirit of intellectual inquiry, pursuit of sustained excellence, tolerance and mutual understanding.
- To be a catalytic agent in socio-economic transformation by promoting basic attitudes and values of essence for national development.
- To provide for administrative and financial support, infrastructure and other services for effective and efficient management of the activities of the educational institutions.
- To modify, amend, amplify, extend, expand or abridge, delete any of these provisions in order to improve, encompass any of the aims and objects in order to serve the Nation and the society better.
- To undertake such other actions and do such other things as may be necessary or desirable for the furtherance of the aims and objectives enumerated in these at present or as may be expedient in future.

### **Membership – National and International bodies**

- Association of Indian Universities (AIU), New Delhi
- Association of Commonwealth University (ACU), UK
- International Association of University Presidents (IAUP), US

### **Recognitions**

- Re-Accredited by National Assessment and Accreditation Council (NAAC) with a CGPA of 3.62 on a four point scale at “A” Grade.
- ISO 9001:2015 certified
- NIRF - 20th All India Rank 2019

### **International Research Collaborations:**

- International assignments for Teaching, Research & Consultancy and for exploring possible exchanges are a regular feature at DPU. In order to expand students’ horizons and generate job opportunities, DPU has collaborated with many reputed institutions worldwide. The International linkages of DPU have helped it in drawing upon the wisdom built up at the partner institutions of repute.
- The Department of Global Health Education, John’s Hopkins University has sent their students in batches to the Medical and Nursing institutes of DPU to provide global health training to their students at DPU by fostering a collaborative learning environment under their Global Health leadership programme. Last year a group of engineering and medical students from John’s Hopkins University were with us to discuss the development of innovative and low cost patented medical devices for developing countries.
- DPU is starting an inter-disciplinary collaborative research project with John’s Hopkins University on “Bacterial and antimicrobial resistance pattern in Pune, India in febrile illness” which will involve the Departments of Microbiology along with the Department of Medicine & Department of Paediatrics of our Medical College.
- Harvard Medical School Centre for Global Health Diversity Dubai “Assesing Pathways to care among tuberculosis (TB) and drug-resistant tuberculosis (DR-TB) patients in Pune City, India; a Biosocial inquiry and TB”

- DM international collaboration.
- Surindra Rajabhat University Thailand has been assigned for Research and collaboration with DPU
- Four students from Biotechnology Institute of DPU had gone to University of Skovde for the autumn/spring Semester in 2017-18 to perform research project under the bilateral agreement signed between DPU and University of Skovde Sweden.
- Linnaeus – Palme teachers exchange program between DPU and University of Skovde, has been granted by the Swedish Council of Higher Educations, under which two faculty members from DPU had gone to university of Skovde, for teaching for a period of one month and similarly two faculty members from University of Skovde, Sweden were involved for teaching in DPU in the autumn semester in August 2016.
- The Department of Physiology in collaboration with Diabetes & Islet Biology Group of University of Sydney, Australia is performing collaborative research under nutrition & Pancreatic regeneration.
- The Dental College of DPU has initiated number of an inter-disciplinary collaborative research projects with Biohorizon, USA on use of Bioactive Glass & Freeze Dried Bone Allograft in different periodontal pathologies and surgeries.
- The Dental College of DPU under a MoU with University of Hong Kong, Faculty of Density, is pursuing a joint collaborative research project on “Microbial & Host Derived biomarkers in Peri Implant mucositis in relation to periodontal status.”

### **Highlights of the University**

- Highly qualified, experienced and competent senior faculty as per regulations of the statutory bodies over and above the prescribed strength to lead the departments and institutions.
- Regular up-gradation of Curriculum.
- Encouragement for research activities with emphasis on development of a scientific temper among undergraduates as well.

- Well-stocked Central Learning Resource Centre with latest reference Books & Journals both in print and electronic form.
- State-of-the-art infrastructure.
- Continuing Education Programmes.
- Latest teaching-learning facilities including Tele-conferencing facility and other modes of e-learning.
- Alumni Association.
- All-round professional development.
- Extra-Curricular activities.
- Transportation facility.

### **Information about the College and Hospital**

Dr. D. Y. Patil Medical College, Hospital and Research Centre Pimpri, Pune - 18 established in 1996, received recognition of the Medical Council of India (MCI) for the award of MBBS degree from its very first batch. Dr. D.Y. Patil Vidyapeeth, Pune has been accorded the status of University under section 3 of the UGC Act, 1956, vide notification No. F.9-39/2001-U.3 dated 11th Jan. 2003 of the Government of India. This College is the first in the state of Maharashtra to have 250 seats for the MBBS Course.

Dr. D. Y. Patil Vidyapeeth Pune is ranked among top 10 Medical Universities in the Country: survey conducted by: India Today (July 11, 2016) & Top 2<sup>nd</sup> Private University & again in top 5 medical Universities in 2017.

DPU, Pune is Re-Accredited by NAAC in 2015 in 'A' Grade: with CGPA of 3.62 on a four point scale.

ISO 9001:2015 Certified Vidyapeeth in 2015.

National Institutional Ranking Framework

(NIRF) 2019, Conducted by MHRD

- 70<sup>th</sup> in Overall Category in India
- 46<sup>th</sup> University in the Country
- Dr. D. Y. Patil Medical College, Hospital & Research Centre, Pimpri, Pune is 20<sup>th</sup> in Medical Category in India

In 2003, the college was permitted to teach post-graduate courses in a couple of subjects. In June 2005, the college was sanctioned an intake of 81 students in post graduate degree and diploma courses and presently there are

457 Postgraduate and 27 Superspeciality Students in the following 25 subjects: General Surgery, Obstetrics & Gynecology, Orthopedics, Ophthalmology, E.N.T. (Oto Rhino Laryngology) General Medicine, Pediatrics, Anesthesiology, Psychiatry, Radio-diagnosis, Respiratory Medicine, Dermatology, Venereology and leprosy, Pathology, Community Medicine, Pharmacology, Microbiology, Anatomy, Physiology, Biochemistry and Emergency Medicine, Neurosurgery, Urology and Nephrology, Cardiology and Neurology, Plastic Re-constructive Surgery. Cardio vascular and thoracic surgery & Intervention radiology.

All the courses conducted at this College have been recognized by Medical Council of India.

The recognitions and expansions granted by the MCI, UGC, MHRD and by the Ministry of Health & Family Welfare, Government of India are the result of visionary guidance and whole hearted support of our Chancellor the efforts put in by the faculty and the excellent facilities like spacious buildings, measuring 4,50,000 sq.ft. fully air conditioned lecture halls with modern amenities, well-equipped laboratories, well-stocked library, a hospital with super-specialty facilities such as Dialysis, MRI, whole body CT Scan, DSA, Color Doppler, ICUs and equipment required for Neurosurgery, Cath Lab, Cardiothoracic surgery etc.

Besides regular lectures and practical, the college gives due importance to research. Several research proposals of post-graduate students and of the faculty members are approved and funded by National funding agencies, such as Indian Council of Medical Research (ICMR), DST as well as Dr D.Y. Patil Vidyapeeth, Pune. The involvement of the undergraduate in research activities is noteworthy. The college boasts of a significant number of ICMR short term student projects every year. In fact, more than 100 projects have been completed in last 5 years by our undergraduates.

# The Campus

## **Lecture Halls – Empowering with knowledge**

The college has eight well laid-out air conditioned lecture halls; five with seating capacity of 300 each. The desks are well spaced out and halls are air conditioned, well-lit and have fine acoustics. Each hall has the latest audio-visual teaching aids, including e-learning facilities.

## **College Campus - Learning with Spirit**

Dr. D. Y. Patil Vidyapeeth and Dr. D. Y. Patil Medical College, Hospital and Research Centre are located in the same sprawling campus at Pimpri, Pune. The college building is a masterpiece of architecture and has state-of-the-art facilities that are in tune with the best in the world. The college building basks in fine aesthetics and is impressive. It has a mural of Lord Dhanvantari on its façade and the magnificent fiber glass dome that can be seen from miles around.

# The Facilities

## **Auditorium – Inculcating Versatility**

The Auditorium is centrally air-conditioned and is fully equipped with audio-visual facilities. It has a seating capacity of 250 and is being extensively used for seminars, symposia, guest lectures, etc.

## **DPU New Auditorium**

A centrally air-conditioned and fully equipped with audio-visual facilities and seating capacity of 920 auditorium has been build, which is now being extensively used for hosting numerous event including annual day award functions seminars, symposia, guest lectures, etc.

## **Learning –Resource Centre**

The college has an excellent world class central library facility. It has a total floor area of 5000 sq.m with a provision for a separate reading room for the teaching staff and spacious reading halls to accommodate over 750 students. The total collection of the library is more than 27872 books. The Library subscribes to most of the National and International Journals required for the undergraduate and post-graduate students and faculty apart from 2047 online journals. Library is equipped with 52 computer terminals with IT facilities, so that students can access more than 2047 online journals. 218 physical hard copies of 106 national and 112 international journals are available. 14 magazines and 1244 digitized collections are also available in Central library. In addition to the central library facility, each department has its own departmental library. The reading Room of the central library is kept open round-the-clock. The central library has been provided with Wi-Fi internet facility and students and the faculty have open access to this facility. As the College and Hostels are 'Wi-Fi' enabled, the students can access information from any point anywhere.

## **Hostels - Home away from Home**

The College has well-furnished boys and girls hostels in the campus. The hostel rooms are well furnished. Round the clock security is provided. There is a cafeteria attached to each hostel. The hostels have mess facility, reading rooms, recreational areas with T. V. and indoor game facilities like those of carom, table tennis, etc. These hostels are managed by wardens and rectors. The hostels have a well-equipped gym under the supervision of a physical trainer.

## **The International student experience**

Ever since its inception, International students have been a part of Dr D.Y. Patil Vidyapeeth, Pune drawn from countries all over the globe. Students have found the University a home away from home. Separate comfortable housing is available for International students. Broadband connectivity ensures that the students are in touch with only a click. An International student counselor provides individualized attention to the need of international students.

## **Student Counselling –Parental Care**

Students admitted to the first year MBBS are from 10+2 stream and there is a structural difference between the school and college education. Therefore, for smooth integration, students are allotted to a faculty member in small groups who acts as their Mentor during the course. Regular counselling sessions are arranged for the fresh students. Senior members of the faculty look after this activity. Every attempt is made to ensure that students feel confident and fully secure and the changeover is smooth.

## **Student Personality Development**

Along with the academics, the students' also participate in Social events, Annual Cultural, Literary, Art events and Sports. Research activities, Conferences, Personality Development sessions etc.

## **Parent Teacher Organization- Teaming Up**

Parent Teacher Organization is a unique feature of our College. Parents and teachers interact with each other regularly to ensure the well being of their wards. College maintains regular communication with parents informing about the progress of their wards. This is another step towards helping the student adjust to a new environment. Parents, being one of the important stakeholders provide us with valuable inputs from time to time.

## **Departments of the Medical College**

The College has a comprehensive set of departments made for complete learning.

### **The departments have:**

1. Highly qualified and experienced staff as per the norms laid down by the Medical Council of India (MCI).
2. Museums with multitude of specimens for student study and reference.
3. Well-stocked departmental libraries with latest reference books and journals.
4. OHP, LCD projectors, 35mm Slide projector, Computers and CD-ROMs.
5. Well planned laboratories with all modern equipments.
6. Skills Lab.
7. Research Laboratories.

## **Institute Journal**

Institute is publishing peer reviewed journal namely Medical Journal of Dr. D.Y. Patil University [MJDRDYPU] with print ISSN: 0975-2870; E-ISSN 2278-7118 which is indexed with or included in DOAJ, Index Copernicus, Indian Science Abstracts.

## **The Faculty**

The college has a team of dedicated and highly qualified faculty in all specialties with vast teaching experience both at undergraduate and post graduate levels. The faculty is involved in continuous, relevant and innovative research programmes. Innovative teaching learning modules are introduced to enhance performance of the student. They are also invited as guest speakers at many well known institutions in the country. Senior members of the teaching staff are invited as paper setters, examiners and moderators by various universities all over India. The college deputed its faculty to attend workshops, seminars, conferences, symposia, CME etc., frequently. The quality of teaching is evident from the excellent results of the college.

## **Feedback DPU**

DPU has fine tuned its 360° feedback mechanism on curriculum aspects that involves students, peers and alumni. Such feedback from stakeholders and its analysis, both manual and online has given tremendous impact on the revision of curriculum design. The corrective measures and appropriate actions have been taken to upgrade the curriculum and reconstructing of syllabi, resulting in expected learning outcome.

The Hospital A good hospital gives any medical College a fine learning reputation. The hospital provides ample and varied clinical material to the

students, enabling them to be conversant with multitudes of ailments, infirmities and diseases and treatment thereon.

Dr. D. Y. Patil Medical College, Hospital and Research Centre, Pimpri, Pune caters to clinical services through ambulatory, indoor and outreach components.

The Hospital runs ambulatory services through OPDs dedicated to 21 branches, of which 5 are Medicine & allied, 5 are Surgery & allied and 11 are Super specialty subjects including Anesthesiology, Radiology & Emergency Medicine.

All OPDs are spacious with examination rooms and equipped with relevant diagnostic equipments of latest and global standards, upgraded from time to time.

The indoor facility of hospital has 61 Modern General Wards with special services and Unique designs and décor in strict adherence to MCI specification. A special toilet for physically disabled patients in every ward as per Supreme Court of India directives and 1510 beds dedicated to different specialities in proportion to the number of under graduation, post- graduation and super speciality students studying for MBBS, MD, MS, M.Ch. and DM. The number of students is 250 admissions per year for MBBS, 171 for Post-graduation and 18 for Super specialization. There are facilities for PhD in all subjects.

For critical care services, we have Intensive Care Units (ICUs) equipped with monitors, ventilators and the modern medical equipment as the services demand.

The Medical ICU with 15 beds capacity (10 ICU and 5 ICCU), Surgical (10 ICU) with (5 Neurosurgery and 5 OBGY), 35 beds capacity for Pediatrics (15 PICU & 20 NICU), 7[RICU] with all sophisticated and modern facilities are available under the charge of highly qualified and experienced Doctors. Apart from it, 66 ICU beds for various specialties are available. Hospital has 18 Modular operation theaters including MAQUET and DRAGGER operation theatre systems. The latest addition is DAVINCI 4th generation Robot for Robotic Surgery.

The modular operation theatre system is supported by state of art CSSD besides 7 operation

theatres and one in Emergency Medicine department in the old building with CSSD. More than 20 ICU beds are ready to care for the increasing demand of sophisticated ICU facilities for coronary interventions and 8 for recovery of cardio vascular Surgery and Thoracic Surgery patients. Two Cardiac Cath labs are there for Cardiac intervention with state of art infrastructure.

The ultramodern ventilators and multi parametric monitors with central monitoring system are available. Highly trained and experienced staff and nurses are available.

The Department of Radio-diagnosis and Imaging is very well equipped and is one of the best Centers in Pune. In a bid to provide better health care facilities to the patients and society, the hospital has Siemens Avanto 1.5 Tesla Magnetic Resonance Imaging (MRI) machine with matrix and has state-of-the-art latest model of Siemens 3 Tesla Veda MRI that has been installed recently.

The Department of Radio-diagnosis, incorporating the newer ideas and most up-to-date features, has facilities, DSA and two CT Scanners. A digital Mammography unit helps in early diagnosis and management of breast disease. The Department also has High Resolution Colour Doppler and Ultrasonography units with all the latest probes. Digital Radiography, Conventional X-ray units and image intensifier provide the ultra modern radiography set up.

For emergency care, the Department of Emergency Medicine is highly equipped with 30 beds running 24x7 manned by specialists, assisted by 10 doctors and support staff.

There is a haemodialysis unit with 20 dialysis machines running round the clock.

**Latest Addition** – 3 Tesla Veda MRI Scanner,

## **Other Facilities**

- i) Radio Diagnostics
- ii) Highly equipped CCL Lab
- iii) Blood Bank
- iv) Human Milk Bank
- v) Well Stocked Pharmacy
- vi) Ambulance Services
- Modern and supportive diagnostic services
- Two CSSD's
- Emergency and trauma care.
- Geriatric Centre
- Endoscopy procedures like gastroscopy, colonoscopy, cystoscopy, bronchoscopy, thoracoscopy, etc. are performed regularly for persuasion of research & patient treatment.
- Organ Transplant Programme

- MIS
- Laundry, Food & Beverages Services

## **Expansion projects in progress**

- Developing super specialty medical services in 6 disciplines every year to achieve a target of 50 such services in 10 years, kidney transplants and liver transplant.
- Expansion of haemodialysis services with 25 machines with an objective to serve 100 dialysis per day.
- IVF centre
- Day care surgery services
- Bone marrow transplantation services
- Epilepsy surgery centre
- Multi-disciplinary tumor clinic with special attention to breast disease
- Simulator / skill laboratory

# Museums



FMT Museum



Pathology Museum



Community Medicine Museum

# HI-Tech Hospital

OPD, MRI, Operation Theatres



O.P.D.



ICU's



MRI



Operation Theatres

# Infrastructure



Central Research Lab



Auditorium



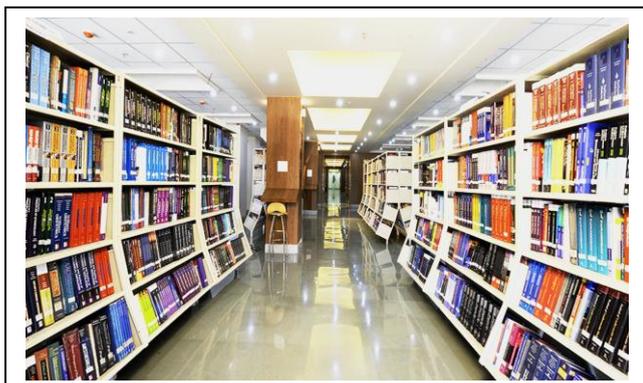
Lecture Hall



College Canteen



College Canteen



Learning Resource Centre or Central Library



# Discipline and Conduct of the Student

## 1.1 Obligations of the Student

- 1.1.1 Conduct himself/herself properly
- 1.1.2 Maintain proper behavior.
- 1.1.3 Observe strict discipline both within the campus & outside of the Institution, and also in Hostel.
- 1.1.4 Ensure that no act of his/her consciously or unconsciously brings the Institution or any establishment or authority connected with it into disrespect.

1.2 Any act/s of the student which is contrary to the clause (1.1), shall constitute misconduct and/or indiscipline, which include any one or more of the acts jointly or severally, mentioned hereinafter;

- 1.2.1 Any act of the student which directly or indirectly causes or attempts to cause disturbance in the lawful functioning of the Institution.
- 1.2.2 The student who is repeatedly absent from the class, lectures, tutorials, practicals and other teaching activity.
- 1.2.3 The student not abiding by the instructions of the Faculty members and not interacting with them with due respect.
- 1.2.4 Any student found misbehaving in the campus/class or behaving arrogantly, violently towards the faculty, staff or fellow student.
- 1.2.5 The Student who is not present for the class tests, midterm exams, terminal and preliminary examinations.
- 1.2.6 Permitting or conniving with any person/parent/guardian, which is not authorized to occupy hostel room, residential quarter, or any other accommodation or any part thereof of the Institution.
- 1.2.7 Obstruction to any student or group of students in any legitimate activities, in classrooms/laboratories/field or places of social and cultural activities within the campus of the Institute.
- 1.2.8 Possessing or using any weapon, firearms, explosives, of

dangerous substances in the premises of the Institution.

- 1.2.9 Indulging in any act which would cause embarrassment or annoyance to any student/authority/staff or any member of the staff.
- 1.2.10 Stealing or damaging any farm produce or any property belonging to the Institution, staff member or student.
- 1.2.11 Securing admission in the Institution, to any undergraduate or postgraduate programme or any other course by fabrication or suppression of facts or information.
- 1.2.12 If the student fails to complete the assignments regularly and has poor academic performance as assessed by the regular class teachers and internal assessment, he/ she will not be allowed to appear for the Vidyapeeth examination.
- 1.2.13 If a student remains absent for lectures, practical or class test and exam intons without prior permission of the Principal or the head of the departments, she/he will not be compensated for extra class.
- 1.2.14 Students should read the notices regularly on notice boards in the academic complex, library and the department notice boards.
- 1.2.15 Damage of property of the college and its sister institutes like tampering with fixtures, fittings, equipments, instruments, furniture, books, periodicals, walls, windows panels, vehicles etc., will be viewed very seriously.
- 1.2.16 Recording of any electronic images in the form of photographs, audio or video recording of any person without the person's knowledge; when such recording is likely to cause injury, distress, or damage the reputation of such person; is prohibited in any part of the College and hostel premises. The storing, sharing or distributing of such unauthorized records by any means is also prohibited.
- 1.2.17 Use of mobile phones and head phones during college hours is prohibited.
- 1.2.18 As per the rules and regulations of the Dr. D. Y. Patil Vidyapeeth, Pimpri, Pune, 75% attendance in a subject for appearing in the examination is

demonstrations, practical's, hospital (tertiary, secondary, primary) posting and bedside clinics etc.

- 1.2.19 The Students must be present in proper dress code with apron/ lab coat, name badge and identity card on all week days /working days and during clinical duties.
- 1.2.20 Admission of the student will be cancelled at any point of time in case of;
  - 1.2.20.1 Not submitting the required documents in time.
  - 1.2.20.2 Failing to fulfill required eligibility criteria of the programme.
  - 1.2.20.3 Submission of fake or incorrect documents.
  - 1.2.20.4 Admission gained by resorting to fraudulent means, illegal gratification or any unfair practice detected at any stage during the entire programme.
  - 1.2.20.5 Not paying the stipulated fees on time.

### **1.3 Prohibition of Ragging:**

- 1.3.1 Ragging in any form is strictly prohibited in the campus and outside. The UGC Regulations on "Curbing the Menace of Ragging in Higher Educational Institutions, 2009" (as amended) and the MCI (Prevention and Prohibiting Ragging in Medical Colleges/ Institutions) Regulations 2009, and DCI Regulations on Curbing the Menace of Ragging in Dental Colleges, 2009 shall be applicable to all students of the Vidyapeeth.
- 1.3.2 It is mandatory to fill the online Anti Ragging undertaking, by every student at the time of the admission and on commencement of every academic year.
- 1.3.3 Smoking or consumption of alcoholic beverages, or use of banned materials inside the College, Hostel and Campus is strictly prohibited.. Any violation on the part of the students will be viewed very seriously and they will be suspended from the college immediately pending enquiry and in the case of hostellers, they will be expelled from the hostels immediately. Such students will not be permitted to attend classes/sit for examinations and

enter the campus without the written permission of the competent Authority.

### **1.4 Attendance & Progress:**

Each student shall always maintain decency, decorum and good conduct, besides keeping steady progress and required attendance. The conduct/ academic performance/ attendance of each student shall be reviewed periodically and appropriate action, including detaining from appearing for the Vidyapeeth Exam/ expelling from the Hostel or College, as the case may be, will be taken against the erring student. The students shall abide by such decision of the authorities of the Institution/ Vidyapeeth.

### **1.5 Payment of Tuition and Other Fees**

- 1.5.1 On admission of candidates to the first year of the course of study, all the fees mentioned in the letter of admission, viz., annual tuition fee, registration and eligibility fee, health insurance, caution deposit, hostel and mess fee, etc., as applicable, should be paid on or before the prescribed date without fail. Any delay will attract payment of penalty as specified. If any candidate fails to remit tuition fee and other fees within the last date as notified, he/she will forfeit his/her admission to the course concerned.
- 1.5.2 In respect of subsequent year(s) of study, tuition fee and other specified fees shall be paid on or before the date as notified to the parents/students and on the Notice Board of the Institution /College concerned. Late payment, if any, will attract penalty as specified.
- 1.5.3 Similarly, examination fee, as prescribed and notified from time to time, shall be paid on or before the due date. If there is any delay, it will attract penalty as specified. If any student fails to remit the examination fee even after lapse of the period specified for payment with penalty, such student will not be issued Hall Ticket for the Vidyapeeth examination(s)/ debarred from appearing for the Vidyapeeth examination(s).
- 1.5.4 All fees, once paid to the Vidyapeeth account, will not be refunded or adjusted for any other purpose under any circumstance.

## **1.6 Rules relating to Vidyapeeth**

### **Examinations**

- 1.6.1 The candidates appearing for the Vidyapeeth theory examinations shall be under the direct disciplinary control of the Centre Incharge. Possession of cell phone or any electronic device or incriminatory materials by a candidate or found copying from any device in the examination hall, is strictly prohibited.
- 1.6.2 Disciplinary action will be initiated if any candidate indulges in any malpractice (unfair means) as enumerated in the Vidyapeeth Examination Manual.

### **1.7 Rules for Hostel Students**

All inmates of the Hostel shall observe the following rules for the smooth and efficient running of the hostel and for their comfortable stay:-

- 1.7.1 Only bonafide students of Vidyapeeth are eligible for admission to the hostels.
- 1.7.2 Students, who fail to remit the Hostel fee when they fall due, even after a reminder in writing, shall vacate the hostel room allotted to them, forthwith.
- 1.7.3 No posters or pictures should be stuck inside and outside the room or anywhere around the premises of the hostel or College. Hostlers should avoid sticking bills and posters on the windows, doors and walls (except name strips on the room door). In case the room is found not in order, fine will be levied on the erring student.
- 1.7.4 Inmates should switch off fans and lights before leaving their rooms.
- 1.7.5 The inmates are advised to close the taps after use in order to avoid wastage of water.
- 1.7.6 Dining services will be provided only in the mess and there will be no room service.
- 1.7.7 Whenever any hosteller falls sick the same should be reported by his/her to the warden who will provide all necessary assistance to get appropriate treatment or medicines.
- 1.7.8 While going out of hostel the students should enter their name in the register & sign the same by mentioning proper reason.

- 1.7.9 To leave the hostel premises, permission of the Chief Warden is absolutely necessary. Students who want to stay overnight to visit their parents or guardians should approach the Chief Warden for permission. Permission will be granted only after obtaining written request from the parent/guardian duly signed by them, which will be duly entered in a register maintained in each block by the Warden.
- 1.7.10 All rooms, corridors, toilets etc. must be kept clean and any student who violates the rule shall be expelled from the hostel.
- 1.7.11 Hostel facility is provided with a view to help the student to pursue his/her studies in good environment and to facilitate/promote his/her academic progress. A student who fails to keep up the congenial atmosphere and environment in the Hostel or to perform well and maintain academic progress shall not be allowed to use the hostel facility and shall vacate his/her room immediately on intimation from the Chief Warden/  
Dean/Principal/Director of Faculties.

All students will be governed by the rules stated above and by those that will be framed from time to time during the academic year.

Failure on the part of the students to abide by the disciplinary rules will result in such punishment including expulsion from the College/Hostel as may be imposed by the Institution/ Vidyapeeth/ Head of the Institution.

The decision of the Institution/ Vidyapeeth / Head of the Institution with regard to disciplinary cases shall be final and all the students shall abide by such decisions.

### **1.8 Powers of Competent Authority (Dean/ Principal / Director / Registrar at the Institute level)**

The Competent authority may impose any one or more of the following punishment/s on the student found guilty of misconduct, indiscipline, in proportion thereof:

- 1.8.1 Warning/reprimand
- 1.8.2 Fine
- 1.8.3 Cancellation/withheld scholarship/award/prize/medal.

- 1.8.4 Expulsion from the Hostel.
- 1.8.5 Expulsion from the institution
- 1.8.6 Cancellation of the result of the student concerned in the examination of the Institution.
- 1.8.7 Temporary annulment from the Hostel/ Institution.
- 1.8.8 Rustication from the Institution.

### 1.9 Procedure for Inquiry

If the competent authority is satisfied that there is a prima facie case inflicting penalties, mentioned in clause No. 8, the authority shall make inquiry, in following manner:

- 1.9.1 Due notice in writing shall be given to the student concerned about his alleged act of misconduct/indiscipline.
- 1.9.2 Student charged shall be required within 15 days of the notice to submit his/her written representation about such charge/s.
- 1.9.3 If the student fails to submit written representation within specified time limit, the inquiry may be held ex parte.
- 1.9.4 If the student charged desired to see the relevant documents, such of the documents, as are being taken into consideration for the purpose of proving the charge/s, may at the discretion of the inquiry authority, be shown to the student.
- 1.9.5 The student charged shall be required to produce documents, if any in support of his defense. The inquiry authority may admit relevant evidence/documents.
- 1.9.6 Inquiry Authority shall record findings on each implication of misconduct or indiscipline, and the reason for such finding and submit the report along with proceedings to the competent Authority
- 1.9.7 The competent Authority on the basis of findings, shall pass such orders as it deems fit.

(specimen copy enclosed.)

Director, such student shall be entitled to prefer an appeal before the Vice- Chancellor within thirty (30) days of the receipt of the order.

### Special Instructions Regarding Ragging

The students of the University are hereby informed that “Ragging” in the any form is strictly prohibited. The University strictly enforces anti-ragging measures. It is needless to explain about the harassment, humiliation and sufferings to which the new entrants would be subjected to in the name of “Ragging” which is inhuman and intolerable. The Management will enforce strict discipline among the students of the University and ensure that the University is a model institution free from ragging. The students are therefore strictly warned to refrain from involving in any ragging activities. Those who indulge in ragging in any form shall be expelled immediately from the College and Hostel and are liable for punishment under the Medical Council of India/ University Grant Commission / Maharashtra State prohibition of ragging act and as per directives of the Supreme Court of India issued from time to time.

The “UGC Regulations on curbing the menace of ragging in higher education institutions, 2009 & The Medical Council of India (Prevention and prohibition of ragging in Medical Colleges /Institutions) regulations 2009” have been adopted by the University and are applicable to the students of the University. The full text of the regulations is reproduced below for information and strict adherence by the students.

### Important Note

Every student who joins a course of study and who is already undergoing a course of study should submit the following declaration (and any other declaration as may be prescribed from time to time, in accordance with the above rules) duly signed at the time of admission and also as and when required during the course of his/her study in the University.

Each student and parent/guardian is required to submit an affidavit on paper separately in the form prescribed in Annexure I and Annexure II regarding curbing the menace of ragging



**D.Y. Patil Vidyapeeth**  
Deemed to be University  
Pimpri, Pune – 411 018

**Curbing the Menace of Ragging in  
Higher Educational Institutions Regulations 2009.**  
(Under Section 26 (1) (g) of the University Grants Commission Act, 1956)  
(To be published in the gazette of India part III, Section- 4)

**F.1-16/ 2007 (CPP-II)**

**Dated 17th June, 2009.**

**Preamble**

In view of the direction of the Hon'ble Supreme Court in the matter of “University of Kerala v/s. Council, Principals, Colleges and others” in SLP no. 24295 of 2006 dated 16.05.2007 and the dated 08.05.2009 in Civil Appeal number 887 of 2009, and in consideration of the determination of the Central Government and the University Grants Commission to prohibit, prevent and eliminate the scourge of ragging including any conduct by any student or student whether by words spoken or written or by an act which has the effect of teasing, treating or handling with rudeness a fresher or any other student, or including in rowdy or in-disciplined activities by any student or students which causes or is likely to cause annoyance, hardship or psychological harm or to raise fear or apprehension thereof in any fresher or any other student or asking any student to do any act which such student will not in the ordinary course do and which has the effect of causing or generating a sense of shame, or torment or embarrassment so as to adversely affect the physique or psyche of such fresher or any other student, with or without an intent to derive a sadistic pleasure or showing off power, authority or superiority by a student over any fresher or any student, in all higher education institutions in the country, and thereby, to provide for the healthy development, physically and psychologically, of all students, the University Grant Commission, in consultation with the Councils, brings forth this Regulation.

**In exercise of the powers conferred by Clause (g) of sub-section (1) of Section 26 of the University Grants Commission Act, 1956, the University Grant Commission hereby makes the following Regulations, namely;**

**\*\* As amended vide Notification dated 08.10.2012 published in the Gazette of India dated 10.11.2012**

**1. Title, commencement and applicability:**

- 1.1 These regulations shall be called the “UGC Regulations on Curbing the Menace of Ragging in Higher Educational Institutions, 2009”.
- 1.2 They shall come into force from the date of their publication in the Official Gazette.
- 1.3 They shall apply to all the institution coming within the definition of an University under sub-section (f) of section (2) of the University Grants Commission Act, 1956, to all other higher educational institutions, or elements of such universities or institutions, including its department, constituent units and all the premises, whether being academic, residential, playgrounds, canteen, or other such premises of such universities, deemed university and higher educational institutions, whether located within the campus or outside, and to all means of transportations of students, whether public or private, accessed by students for the pursuit of studies in such universities, deemed university and higher educational institutions.

## 2. Objective:

To prohibit any conduct by any student or students whether by words spoken or written or by an act which has the effect of teasing, treating or handling with rudeness a fresher or any other students, or indulging in rowdy or in-disciplined activities by any student or students which causes or is likely to cause annoyance, hardship or psychological harm or to raise fear or apprehension thereof in any fresher or any other student or asking any student to do any act which such student will not in the ordinary course do and which has the effect of causing or generating a sense of shame, or torment or embarrassment so as to adversely affect the physique or psyche of such fresher or any other student, with or without an intent to derive a sadistic pleasure or showing off power, authority or superiority by a student over any fresher or any student; and thereby, to eliminate ragging in all its forms from universities, deemed universities and other higher educational institutions in the country by prohibiting it under these Regulations, preventing its occurrence and punishing those who indulge in ragging as provided for in these Regulations and the appropriate law in force.

## 3. What constitutes Ragging: Ragging constitutes one or more of any the following acts:

- a) Any conduct by any student or students whether by words spoken or written or by an act which has the effect of treating or handling with rudeness a fresher or any other student;
- b) Including in rowdy or in-disciplined activities by any student or students which causes or is likely to cause annoyance, hardship or psychological harm or to raise fear or apprehension thereof in any fresher or any other student;
- c) Asking any student to do any act which such student will not in the ordinary course do and which has the effect of causing or generating a sense of shame, or torment or embarrassment so as to adversely affect the physique or psyche of such fresher or any other student;
- d) Any act by the senior student that prevent, disrupts or disturbs the regular academic activity of any other student or a fresher;
- e) Exploiting the service of a fresher or any other student for completing the academic

tasks assigned to an individual or a group of students;

- f) Any act of financial extortion or forceful expenditure burden put on a fresher or any other student by students;
- g) Any act of physical abuse including all variants of it: sexual abuse, homosexual assaults, stripping, forcing obscene and lewd acts, gestures, causing bodily harm or any other danger to health person.
- h) Any act or abuse by spoken words, e-mails, post, public insults which would also include deriving perverted pleasure, vicarious or sadistic thrill from actively or passively participating in the discomfiture to fresher or any other students;
- i) Any act that affects the mental health and self-confidence of a fresher or any other student with or without an intent to derive a sadistic pleasure or showing off power, authority or superiority by a student over any fresher or any other students.

## 4. Definitions:

### 1. In these regulations unless the context otherwise requires,-

- (a) "Act" means, the university Grant Commission Act, 1956 (3 of 1956);
- (b) "Academic year" means the period from commencement of admission of students in any course of study in the institution up to the completion of academic requirements for that particular year;
- (c) "Anti-Ragging Helpline" means the Helpline established under clause (a) of Regulation 8.1 of these Regulation.
- (d) "Commission" means the University Grant Commission;
- (e) "Council" means a body so constituted by an Act of Parliament or an Act of any State Legislature for setting, or co-ordinating or maintaining standards in the relevant areas of higher education, such as the All India Council for Technical Education (AICTE), the Bar Council of India (BCI), the Dental Council of India (DCI), the Distance Education Council (DEC), the Indian Council of Agricultural Research (ICAR), the Indian Nursing Council (INC), the Medical Council of India

(MCI), the National Council for Teacher Education (NCTE), the Pharmacy Council of India (PCI), etc. and the state Higher Education Councils.

- (f) “District Level Anti-Ragging Committee” means the Committee, headed by the district Magistrate, constituted by the State Government, for the control and elimination of ragging in institutions with the jurisdiction of the district.
- (g) “Head of the institution” means the Vice-Chancellor in case of university or a deemed to be university, the Principal or the Director or such other designation as the executive head of the institution or the college is referred.
- (h) “Fresher” means a student who has been admitted to an institution and who is undergoing his/her first year of study in such institution.
- (i) “Institution” means a higher educational institution including, but not limited to an university, a deemed to be university, a college, an institute, an institution of national importance set up by an Act of Parliament or a constitute unit of such institution, imparting higher education beyond 12 years of schooling leading to, but not necessarily culminating in, a degree (graduate, postgraduate and/or higher level) and/or to a university diploma.
- (j) “NAAC” means the National Academic and Accreditation Council established by Commission under section 12(ccc) of the Act;
- (k) “State Level Monitoring Cell” means the body constituted by the State Government for the control and elimination of ragging in institution within the jurisdiction of the State, established under a State Law or on the advice of the Central Government, as the case may be.

**2. Words and expression used and not defined herein but defined in the Act or in the General Clauses Act, 1897, shall have the meanings respectively assigned to them in the Act in the General Clauses Act, 1897, as the case may be.**

**5. Measures for prohibition of ragging at the institution level:**

- (a) No institution or any part of it thereof, including its elements, including, but not limited to, the departments, constituent units, colleges, centers of studies and all its premises, whether academic, residential, playgrounds, or canteen, whether located within the campus or outside, and all means of transportation of students, whether public or private, accessed by students for the pursuit of studies in such institution, shall permit or condone any reported incident of ragging in any form; and all institution shall take all necessary and required measures, including but not limited to the provision of these Regulation, to achieve the objective of eliminating ragging, with the institution or outside;
- (b) All institutions shall take action in according with these Regulations against those found guilty of ragging and/or abetting ragging, actively or passively, or being part of a conspiracy to promote ragging.

**6. Measures for prevention of ragging at the institution level:-**

6.1 An institution shall take the following steps in regards to admission or registration of students; namely;

- (a) Every public declaration of intent by any institution, in any electronic, audio-visual or print or any media, for admission of students to any course of study shall expressly provide that ragging is totally prohibited in the institution, and anyone found guilty of ragging and/or abetting ragging, whether actively or passively, or being a part of a conspiracy to promote ragging, is liable to be punished in accordance with these Regulations as well as under the provision of any penal law for the time being in force.
- (b) The brochure of admission/instruction booklet or the prospectus, whether in print or electronic format, shall prominently print these Regulations in full.

Provided that the institution shall also draw attention to any law concerning ragging and its consequences, as may be applicable to the institution publishing such brochure of admission/instruction booklet or the prospectus.

Provided further that the telephone numbers of the Anti-Ragging Helpline and all the important functionaries in the institution, including but not limited to the Head of the institution, faculty members, members of the Anti-Ragging Committees and Anti-Ragging Squads, District and Sub-Divisional authorities, Warden of hostels, and other functionaries or authorities where relevant, shall be published in brochure of admission / instruction booklet or the prospectus.

- (c) Where an institution is affiliated to a University and publishes brochure of admission/instruction booklet or a prospectus, the affiliating university shall ensure that the affiliated institution shall comply with the provisions of clause (a) and clause (b) of Regulation 6.1 of these Regulations.
- (d) The application form for admission, enrolment or registration shall contain an affidavit, mandatorily in English and Hindi and/or one of the regional languages known to the applicant, as provided in the English language in Annexure I to these Regulations, to be filled up and signed by the applicant to the effect that he/she has read and understood the provision of these Regulations as well as the provisions of any other law for the time being in force, and is aware of the prohibition of ragging and the punishment prescribed, both under penal laws as well as under these Regulation and also affirm to the further aver that he/she would not indulge, actively or passively, in the act or abet the act of ragging and if found guilty of ragging and/or abetting ragging, is liable to be proceeded against under these Regulations or under any penal law or any other law for the time being in force and such action would include but is not limited to debarment or expulsion of such student.
- (e) The application form for admission, enrolment or registration shall contain an affidavit, mandatorily known to the parents/guardians of the applicant, as provided in the English language in Annexure I to these Regulations, to be filled up and signed by the parents/guardians of these applicant to the effect that he/she has read and understood the provision of these Regulation as well as the provisions of

any other law for the time being in force, and is aware of the prohibition of ragging and the punishment prescribed, both under penal laws as well as under these Regulations and also affirm to the effect that his/her ward has not been expelled and/or debarred by any institution and further aver that his/her ward would not indulge, actively or passively, in the act or abet the act or ragging and if found guilty of ragging and/or abetting ragging, his/her ward is liable to be proceeded against under these Regulation or under any penal law or any other law for the time being in force and such action would include but is not limited to debarment or expulsion of his/her ward.

- (f) The application for admission shall be accompanied by a document in the form of, or annexed to, the School Leaving Certificate/Transfer Certificate/ Migration Certificate/ Character Certificate reporting on the inter-personal/ social behavioral pattern of the applicant, to be issued by the school or institution last attended by the applicant, so that the institution can thereafter keep watch on the applicant, if admitted, whose behavior has been commented in such document.
- (g) A student seeking admission to a hostel forming part of the institution, or seeking to reside in any temporary premises not forming part of the institution, including a private commercially managed lodge or hostel, shall have to submit additional affidavits countersigned by his/her parents/guardians in the form prescribed in Annexure I and Annexure II to these Regulation respectively along with his/her application.
- (h) Before the commencement of the academic session in any institution, the Head of the institution shall convene and address a meeting of various functionaries/agencies, such as Hostel Wardens, representatives of students, parents/guardians, faculty, district administration including the police, to discuss the measures to be taken prevent ragging in the institution and steps to be taken to identify those indulging in or abetting ragging and punish them.
- (i) The institution shall, to make the community at large and the students in

particular aware of the dehumanizing effect of ragging, and the approach of the institution towards those indulging in ragging, prominently display posters depicting the provisions of penal law applicable to incidents of ragging and the provisions of these Regulations and also any other law for the time being in force, and the punishment thereof, shall be prominently displayed on Notice Boards of all departments, hostel and other buildings as well as at places, where students normally gather and at places, known to be vulnerable to occurrences of ragging incidents.

- (j) The institution shall request the media to give adequate publicity to the law prohibiting ragging and the negative aspects of ragging and the institution's resolve to ban ragging and punish those found guilty without fear or favour.
- (K) The institution shall identify, properly illuminate and keep a close watch on all locations known to be vulnerable to occurrences of ragging incidents.
- (l) The institution shall tighten security in its premises, especially at vulnerable places and intense policing by Anti-Ragging Squad, referred to in these Regulations and volunteers, if any, shall be resorted to at such points at odd hours during the first few months of the academic session.
- (m) The institution shall utilize the vacation period before the start of the new academic year to launch a publicity campaign against ragging through posters, leaflets and such other means, as may be desirable or required, to promote the objectives of these Regulations.
- (n) The faculties / departments / units of the institution shall have induction arrangements, including those which anticipate, identify and plan to meet any special needs of any specific section of students, in place well in advance of the beginning of the academic year with an aim to promote objectives of this Regulation.
- (o) Every institution shall engage or seek the assistance of professional counselor before the commencement of the academic session, to be available when required by the institution for the purpose of offering counseling to fresher and to other students

after the commencement of the academic year.

- (p) The head of the institution shall provide information to the local police and local authorities, the details of every privately commercially managed hostels or lodges used for residential purposes by students enrolled in the institution and the head of the institution shall also ensure that the Anti-Ragging Squad shall ensure vigil in such locations to prevent the occurrence of ragging therein.

**6.2 An institution shall, on admission or enrolment or registration of students, take the following steps, namely;**

- (a) Every fresh students admitted to the institution shall be given a printed leaflet detailing to whom he/she has to turn to for help and guidance for various purpose including address and telephone numbers, so as to enable the student to contact the concerned person at any time, if and when required, of the Anti-Ragging Helpline referred to in these Regulations, Wardens, Head of the institution, all members of the anti-ragging squads and committees, relevant district and police authorities.
- (b) The institution, through the leaflet specified in clause (a) of Regulation 6.2 of these Regulations shall explain to the fresher, the arrangements made for their induction and orientation which promote efficient and effective means of integrating them fully as students with those already admitted to the institution in earlier years.
- (c) The leaflet specified in clause (a) of Regulation 6.2 of these regulations shall inform the fresher about their rights as bona fide students of the institution and clearly instructing them that they should desist from doing anything, with or against their will, even if ordered to by the seniors students, and that any attempt of ragging shall be promptly reported to the Anti-Ragging Squad or to the Warden or to the Head of the institution, as the case may be.
- (d) The leaflet specified in clause (a) of Regulation 6.2 of these Regulations shall contain a calendar of events and activities laid down by the institution to facilitate and complement familiarization of fresher with the academic environment of the institution.

- (e) The institution shall, on the arrival of senior students after the first week or after the second week, as the case may be, schedule orientation programmes as follows, namely; (i) joint sensitization programme and counseling of both fresher and senior students by a professional counselor, referred to in clause (o) of Regulations 6.1 of these Regulations; (ii) joint orientation programme of fresher and senior to be addressed by the Head of the institution and the anti-ragging committee; (iii) organization on a large scale of cultural, sports and other activities to provide a platform for the fresher and senior to interact in the presence of faculty members; (iv) in the hostel, the warden should address all students; and may request two junior colleagues from the college faculty to assist the warden by becoming resident tutors for a temporary duration. (v) as far as possible faculty members should dine with the hostel residents in their respective hostels to instill a feeling confidence among the freshers.
- (f) The institution shall set up appropriate committees, including the course-in-charge, student advisor, Wardens and some senior students as its members, to actively monitor, promote and regulate healthy interaction between the freshers, junior students and senior students.
- (g) Freshers or any other student(s), whether being victims, or witnesses, in any incident of ragging, shall be encouraged to report such occurrence, and the identity of such informants shall be protected and shall not be subject to any adverse consequence only for the reason for having reported such incidents.
- (h) Each batch of freshers, on arrival at the institution, shall be divided into small groups and each groups shall be assigned to a member of the faculty, who shall interact individually with each member of the group every day for ascertaining the problems or difficulties, if any, faced by the fresher in the institution and shall extend necessary help to the fresher on overcoming the same.
- (i) It shall be the responsibility to the member of the faculty assigned to the group of fresher, to coordinate with the wardens of the hostels and to make surprise visit to the room in such hostel, where a member or members of the group are lodged; and such member of faculty shall maintain a diary of his/her interaction with the freshers under his/her charge.
- (j) Freshers shall be lodged, as far as may be, in a separate hostel block, and where such facilities are not available, the institution shall ensure that access of seniors to accommodation allotted to freshers is strictly monitored by wardens, security guards and other staff of the institution.
- (k) A round the clock vigil against in the hostel premises, in order to prevent ragging in the hostel after the classes are over, shall be ensured by the institution.
- (l) It shall be the responsibility of the parents/guardians of freshers to promptly bring any instance of ragging to the notice of the head of the Institution.
- (m) Every student studying in the institution and his/her parents/guardians shall provide the specific affidavits required under clauses (d), (e) and (g) of Regulation 6.1 of these Regulation, as the case may be, during each academic year.
- (n) Every institution shall obtain the affidavit form every student as referred to above in clause (m) of Regulation 6.2 and maintain a proper record of the same and to ensure its safe upkeep thereof, including maintaining the copies of the affidavit in an electronic form, to be accessed easily when required either by the Commission or any of the Councils or by the affiliating University or by any other person or organization authorized to do so.
- (o) Every student at the time of his/her registration shall inform the institution about his/her place of residence while pursuing the course of study, and In case the student has not decided his/her place of residence or intends to change the same, the details of his place of residence shall be provided immediately on deciding the same; and specifically in regard to a private commercially managed lodge or hostel where he/she has taken up residence.
- (p) The Head of institution shall, on the basis of the information provided by the student under clause (o) of Regulation 6.2,

apportion sectors to be assigned to members of the faculty, so that such members of faculty can maintain vigil and report any incident of ragging outside the campus or en route while commuting to the institution using any means of transportation of students, whether public or private.

- (q) The Head of the institution shall, at the end of each academic year, send a letter to the parents/guardians of the students who are completing their first year in the institution, informing them about these Regulations and any law for the time being in force prohibiting ragging and the punishment thereof as well as punishment prescribed under the penal law, and appealing to them to impress upon their wards to desist from indulging in ragging on their return to the institution at the beginning of the academic session next.

**6.3 Every institution shall constitute the following bodies; namely,**

- (a) Every institution shall constitute a Committee to be known as the Anti-Ragging Committee to be nominated and headed by the Head of the institution, and consisting of representatives of civil and police administration, local media, Non Government Organization involved in youth activities, representatives of faculty members, representatives of parents, representatives of students belonging to the freshers' category as well as senior students, non-teaching staff; and shall have a diverse mix of membership in terms of level as well as gender.
- (b) It shall be the duty of the Anti-Ragging Committee to ensure compliance with the provision of these Regulations as well as the provision of any law for the time being in force concerning ragging; and also to monitor and oversee the performance of the Anti-Ragging Squad in prevention of ragging in the institution.
- (c) Every institution shall also constitute a smaller body to be known as the Anti-Ragging Squad to be nominated by the Head of the Institution with such representation as may be considered necessary for maintaining vigil, oversight and patrolling function and shall remain mobile, alert and active at all times.

Provided that the Anti-Ragging Squad shall have representation of various members of the campus community and shall have no outside representation.

- (d) It shall be the duty of the Anti-Ragging Squad to be called upon to make surprise raids on hostels, and other places vulnerable to incidents of, and having the potential of, ragging and shall be empowered to inspect such places.
- (e) It shall also be the duty of Anti-Ragging Squad to conduct an on-the-spot enquiry into any incidents of ragging referred to it by the Head of the institution or any member of the faculty or any member of the staff or any student or any parent or guardian or any employee of a service provider or by any other person, as the case may be; and the enquiry report along with recommendations shall be submitted to the Anti-Ragging Committee for action under clause (a) of Regulation 9.1.

Provided that the Anti-Ragging Squad shall conduct such enquiry observing a fair transparent procedure and the principles of natural justice and after giving adequate opportunity to the student or students accused of ragging and other witnesses to place before it the facts, documents and views concerning the incident of ragging, and considering such other relevant information as may be required.

- (f) Every institution shall, at the end of each academic year, in order to promote the objectives of these Regulations, constitute a Mentoring Cell consisting of students volunteering to be Mentor for freshers, in the succeeding academic year; and there shall be as many levels or tiers of Mentors as the number of batches in the institution, at the rate of one Mentor of six freshers and one Mentor of a higher level for six Mentors of the lower level.
- (g) Every institution shall, constitute a body to be known as Monitoring Cell on Ragging, which shall coordinating with the affiliated colleges and institution under the domain of the University to achieve the objectives of these Regulations; and the Monitoring Cell shall call for reports from the Head of institution in regard to the activities of the Anti-Ragging Committees, Anti-Ragging Squads, and the Mentoring Cells at the institution, and it shall also keep itself

abreast of the decisions of the District level Anti-Ragging Committee headed by the District Magistrate.

- (h) The Monitoring Cell shall also review the efforts made by institution to publicize anti-ragging measures, soliciting of affidavits from parents/guardians and from students, each academic year, to abstain from ragging activities or willingness to be penalized for violations; and shall function as the prime mover for initiating action on the part of the appropriate authorities of the university for amending the Statutes or Ordinances or By-laws to facilitate the implementation of anti-ragging measures at the level of the institution.

**6.4 Every institution shall take the following other measures, namely,**

- (a) Each hostel or a place where groups of students reside, forming part of the institution, shall have a full-time Warden, to be appointed by the institution as per the eligibility criteria laid down for the post reflecting both the command and control aspects of maintaining discipline and preventing incidents of ragging within the hostel, as well as the softer skills of counseling and communicating with the youth outside the class-room situation; and who shall reside within the hostel, or at the very least, in the close vicinity thereof.
- (b) The Warden shall be accessible at all hours and be available on telephone and other modes of communication, and for the purpose the Warden shall be provided with a mobile phone by the institution, the number of which shall be publicized among all students residing in the hostel.
- (c) The institution shall review and suitably enhance the powers of Wardens; and the security personnel posted in hostels shall be under the direct control of the Warden and their performance shall be assessed by them.
- (d) The professional counselor referred to under clause (o) of Regulation 6.1 of these Regulation shall, at the time of admission, counsel freshers and/or any other students(s) desiring counseling, in order to prepare them for the life ahead, particularly in regard to the life in hostels and to extent possible, also involve parents and teachers in the counseling sessions.
- (e) The institution shall undertake measures for extensive publicity against ragging by means of audio-visual aids, counseling sessions, workshop, painting and design competitions among students and such other measures, as it may deem fit.
- (f) In order to enable a student or any person to communicate with the Anti-Ragging Helpline, every institution shall permit unrestricted access to mobile phones and public phones in hostels and campuses, other than in class-rooms, seminar halls, library, and in such other places that the institution may deem it necessary to restrict the use of phones.
- (g) The faculty of the institution and its non-teaching staff, which includes but is not limited to the administrative staff, contract employees, security guards and employees of service providers providing services within the institution, shall be sensitized towards the ills of ragging, its prevention and the consequences thereof.
- (h) The institution shall obtain an undertaking from every employee of the institution including all teaching and non-teaching members of staff, contract labour employed in the premises either for running canteen or as watch and ward staff or for cleaning or maintenance of the buildings/lawns and employees of service provider providing services within the institution, that he/she would report promptly any case of ragging which comes to his/her notice.
- (i) The institution shall make a provision in the service rules of its employees for issuing certificates of appreciation to such members of the staff who report incidents of ragging, which will form part of their service record.
- (j) The institution shall make give necessary instruction to the employees of the canteen and messing, whether that the institution or that of a service provider providing this service, or their employers, as the case may be, to keep a strict vigil in the area of their work and to report the incidents of ragging to the Head of the institution or members of the Anti-Ragging Squad or members of the Anti-Ragging Committee or the Wardens, as may be required.

- (k) All University awarding a degree in education at any level, shall be required to ensure that institution imparting instruction in such courses or conducting training programme for teachers include inputs relating to anti-ragging and the appreciation of the relevant human rights, as well as inputs on topic regarding sensitization against corporal punishment and checking of bullying amongst student, so that every teacher is equipped to handle at least the rudiments of the counseling approach.
- (l) Discreet random survey shall be conducted amongst the freshers every fortnight during the first three months of the academic year to verify and cross-check whether the institution is indeed free of ragging or not and for the purpose the institution may design its own methodology of conducting such surveys.
- (m) The institution shall cause to have an entry, apart from those relating to general conduct and behavior, made in the Migration/Transfer Certificate issued to the student while leaving institution, as to whether the student has been punished for committing or abetting an act of ragging, as also whether the student has displayed persistent violent or aggressive behavior or any inclination to harm others, during his course of study in the institution.
- (n) Notwithstanding anything contained in these Regulations with regard to obligations and responsibilities pertaining to the authorities or members of bodies prescribed above, it shall be the general collective responsibility of all levels and sections of authorities or functionaries including members of the faculty and employees of the institution, whether regular or temporary, and employees of service providers providing service within the institution, to prevent or to act promptly against the occurrence of ragging or any incident of ragging which comes to their notice.
- (o) The Heads of institution affiliated to a University or a constituent of the University, as the case may be, shall, during the first three months of an academic year, submit a weekly report on the status of compliance with Anti-Ragging measures under these

Regulations, and a monthly report on such status thereafter, to the Vice-Chancellor of the University to which the institution is affiliated to or recognized by.

- (p) The vice Chancellor of each University shall submit fortnight reports of the University, including those of the Monitoring Cell on Ragging in case of an affiliating university, to the State Level Monitoring Cell.

**7. Action to be taken by the Head of the institution:**

On receipt of the recommendation of the Anti-Ragging Squad or on receipt of any information Concerning any reported incident of ragging, the Head of institution shall immediately determine if a case under the penal law is made out and if so, either on his own or through a member of the Anti-Ragging Committee authorized by him in this behalf, proceed to file a First Information Report (FIR), within twenty four hours of receipt of such information or recommendation, with the police and local authorities, under the appropriate penal provisions relating to one or more of the following, namely;

- i. Abetment to ragging,
- ii. Criminal conspiracy to rag,
- iii. Unlawful assembly and rioting while ragging,
- iv. Public nuisance created during ragging,
- v. Violation of decency and morals through ragging,
- vi. Injury to body, causing hurt or grievous hurt,
- vii. Wrongful restraint,
- viii. Wrongful confinement,
- ix. Use of criminal force,
- x. Assault as well as sexual offence or unnatural offences,
- xi. Extortion,
- xii. Criminal trespass,
- xiii. Offences against property,
- xiv. Criminal intimidation,
- xv. Attempts to commit any or all of the above mentioned offences against the victim(s),
- xvi. Threat to commit any or all of the above mentioned offences against the victim(s),
- xvii. Physical or psychological humiliation,
- xviii. All other offences following from the definition of "Ragging".

Provided that the Head of the institution shall forthwith report the occurrence of the incident of ragging to the District Level

Anti-Ragging Committee and the Nodal officer of the affiliating University, if the institution is an affiliated institution.

Provided that the Head of the institution shall also continue with its own enquiry initiated under clause 9 of these Regulation and other measure without waiting for action on the part of the police/local authorities and such remedial action shall be initiated and completed immediately and in no case later than a period of seven days of the reported occurrence of the incident ragging.

### **8. Duties and Responsibility of the Commission and the Councils:**

8.1 The Commission shall, with regard to providing facilitating communicating of information regarding incidents of ragging in any institution, take the following steps, namely;

- (a) The Commission shall establish, fund and operate, a toll-free Anti-Ragging Helpline, operational round the clock, which could be accessed by students in distress owing to ragging related incidents.
- (b) Any distress message received at the Anti- Ragging Helpline shall be simultaneously relayed to the Head of the Institution, the Warden of the Hostels, the Nodal Officer of the affiliating University, if the incident reported has taken place in an institution affiliated to a University, the concerned District authorities and if so required, the District Magistrate, and the Superintendent of Police, and shall also be web enabled so as to be in the public domain simultaneously for the media and citizens to access it.
- (c) The Head of the institution shall be obliged to act immediately in response to the information received from the Anti-Ragging Helpline as at sub-clause (b) of this clause.
- (d) The telephone numbers of the Anti- Ragging Helpline and all the important functionaries in every institution Heads of institution, faculty members, members of the Anti-Ragging committees and anti- ragging squads, district and sub-divisional authorities and state authorities where relevant, shall be widely disseminated for access or to seek help in emergencies.
- (e) The Commission shall maintain an appropriate data base to be created out of

affidavits, affirmed by each student and his/her parents/guardians and stored electronically by the institution, either on its or through an agency to be designated by it; and such database shall also function as a record of ragging complaints received, and the status of the action taken thereon.

- (f) The Commission shall make available the database to a non-governmental agency to be nominated by the University Grants Commission, to build confidence in the public and also to provide information of non compliance with these Regulations to the Councils and to such bodies as may be authorized by the Commission or by the University Grants Commission.

### **8.2 The Commission shall take the following regulatory steps, namely;**

- (a) The Commission shall make it mandatory for the institution to incorporate in their prospectus, the directions of the Central Government or the State Level Monitoring Committee with regard to prohibition and consequences of ragging, and that non-compliance with these Regulations and directions so provided, shall be considered as lowering of academic standards by the institution, therefore making considered it liable for appropriate action.
- (b) The Commission shall verify that the institution strictly comply with the requirement of getting the affidavits from the students and their parents/guardians as envisaged under these Regulations.
- (c) The Commission shall include a specific condition in the Utilization Certificate, in respect of any financial assistance or grants-in-aid to any institution under any of the general or special schemes of the Commission, that the institution has complied with the anti-ragging measures.
- (d) Any incident of ragging in an institution shall adversely affect its accreditation, ranking or grading by NAAC or by any other authorized accreditation agencies while assessing the institution for accreditation, ranking or grading purpose.
- (e) The Commission may accord priority in financial grants-in-aid to those institutions, otherwise eligible to receive grants under section 12B of the Act, which report a blemish-less record in terms of there being no reported incident of ragging.

(f) The Commission shall constitute an Inter-Council Committee, consisting of representatives of the various Council, the Non-Governmental agency responsible for monitoring the database maintained by the Commission under clause (f) of Regulation 801 and such other bodies in higher education, to coordinate and monitor the anti-ragging measures in institutions across the country and to make recommendations from time to time; and shall meet at least once in six months each year.

(g) The Commission shall institute an Anti-Ragging Cell within the Commission as an institution Mechanism to provide secretarial support for collection of information and monitoring, and to coordinate with the State Level Monitoring Cell and University levels Committees for effective implementation of anti-ragging measures, and the Cell shall also coordinate with the Non-Governmental agency responsible for monitoring the database maintained by the Commission appointed under clause (g) of Regulation 8.1.

## **9. Administrative action in the event of ragging:**

### **9.1 The institution shall punish a student found guilty of ragging after following the procedure and in the manner prescribed herein under:**

(a) The Anti-Ragging Committee of the institution shall take an appropriate decision, in regard to punishment or otherwise, depending on the facts if each incidents of ragging and nature and gravity of the incident of ragging established in the recommendations of the Anti-Ragging Squad.

(b) The Anti-Ragging Committee may, depending on the nature and gravity of the guilt established by the Anti-Ragging Squad, award, to those found guilty, one or more of the following punishments, namely.

- i. Suspension from attending classes and academic privileges.
- ii. Withholding/ withdrawing scholarship/ fellowship and other benefits.
- iii. Debarring from appearing in any test/ examination or other evaluation process.
- iv. Withholding results.

v. Debarring from representing the institution in any regional, national or international meet, tournament, youth festival, etc.

vi. Suspension/ expulsion from the hostel.

vii. Cancellation of admission.

viii. Rustication from the institution and consequent debarring from admission to any other institution for a specified period.

ix. Expulsion from the institution and consequent debarring from admission to ant other institution for a specified period.

Provided that where the persons committing or abetting the act of ragging are not indentified, the institution shall resort to collective punishment.

(c) An appeal against the order of punishment by Anti-Ragging Committee shall lie,

i. In case of an order of an institution, affiliated to or constituent part, of a University, to the Vice-Chancellor of the University.

ii. In case of an order of a University, to its Chancellor.

iii. In case of an institution of national importance created by an Act of Parliament, to the Chairman or Chancellor of the institution, as the case may be.

### **9.2 Where an institution, being constituent of, affiliated to or reorganization by a University, fails to comply with any of the provisions of these Regulations or fails to curb ragging, effectively, such University may take any one or more of the following actions, namely;**

i. Withdrawal of affiliation/recognition or other privileges conferred.

ii. Prohibiting such institution from presenting any student or students then undergoing any programme of study therein for the award of any degree/ diploma of the university.

a. Provided that where an institution is prohibited from presenting its student(s), the

b. Commission shall make suitable arrangements for the others students so as to ensure that such students are able to pursue their academic studies.

iii. Withholding grants allocated to it by the university, if any

- iv. Withholding any grants channelized through the university to the institution.
- v. Any other appropriate penalty with the powers of the university.

9.3 Where in the opinion of the appointing authority, a lapse is attributable to any member of the faculty staff of the institution, in the matter of reporting or taking prompt action to prevent an incident of ragging or who display an apathetic or insensitive attitude towards complaints of ragging, or who fail to take timely steps, whether required under these Regulation or otherwise, to prevent an incident or incident of ragging, then such authority shall initiate departmental disciplinary action, in accordance with the prescribed procedure of the institution, against such member of the faculty or staff.

Provided that where such lapse is attributable to the Head of the institution, the authority designated to appoint such Head shall take such departmental disciplinary action; and such action shall be without prejudice to any action that may be taken under the penal laws for abetment of ragging for failure to take timely steps in the prevention of ragging or punishing any student found guilty of ragging.

9.4 The Commission shall, in respect of any institution that fails to take adequate steps to prevent ragging or fails to act in accordance with these Regulation or fails to punish perpetrator or incidents of ragging suitably, take one or more of the following measures, namely;

- i. Withdrawal of declaration of fitness to receive grants under section 12B of the Act.
- ii. Withholding any grant allocated.
- iii. Declaring the institution ineligible for consideration for any assistance under any of the general or special assistance programmes of the Commission.
- iv. Informing the general public, including potential candidates for admission, through a notice displayed prominently in the newspaper or other suitable media and posted on the website of the Commission, declaring that the institution does not possess the minimum academic standards.
- v. Taking such other action within its power as it may deem fit and impose such other penalties as may be provided in the Act for such duration of time as the institution complies with the provision of these Regulations.

Provided that the action taken under this clause by the Commission against any institution shall be shared with all Councils.

**ANNEXURE I**  
**Affidavit by the Student**

1. I \_\_\_\_\_(Full name of student with admission/registration/enrolment number)s/o/d/oMr./Mrs./Ms. \_\_\_\_\_, having been admitted to Dr D. Y. Patil Medical College Hospital and Research Centre, Pimpri, Pune have received a copy of the UGC Regulations on Curbing the Menace of Ragging in Higher Educational Institutions, 2009, (hereinafter called the “Regulations”) carefully read and fully understood the provisions contained in the said Regulations.
2. I have, in particular, perused clause 3 of the Regulations and am aware as to what constitutes ragging.
3. I have also, in particular, perused clause 7 and clause 9.1 of the Regulations and am fully aware of the penal and administrative action that is liable to be taken against me in case I am found guilty of or abetting ragging, actively or passively, or being part of a conspiracy to promote ragging.
4. I hereby solemnly aver and undertake that
  - a) I will not indulge in any behaviour or act that may be constituted as ragging under clause 3 of the Regulations.
  - b) I will not participate in or abet or propagate through any act of commission or omission that may be constituted as ragging under clause of the Regulations.
5. I hereby affirm that, if found guilty of ragging, I am liable for punishment according to clause 9.1 of the Regulations, without prejudice to any other criminal action that may be taken against me under any penal law or any law for the time being in force.
6. I hereby declare that I have not been expelled or debarred from admission in any institution in the country on account of being found guilty of, abetting or being part of a conspiracy to promote, ragging; and further affirm that, in case the declaration is

Found to be untrue, I am aware that my admission is liable to be cancelled.

Declared this \_\_\_\_\_ day of \_\_\_\_\_ month of \_\_\_\_\_ year.

Signature of deponent

Name:

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**Verification**

Verified that the contents of this affidavit are true to the best of my knowledge and no Part of the affidavit is false and nothing has been concealed or misstated therein.

Verified at \_\_\_\_\_ (place) on this the \_\_\_\_\_ (day) of \_\_\_\_\_ (month) \_\_\_\_\_ (year ).

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Signature of Student

**ANNEXURE II**  
**Affidavit by Parent / Guardian**

1. I, Mr./Mrs./Ms. \_\_\_\_\_ (full name of parent/guardian) father/mother/guardian of \_\_\_\_\_ (full name of student with admission/registration/enrolment number) , having been admitted to Dr D. Y. Patil Medical College Hospital and Research Centre, Pimpri, Pune, have received a copy of the UGC Regulations on Curbing the Menace of Ragging in Higher Educational Institutions, 2009,(hereinafter called the “Regulations”), carefully read and fully understood the provisions contained in the said Regulations.
2. I have, in particular, perused clause 3 of the Regulations and am aware as to what constitutes ragging.
3. I have also, in particular, perused clause 7 and clause 9.1 of the Regulations and am fully aware of the penal and administrative action that is liable to be taken against my ward in case he/she is found guilty of or abetting ragging, actively or passively, or being part of a conspiracy to promote ragging.
4. I hereby solemnly aver and undertake that
  - a) My ward will not indulge in any behavior or act that may be constituted as ragging under clause 3 of the Regulations.
  - b) My ward will not participate in or abet or propagate through any act of commission or omission that may be constituted as ragging under clause 3 of the Regulations.
5. I hereby affirm that, if found guilty of ragging, my ward is liable for punishment according to clause 9.1 of the Regulations, without prejudice to any other criminal action that may be taken against my ward under any penal law or any law for the time being in force.
6. I hereby declare that my ward has not been expelled or debarred from admission in any institution in the country on account of being found guilty of, abetting or being part of a conspiracy to promote, ragging; and further affirm that, in case the declaration is found to be untrue, the admission of my ward is liable to be cancelled.

Declared this \_\_\_\_\_ day of \_\_\_\_\_ month of \_\_\_\_\_ year.

Signature of Parent/Guardian

Name:

Address:

Telephone/ Mobile No.:

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**Verification**

Verified that the contents of this affidavit are true to the best of my knowledge and no Part of the affidavit is false and nothing has been concealed or misstated therein.

Verified at \_\_\_\_\_(place) on this the \_\_\_\_\_(day) of \_\_\_\_\_ (month) \_\_\_\_\_ (year )

\_\_\_\_\_  
Signature of Parent/Guardian

**Ragging:** Ragging in any form is a punishable offence in accordance with the “UGC REGULATION ON CURBING THE MENACE OF RAGGING IN HIGHER EDUCATIONAL INSTITUTIONS 2009 and committing this act of indiscipline shall result in – PUNISHMENT UNDER THE PROVISION OF ANY PENAL LAW FOR THE TIME BEING IN FORCE.

### Anti-Ragging Committee (2019-2020)

Sr No	Member	Name	Post	Phone No	Email ID
1	To be nominated and headed by the Head of the Institution	Dr. J. S. Bhawalkar	Dean and Chairman	9766545431	dean.medical@dpu.edu.in
2	Consisting of representatives	Mr. Vivek Muglikar	Senior P.I., P.S (Pimpri)	9823029739	vkinkoll91@gmail.com
	a. Police Administration	Mr. Rangnath Babu Unde	P.I., P.S. (Crime) Pimpri	9923353452	rangnathunde67@gmail.com
	b. Civil Administration	Mr. Shivajirao Kamble	Ex M.P.	9422647579	svkamble9999@gmail.com
	c. Representative of Local Media	Mr. Mayur Kemse	Manager, Distributor, Lokmat Pimpri, Pune	9850304097	mayurkemse2010@gmail.com
3	Representatives of Non Government Organization involved in youth activities	Adv. Dr. Ruby Pritipal Chhatwal	Social activist	9422526508	rpchhatwal@gmail.com ppchhatwal@gmail.com
4	Zonal Officer 'C' Zone office P.C.M.C. Municipal Corporation Bhosari Pune	Shri. Anna Bodade	Zonal Officer	9922501942	a.bodade@pcmcindia.gov.in pro@pcmcindia.gov.in
5	Representatives of Faculty Members	Dr. P. Vatsalaswamy	Director Academics	9850116519	puranamv@gmail.com
		Dr. H. G. Deshpande	Chief Warden Hostels	9422033660	drhemantdeshpande@gmail.com
		Dr. Atul Desale	Warden Boys' Hostels	8888309351	dr.a.v.desale@gmail.com
		Dr.(Col) Suri Tripta	Wardem Girls' Hostels	7249683872	triptaasuri@gmail.com
		Dr. Vaishali Dhat	Warden Girls' Hostels	9922737501	vaishdhat@yahoo.com
		Dr. A. B. Sapate	<b>Member secretary</b>	9225632392	fntabsapate@gmail.com
6	Representatives of Parents UG Students	Mr. Sambhaji D. Pote	Parent of UG student	9922693131	truptipote1410@gmail.com
		Mr. Vilasrao Patil	Parent of UG student	9923159995	prashantbajiraopatil@gmail.com
7	Representatives of students belonging to freshers category	Mr. Dhruv Qureshi	1st yr 19-20 UG student	9518363473	dhruv.qureshi@gmail.com
		Mr. Ellora Pandey	1st yr 19-20 UG student	9696579930	ellorapandey10@gmail.com
		Mr. Harsh Tyagi	UG student	9561886528	harshthyagi10@gmail.com
		Ms.Srishti Mohapatra	UG student	9922960064	shrishti191@gmail.com
8	Representatives of Senior Students (Post Graduate)	Dr. Nimish Narkar	PG Student	9767870637	dr.nimishnarkar@gmail.com
		Dr. Revati Kothari	PG Student	9158143884	dineshkothari@gmail.com
9	Representatives of non-teaching staff and shall have a diverse mix of membership in terms of levels as well as gender	Mr. Uday Shende	Registrar	9833326464	registrar.medical@dpu.edu.in
		Mrs. Shilpa Arunkumar B.	Manager HR & Admin	9096301326	drwaraeshilpa@gmail.com
		Mrs. S. A. Palekar	Incharge Student section	9657966228	ugsection.medical@dpu.edu.in
		Mr. Nitesh Sangle	Student section	9764175767	nitesh.nitesh0805@gmail.com
		Mr. Swapnil Sonje	Hostel Co-ordinator	9226539196	swapnil.sonje@dpu.edu.in
		Mrs. Deshpande	Hostel Co-ordinator	8530208875	drhemantdeshpande@gmail.com
		Mrs. Vijaya Darekar	Girls' Hos. Rector	9860961671	darekarvijay@gmail.com
		Mr. N.P. Choudhari	Boys' Hos. Rector	9960463974	namdeochoudhari951@gmail.com

## Anti-Ragging Squad

Sr. No.	Name	Designation	Phone No.	Email ID
1	Dr. A.B. Sapate (Professor, Forensic Medicine)	Officer Incharge	9225632392	fmtabsapate@gmail.com
2	Dr. Umesh More (Professor, Biochemistry)	Member	9422314399	umesh_aditya@yahoo.co.in
3	Dr. Vaishali V. Dhat (Professor, Biochemistry)	Member	9922737501	vaishdhat@yahoo.com
4	Dr. Prashant Khuje (Professor, Physiology)	Member	8390360859	drtdkhuje@ymail.com
5	Mr. N.P. Choudhari (Boys' Hostel)	Member	9960463974 020-27805162	namdeochoudhari951@gmail.com
6	Mrs. Vijaya Darekar (Girls' Hostel)	Member	9860961671 020-27805646	darekarvijay@gmail.com

## Hostel Committee

Sr. No.	Representative of Faculty Member		Phone No	Email Id
1	Dr H.G. Deshpande	Warden Boys Hostel	9422033660	drhemantdeshpande@gmail.com
2	Dr. Atul Desale	Warden Boys' Hostels	8888309351	dr.a.v.desale@gmail.com
3	Dr. Vaishali V. Dhat	Warden Girls' Hostels	9922737501	vaishdhat@yahoo.com
4	Mrs Vijaya Darekar	Girls Hostel Rector	9860961671	darekarvijay@gmail.com
5	Mr N. P. Choudhari	Boys Hostel Rector	9960463974	namdeochoudhari951@gmail.com

## Hostel Authorities

Name	Designation	Mobile No
Dr H.G. Deshpande	Chief Warden	9422033660
Dr. (Col) Suri Tripta	Warden Girls' Hostels	7249683872
Dr. Atul Desale	Warden Boys' Hostel	8888309351
Dr. Pradeep Shetty	Warden Boys' Hostel	9422340343
Dr. Vaishali Dhat	Warden Girls' Hostels	9922737501
Dr. Sumit Khupse	Assistant Warden (Male)	9130338154
Dr. Rajashri Kharat	Assistant Warden (Female)	9420497513
<b>Vigilance Team (Boys Hostel)</b>		
• Dr Umesh More	(Biochemistry Deptt.)	- 9422314399
• Dr Shailesh Meshram	(Pulmonary Medicine)	- 9823096022
• Dr Prashant Khuje	(Physiology Deptt.)	- 8390360859
<b>Vigilance Team (Girls Hostel)</b>		
• Dr Mrs Diggikar Pradnya	(Medicine Deptt.)	- 9420169778
• Dr Mrs Vaishali V. Dhat	(Biochemistry Deptt.)	- 9922737501
• Dr Mrs Shilaja Mane	(Paediatrics Deptt.)	- 9822595553
• Dr Geetanjali Unawane	(Radiology Deptt.)	- 9422607183

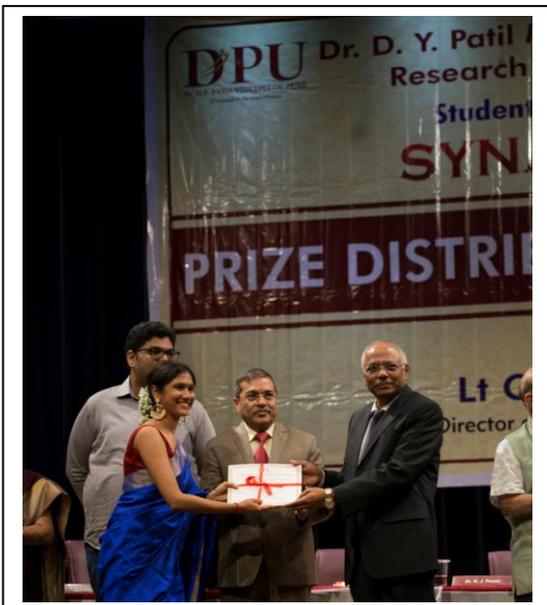
## Activities of the Students Council

The College has vibrant Student Council which comprises of General Secretary, Vice Secretary, Sectional Secretaries and Class Representatives

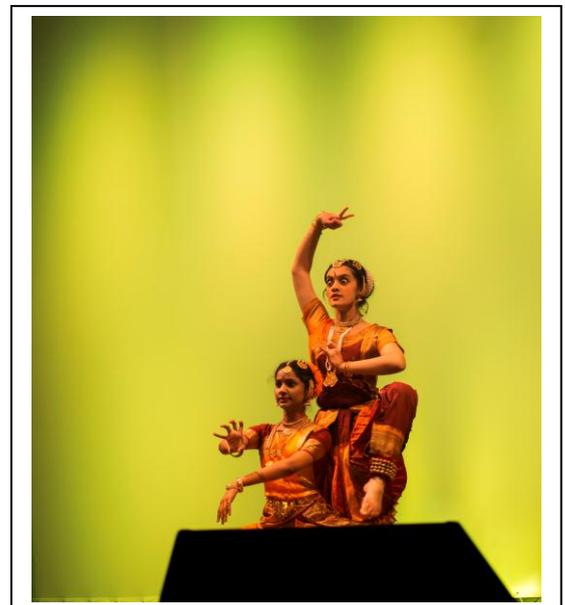
1. The College Annual Social Function - SYNAPSE is organized in the month of February
2. Various competitions for display of talent in the field of Music, Drama, Debates, Sports, Dance and Arts are organized. Students also participate in various intercollegiate events.
3. The Inter collegiate cultural festival of the University - DPU NITE is organized in the month of February every year. This event fosters a sense of camaraderie amongst students of all the constituent colleges of the University.



**Prize Dristibution**



**Prize Dristibution**



**Dance Event**



**Group Dance Event**

# ERP and Biometric System for students

Dr. D. Y. Patil Vidyapeeth and Dr. D.Y. Patil Medical College, Pune feel proud to announce that ERP and Biometric System are implemented. Details are as under:-

## ERP System:

### Login for following facilities:

- 1) View your time-table online
- 2) Check out attendance
- 3) Read notes uploaded by faculty
- 4) View the notices and circulars
- 5) Check out the allotted mentor
- 6) View your Academic calendar
- 7) Check your Internal Assessment Evaluation pattern
- 8) Submit online application regarding bonafide and other certificates
- 9) Browse the libraries of all Institutes under Dr.D.Y. Patil Vidyapeeth
- 10) Students can give online feedback

## Biometric System

1. Student's attendance is taken by Biometric System during the Lectures / Practicals / Dissections and tutorial.
2. The student section will daily send the absent report of student through SMS at parent/guardians registered mobile number in college office at the time of admission (SMS No.BZ- DPUMED)
3. Classroom attendance will not be considered if the student is late in class or misbehaves

**Proposed Academic Calendar for (2019-20)**  
**For Clinical Subjects (3rd, 5th, 7th and 9th Semesters & 4th, 6th & 8th)**

Semester	Starting Dates to Ending Dates	Working Days	Sunday	Festivals
9th Semester Teaching Duration	10.06.2019 to 27.10.2019	June =18	03	0
7th Semester Teaching Duration	19.06.2019 to 05.11.2019	June =10	02	0
		July =27	04	0
5th Semesters Teaching Duration	01.07.2019 to 22.09.2019			
3rd Semesters Teaching Duration	05.08.2019 to 22.12.2019	August =21	03	03
		Sept.= 22	05	03
Registration without fine (Tution Fees)	10.07.2019	Oct. = 23	04	04
Registration with fine (Tution Fees)	20.07.2019	Nov. = 25	04	01
<b>Prelim Examination 9th Sem.(TH+PR)</b>	<b>01.11.2019 to 21.11.2019</b>	Dec. = 25	05	01
<b>Prelim Examination 7th Sem.(TH+PR)</b>	<b>06.11.2019 to 21.11.2019</b>			
Revision Classes for students	22.11.2019 to 26.11.2019			
Diwali Vacation for 7th and 9th Sem.Students only	28.10.2019 to 30.10.2019= 03 days			
<b>University Examination (7th &amp; 9th Sem.)</b>	<b>02.12.2019 to 22.12.2019</b>			
		<b>171</b>	<b>30</b>	<b>12</b>
8th Sem. Clinical Posting, Lect. & Tutorials	01.01.2020 to 16.06.2020			
6th Sem. Clinical Posting, Lect. & Tutorials	01.01.2020 to 16.06.2020			
4th Semesters Lectures & Clinical Posting	01.01.2020 to 19.05.2020			
		Jan = 26	04	01
<b>8th Semester Term Ending Examination</b>	<b>26.05.2020 to 16.06.2020</b>	Feb. = 23	04	02
<b>6th Semester Term Ending Examination</b>	<b>26.05.2020 to 16.06.2020</b>	March = 24	05	02

<b>4th Semester Term Ending Examination</b>	<b>01.06.2020 to 22.06.2020</b>	April = 24	04	02
For Failure and Detained Students 5th & 7th Sem. <b>University Examination (Th + Pr)</b>	<b>17.06.2020 to 03.07.2020</b>			02
				01
For 9th Semester Detained Students <b>University Examination (Th + Pr)</b>	<b>01.06.2020 to 16.06.2020</b>			
Total Working Days = <b>(171 + 146)</b>	<b>317</b>			
Sunday	<b>56</b>	<b>146</b>	<b>26</b>	<b>10</b>
Festivals	<b>22</b>			
* The 4th, 6th & 8th Semesters and 3rd,5th, 7th & 9th semesters will be conducted simultaneously				

### Time Table (5th, 7th and 9th Semesters) June 2019 to December 2019

Day	Semesters	8.00 am. to 9.00 am.	9.00 am. to 10.00 am.	10.0 pm. to 1.00 pm.	2.00 pm. to 3.00 pm.	3.00 pm. to 4.00 pm.	4.00 pm. to 5.00 pm.
<b>Monday</b>	<b>5</b>	Medicine (L)	<b>Clinics (9-12)</b>		<b>Para Clinical Subjects</b>		
	<b>7</b>	-----	Obgy (L)	Clinics	PSM (L)	Ophthal (L)	Ortho (L)
	<b>9</b>	-----	Paed.(L)	Clinics	Obgy (L)	Ortho (T)	Ortho (T)
<b>Tuesday</b>	<b>5</b>	Medicine (L)	<b>Clinics (9-12)</b>		<b>Para Clinical Subjects</b>		
	<b>7</b>	Surgery (L)	Resp.Med.(L)	Clinics	Skin & Vd (L)	Ophthal (L)	Obgy (L)
	<b>9</b>	-----	Obgy (L)	Clinics	Medicine (T)	Medicine (T)	Medicine (L)
<b>Wednesday</b>	<b>5</b>	Medicine (L)	<b>Clinics (9-12)</b>		<b>Para Clinical Subjects</b>		
	<b>7</b>	Ortho (L)	Psychiatry (L)	Clinics	ENT (L)	Surgery (L)	Ophthal (T)
	<b>9</b>	-----	Surgery (L)	Clinics	Pediatrics (L)	Obgy (T)	Obgy (T)
<b>Thursday</b>	<b>5</b>	Medicine (L)	<b>Clinics (9-12)</b>		<b>Para Clinical Subjects</b>		
	<b>7</b>	Ophthal (L)	Surgery (L)	Clinics	PSM (L)	PSM (L)	Medicine (L)
	<b>9</b>	Ortho (T)	Surgery (L)	Clinics	Surgery (L)	Paed. (T)	Paed(T)
<b>Friday</b>	<b>5</b>	-----	<b>Clinics (9-12)</b>		<b>Para Clinical Subjects</b>		
	<b>7</b>	Medicine (L)	Radiology (L)	Clinics	PSM (L)	PSM (T)	ENT (T)
	<b>9</b>	Surgery (T)	Anaestha.(L)	Clinics	Ortho. (L)	Surgery (T)	Surgery (T)
<b>Saturday</b>	<b>5</b>	-----	<b>Clinics (9-12)</b>		<b>Para Clinical Subjects</b>		
	<b>7</b>	ENT (L)	Medicine (L)	Clinics	Ophthal (L)		
	<b>9</b>	Medicine (L)	Medicine (L)	Clinics			

**Time Table (4th, 6th and 8th Semesters) January-2020 to June-2020  
Clinical Departments**

Day	Semester	08:00 a.m. to 09:00 a.m.	09:00 a.m. to 10:00 a.m.	10:00 a.m. to 01:00 p.m	02:00 p.m. to 03:00 p.m.	03:00 a.m. to 04:00 p.m.	04:00 p.m. to 05:00 p.m.
<b>Monday</b>	<b>6</b>	-----	Surgery (L)	Clinics	OBGY (L)	Ophal (L)	Surgery (T)
	<b>8</b>		Surgery (L)	Clinics	Medicine (L)	Surgery (T)	Surgery (T)
<b>Tuesday</b>	<b>6</b>	Medicine(L)	T.B. (L)	Clinics	Surgery (L)	Surgery (T)	Ophal (T)
	<b>8</b>		Medicine (L)	Clinics	Surgery (L)	Medicine (T)	Medicine (T)
<b>Wednesday</b>	<b>6</b>	Medicine(L)	Paed. (L)	Clinics	ENT (L)	Skin & VD (L)	Comm. Medicine (L)
	<b>8</b>		TB (T)/Psy (T)	Clinics	OBGY (L)	Ortho (T)	Ortho (T)
<b>Thursday</b>	<b>6</b>	Medicine(T)	Medicine(T)	Clinics	Comm.Medicine (L)	Psychiatry (L)	ENT (L)
	<b>8</b>		Ortho (L)	Clinics	Skin & VD (T)	Pead. (T)	OBGY(T)
<b>Friday</b>	<b>6</b>		Ophal (L)	Clinics	Surgery (T)	Comm.Medicine (L)	Ortho (L)
	<b>8</b>		Paed. (L)	Clinics	Ortho (L)	OBGY (T)	OBGY (T)
<b>Saturday</b>	<b>6</b>		OBGY (L)	Clinics			
	<b>8</b>		Surgery (L)	Clinics			

# CURRICULUM FOR GENERAL MEDICINE

## 1. GOAL

To teach undergraduate MBBS students the subject of General medicine (theory and clinical) so that they develop knowledge, skills and behavioral attitudes to function effectively as the first contact physicians.

## 2. OBJECTIVES

The teaching shall be designed to fulfill the following objectives:-

### a) Knowledge

1. At the end of the course the student shall have adequate knowledge to; diagnose common clinical conditions with special reference to infectious diseases, nutritional disorder, metabolic disorders and environmental disorders.
2. Propose diagnostic and investigative procedures and ability to interpret them;
3. Outline various modes of management including drug therapy especially doses, side effects, toxicity, indications, contraindications and interaction;
4. Provide first level management of acute emergencies promptly and efficiently and decide on the timing and level of referral if required;
5. Recognize geriatric disorders and their management.

### b) Skills

At the end of the course the student should be able to;

1. Apply clinical skills of history taking, clinical examination to diagnose common medical disorders and medical emergencies;
2. Perform simple routine investigations like haemogram, stool, urine, sputum and other biological fluids;
3. To interpret simple X-Ray, ECG, CT scan and laboratory report findings;

4. Assist common bedside medical procedures like pleural tap, lumbar puncture, bone marrow

5. Institute primary care and refer the patient to a higher care center if required.

## 3. ATTITUDE

The student shall inculcate;

1. A sympathetic and compassionate attitude towards patient and their relatives;
2. A curiosity to learn about medical research
3. To correctly record case files, medical certificates

## 4. INTEGRATION

1. With community medicine and physical medicine and rehabilitation to have the knowledge and be able to manage important current National Health Programmes .
2. Also be able to view the patient in his / her total physical, social and economic milieu ;
2. With other relevant academic inputs which provides scientific basis of clinical medicine e.g., Anatomy, Physiology,

## 5. SYLLABUS

### I. GENERAL INSTRUCTION:

**1. The Lectures** Stated below shall cover knowledge about applied aspects of basic & allied sciences, practical approaches in the management of patients in the outdoor & indoor setting as well as their management in the community. Special emphasis shall be placed on preventive aspects, National Health Programs & dietetics & nutrition.)

### 2. During practical teaching & training in wards,

OPD & fields works proper emphasis should be given to common health problems in addition to other diseases. Emphasis should be given to learning of tacit knowledge & skills in diagnosis & interpretation of finding & Laboratory Data.

**Department of Medicine**  
**CS-(04)**  
**UG LECTURES & TUTORIALS LESSION PLAN**

S. N.	Code	4 <sup>th</sup> Semester Lecture
		Topic:- Introduction & Symptomatology
1	UG/4/L/IS	History of Medicine Concept & Objective of Diagnosis. <ul style="list-style-type: none"> <li>History of medicine from Hippocrates to present day developments</li> <li>Diagnosis clinical, laboratory &amp; its correlation</li> </ul>
2	UG/4/L/IS	Medical Ethics. <ul style="list-style-type: none"> <li>Principles of medical ethics</li> <li>Doctor patients relationship</li> <li>Communication skills</li> <li>End of life care</li> <li>Disclosure of diagnosis</li> </ul>
3	UG/4/L/IS	History taking Differential Diagnosis. <ul style="list-style-type: none"> <li>Detailed history taking form personal data chief complains history of presenting illness past/family history- significant of each</li> <li>Differential diagnosis &amp; approach to case</li> </ul>
4	UG/4/L/IS	Cardio-vascular system (CVS Symptomatology). <ul style="list-style-type: none"> <li>Signs &amp; symptoms of CVS &amp; approach to case of CVS</li> </ul>
5	UG/4/L/IS	Respiratory system (RS) Symptomatology. <ul style="list-style-type: none"> <li>Signs &amp; symptoms of respiratory system &amp; approach to case of RS</li> </ul>
6	UG/4/L/IS	Nervous system CNS Symptomatology. <ul style="list-style-type: none"> <li>Signs &amp; symptoms of NS</li> <li>Definition of different symptoms &amp; approach to a NS case</li> </ul>
7	UG/4/L/IS	Gastro intestinal tract (GIT) Symptomatology. <ul style="list-style-type: none"> <li>Signs &amp; symptoms of GIT diseases</li> <li>Approach to case of GIT diseases</li> </ul>
8	UG/4/L/IS	Hepatobiliary Symptomatology. <ul style="list-style-type: none"> <li>Anatomy, signs, symptoms, approach to a case of hepatobiliary disease</li> </ul>
9	UG/4/L/IS	Patient with fever & Edema – approach <ul style="list-style-type: none"> <li>Definition / types of fever/ approach to case of fever/PUO</li> </ul>
10	UG/4/L/IS	Patient with Anaemia & Jaundice – Approach <ul style="list-style-type: none"> <li>Definition of anaemia / classification /signs /symptoms /diagnosis /treatment/approach to case of anemia</li> </ul>
11	UG/4/L/IS	<ul style="list-style-type: none"> <li>Revision</li> </ul>
12	UG/4/L/IS	Patient with Lymphadenopathy – Approach <ul style="list-style-type: none"> <li>Definition/generalized lymphadenopathy/ localized lymphadenopathy differential diagnosis</li> </ul>
13	UG/4/L/IS	Investigation -I (Non Invasive) X-Ray USG CT MRI PBS <ul style="list-style-type: none"> <li>Importance of each investigations / technical details / indications / contra indications / recent advances</li> </ul>
14	UG/4/L/IS	Investigation -II ( Invasive) FNAC, LP, BM, LN, Liver biopsy <ul style="list-style-type: none"> <li>Indication / contra indications / methods of each surgical procedures</li> </ul>
15	UG/4/L/IS	Review of common Diseases in India <ul style="list-style-type: none"> <li>Malaria/ TB / enteric fever etc short review</li> </ul>
16	UG/4/L/IS	Approach to oedema <ul style="list-style-type: none"> <li>Definition of edema/causes / pathophysiology/approach to case of edema</li> </ul>
17	UG/4/L/IS	Approach to jaundice <ul style="list-style-type: none"> <li>Definition of jaundice/clinical features / causes/ complications/ diagnosis/treatment/ approach/ differential diagnosis</li> </ul>
18	UG/4/L/IS	<ul style="list-style-type: none"> <li>Revision</li> </ul>

Sr. No.	Code	5 <sup>th</sup> Semester Lectures - I
		Topic:- Infection Diseases
1	UG/5/L/ID	Staphylococcus, infections <ul style="list-style-type: none"> <li>• Skin infections, wound infections, cannula related infections, MRSA</li> <li>• Staph toxic shock syndrome and management Streptococcal infections</li> <li>• Skin infections, scarlet fever, toxic shock syndrome, related infections, management</li> </ul>
2	UG/5/FL/ID	Typhoid Fever- Flipped Classroom Teaching <ul style="list-style-type: none"> <li>• Causative agents</li> <li>• Epidemiology</li> <li>• Pathogenesis</li> <li>• Clinical features</li> <li>• Complication</li> <li>• Investigations</li> <li>• Management</li> </ul>
3	UG/5/L/ID	Gastroenteritis & Cholera <ul style="list-style-type: none"> <li>• Causative agents</li> <li>• Epidemiology</li> <li>• Clinical features</li> <li>• Complications</li> <li>• Investigations</li> <li>• Prevention</li> </ul>
4	UG/5/L/ID	Tetanus / Leptospirosis <ul style="list-style-type: none"> <li>• Epidemiology</li> <li>• Pathogenesis</li> <li>• Clinical features</li> <li>• Complications</li> <li>• Prevention</li> </ul>
5	UG/5/L/ID	Anthrax, brucellosis, plague. <ul style="list-style-type: none"> <li>• Causative agents microbiology</li> <li>• Epidemiology</li> <li>• Pathogenesis</li> <li>• Clinical features</li> <li>• Complications</li> <li>• Treatment</li> <li>• Prevention</li> </ul>
6	UG/5/FL/ID	Leprosy- Flipped Classroom Teaching <ul style="list-style-type: none"> <li>• Types</li> <li>• Definition</li> <li>• Investigation</li> <li>• Complication</li> <li>• Management</li> </ul>
7	UG/5/FL/ID	Syphilis <ul style="list-style-type: none"> <li>• Causative agent</li> <li>• Epidemiology</li> <li>• Pathogenesis</li> <li>• Stages of syphilis</li> <li>• Clinical features of each stage.</li> <li>• Complications</li> <li>• Treatment</li> <li>• Prevention</li> </ul>
8	UG/5/FL/ID	Malaria- Flipped Classroom Teaching <ul style="list-style-type: none"> <li>• Causative agents</li> <li>• Epidemiology</li> <li>• Pathogenesis</li> <li>• Clinical features Complications.</li> <li>• Investigation</li> <li>• Management Prevention.</li> </ul>
9	UG/5/L/ID	Amoebiasis & Amoebic Liver Abscess & Kala Azar

		<ul style="list-style-type: none"> <li>• Causative agents microbiology</li> <li>• Epidemiology, Pathogenesis</li> <li>• Clinical features and Complications</li> <li>• Treatment</li> <li>• Prevention</li> </ul>
10	UG/5/L/ID	<p>Filariasis /worm infestations</p> <ul style="list-style-type: none"> <li>• Causative agents</li> <li>• Epidemiology</li> <li>• Pathogenesis</li> <li>• Clinical features</li> <li>• Complications</li> <li>• Investigations</li> <li>• Management</li> </ul>

Sr. No.	Code	5 <sup>th</sup> Semester Lectures - I	
		Topic:- Infection Diseases	
11	UG/5/L/ID	<p>Measles, mumps, chicken pox, herpes simplex, herpes zoster.</p> <ul style="list-style-type: none"> <li>• Causative agents</li> <li>• Epidemiology</li> <li>• Pathogenesis</li> <li>• Clinical features</li> <li>• Complications</li> <li>• Investigations</li> <li>• Management</li> </ul>	
12	UG/5/L/ID	<p>Dengue, Chikungunya, Yellow fever</p> <ul style="list-style-type: none"> <li>• Causative agents</li> <li>• Epidemiology</li> <li>• Pathogenesis</li> <li>• Clinical features</li> <li>• Investigations</li> <li>• Complications and Management</li> </ul>	
13	UG/5/L/ID	<p>HIV-I</p> <ul style="list-style-type: none"> <li>• Clinical examination,</li> <li>• Epidemiology and biology(Modes of transmission),</li> <li>• Natural history,</li> <li>• Classification,</li> <li>• Post exposure prophylaxis.</li> <li>• Management</li> </ul>	
14	UG/5/L/ID	<p>HIV-II</p> <ul style="list-style-type: none"> <li>• Clinical examination,</li> <li>• Epidemiology and biology(Modes of transmission),</li> <li>• Natural history,</li> <li>• Classification,</li> <li>• Post exposure prophylaxis.</li> <li>• Management</li> </ul>	
15	UG/5/L/ID	<p>Polio, rabies, japanese encephalitis</p> <ul style="list-style-type: none"> <li>• Causative agent</li> <li>• Epidemiology</li> <li>• Pathogenesis, Complication</li> <li>• Investigations</li> <li>• Management</li> </ul>	
16	UG/5/L/ID	<p>Rickketsial infection</p> <ul style="list-style-type: none"> <li>• Causative agent</li> <li>• Epidemiology</li> <li>• Pathogenesis, Complication</li> <li>• Investigations</li> <li>• Management</li> </ul>	
17	UG/5/L/ID	<p>New emerging infections- H1N1, SARS ,Bird flu</p> <ul style="list-style-type: none"> <li>• Clinical features</li> <li>• Investigations</li> <li>• Management</li> </ul>	

		<ul style="list-style-type: none"> <li>Prevention</li> </ul>
18	UG/5/L/ID	Antibiotic resistance <ul style="list-style-type: none"> <li>Mechanisms</li> <li>Causes</li> <li>Types</li> </ul>
19	UG/5/L/ID	Fever of unknown origin <ul style="list-style-type: none"> <li>Clinical assessment</li> <li>Etiology</li> <li>Investigations</li> </ul>
20	UG/5/L/ID	Febrile neutropenia, fever in immune compromised <ul style="list-style-type: none"> <li>Definition</li> <li>Investigations</li> <li>treatment</li> </ul>
21	UG/5/L/ID	<ul style="list-style-type: none"> <li>Revision</li> </ul>

Lecture number 2 (Typhoid Fever), 6 (Leprosy) and 8( Malaria) in will be conducted by using Flip Classroom Method.

Sr. No.	Code	5 <sup>th</sup> Semester Lectures - II
		Topic:- Cardiovascular System (CVS)
1	UG/5/L/CVS	Introduction - ( CVS ) <ul style="list-style-type: none"> <li>clinical examination</li> <li>Anatomy physiology of CVS</li> </ul>
2	UG/5/L/CVS	CVS - Method of Evaluation - Non invasive CVS <ul style="list-style-type: none"> <li>ECG</li> <li>2DECHO</li> <li>X ray chest</li> <li>Stress test</li> <li>CAG</li> </ul>
3	UG/5/L/CVS	Arrhythmias <ul style="list-style-type: none"> <li>Tachyarrhythmias</li> <li>Bradyarrhythmias</li> </ul>
4	UG/5/L/CVS	Congestive Cardiac Failure, LVF <ul style="list-style-type: none"> <li>Clinical features</li> <li>Investigation</li> <li>Treatment</li> <li>Complications of Treatment</li> </ul>
5	UG/5/L/CVS	Cong Heart Diseases Aetiology, Classification CHD in Adults <ul style="list-style-type: none"> <li>Foetal heart circulation</li> <li>Cyanotic heart disease</li> <li>Acyanotic heart disease</li> </ul>
6	UG/5/L/CVS	Rheumatic Fever <ul style="list-style-type: none"> <li>Clinical features</li> <li>Investigations</li> <li>Treatment &amp; Prophylaxis.</li> <li>Complications</li> </ul>
7	UG/5/L/CVS	Valvular heart diseases (MS,MR,TR)- Part- I <ul style="list-style-type: none"> <li>Haemodynamics- clinical features</li> <li>Investigation</li> <li>Complications</li> <li>Treatment</li> </ul>
8	UG/5/L/CVS	Valvular heart diseases (AS,AI) - Part- II <ul style="list-style-type: none"> <li>Haemodynamics- clinical features</li> <li>Investigation</li> <li>Complications</li> <li>Treatment</li> </ul>
9	UG/5/L/CVS	Infective Endocarditis <ul style="list-style-type: none"> <li>Etiology</li> <li>Clinical features</li> <li>Investigation</li> <li>Treatment</li> <li>Complications</li> </ul>

10	UG/5/L/CVS	Coronary Artery Disease <ul style="list-style-type: none"> <li>• Definition etiology, Pathophysiology, clinical features, investigations, diagnosis &amp; management</li> </ul>
11	UG/5/L/CVS	Myocardial Infarction, Angina pectoris. <ul style="list-style-type: none"> <li>• Definition, etiology, Pathophysiology, clinical features, investigations, diagnosis &amp; management, Complications</li> </ul>
12	UG/5/L/CVS	Cardiomyopathy <ul style="list-style-type: none"> <li>• Definition, etiology, types, pathophysiology, clinical features, investigations, diagnosis, management</li> </ul>
13	UG/5/L/CVS	Pericardial Disease <ul style="list-style-type: none"> <li>• Definition, etiology, pathophysiology, clinical features, investigations, diagnosis, management, deferential diagnosis &amp; complication</li> </ul>
14	UG/5/L/CVS	Hypertension - I <ul style="list-style-type: none"> <li>• Definition , JNC classification, causes, secondary causes investigation</li> </ul>
15	UG/5/L/CVS	Hypertension - II <ul style="list-style-type: none"> <li>• Management, treatment individual drugs with doses &amp; contra indication, Treatment of complications, prevention of complications</li> </ul>
16	UG/5/L/CVS	Disorders of aorta and peripheral blood vessels <ul style="list-style-type: none"> <li>• Aortic aneurysm, aortic dissection( etiology, types, clinical features, treatment, management)</li> <li>• Atherosclerosis.</li> <li>• Acute &amp; Chronic upper &amp; lower limb ischaemia.</li> </ul>
17	UG/5/L/CVS	<ul style="list-style-type: none"> <li>• Revision</li> </ul>

Sr. No.	Code	6 <sup>th</sup> Semester Lectures
		Topic:- GIT / Liver
1	UG/6/L/GIT	Diseases of oral cavity, aphthos ulcer <ul style="list-style-type: none"> <li>• Aphthos ulcer differential diagnosis, etiology, management</li> <li>• Haematemesis causes &amp; management</li> <li>• Malena causes &amp; management</li> </ul>
2	UG/6/L/GIT	Esophagus Anatomy & physiology of deglutition dysphasia, GERD, Achlasia cardiac Reflux oesphagitis <ul style="list-style-type: none"> <li>• Esophagus Anatomy</li> <li>• Reflux oesphagitis- etiology, types management</li> <li>• Achlasia cardiac GERD etiology, presentation, management</li> </ul>
3	UG/6/L/GIT	Heametmesis & Maleana <ul style="list-style-type: none"> <li>• D/D</li> <li>• Management</li> </ul>
4	UG/6/L/GIT	Disease of Stomach <ul style="list-style-type: none"> <li>• Peptic Ulcer, Acute &amp; Chronic Gastritis, malignancies</li> <li>• Peptic ulcer- types, etiology, symptoms, investigation &amp; Management</li> </ul>
5	UG/6/L/GIT	Diseases of Small Intestine <ul style="list-style-type: none"> <li>• Anatomy Secretions, Functions , Malabsorption Syndrome</li> </ul>
6	UG/6/L/GIT	Blood Supply of bowel & ischemic disease of bowel <ul style="list-style-type: none"> <li>• Blood Supply of bowel</li> <li>• Etiology,clinical features and management of ischemic bowel disease</li> </ul>
7	UG/6/L/GIT	IBS <ul style="list-style-type: none"> <li>• Definition, presentation etiology &amp; management</li> </ul>
8	UG/6/L/GIT	Ulcerative Colitis Crohn's Disease; other disease of large intestine. <ul style="list-style-type: none"> <li>• Crohn's Disease; other disease of large intestine.</li> </ul>
9	UG/6/L/GIT	Tuberculosis abdomen <ul style="list-style-type: none"> <li>• Types</li> <li>• Management</li> </ul>
10	UG/6/L/GIT	Jaundice <ul style="list-style-type: none"> <li>• D/D,</li> <li>• Bilirubin metabolism &amp; LFT</li> </ul>
11	UG/6/L/GIT	Hepatitis-Acute & Chronic Hepatitis -I <ul style="list-style-type: none"> <li>• Etiology</li> <li>• Pathology</li> <li>• Clinical features</li> <li>• Complication</li> <li>• Management</li> </ul>

12	UG/6/L/GIT	Hepatitis-Acute & Chronic Hepatitis –II <ul style="list-style-type: none"> <li>• Etiology</li> <li>• Pathology</li> <li>• Clinical features</li> <li>• Complication</li> <li>• Management</li> </ul>
13	UG/6/L/GIT	Cirrhosis of Liver – I <ul style="list-style-type: none"> <li>• Aetiopathogenesis, clinical Features &amp; Diagnosis</li> </ul>
14	UG/6/L/GIT	Cirrhosis of Liver - II <ul style="list-style-type: none"> <li>• Management</li> <li>• Complications including portal hypertension.</li> </ul>
15	UG/6/L/GIT	Acute pancreatitis <ul style="list-style-type: none"> <li>• Etiology</li> <li>• Pathology</li> <li>• Clinical features</li> <li>• Complication</li> <li>• Management</li> </ul>
16	UG/6/L/GIT	Chronic pancreatitis <ul style="list-style-type: none"> <li>• Etiology</li> <li>• Pathology</li> <li>• Clinical features</li> <li>• Complication</li> <li>• Management</li> </ul>
17	UG/6/L/GIT	Disease of gall bladder <ul style="list-style-type: none"> <li>• Etiology</li> <li>• Clinical Features</li> <li>• Management</li> </ul>
18	UG/6/L/GIT	<ul style="list-style-type: none"> <li>• Revision</li> </ul>

Sr. No	Code	6 <sup>th</sup> Semester Lectures
		Topic:-Respiratory System
1	UG/6/L/RS	Approach to haemoptysis <ul style="list-style-type: none"> <li>• Definition</li> <li>• Causes</li> <li>• Management</li> </ul>
2	UG/6/L/RS	Bronchial asthma <ul style="list-style-type: none"> <li>• Epidemiology</li> <li>• Etiology</li> <li>• Pathology</li> <li>• Clinical features</li> <li>• investigations</li> <li>• Management</li> </ul>
3	UG/6/L/RS	COPD <ul style="list-style-type: none"> <li>• Etiology</li> <li>• Pathology</li> <li>• Clinical features</li> <li>• investigations</li> <li>• Management</li> </ul>
4	UG/6/L/RS	Tropical Eosinophilia <ul style="list-style-type: none"> <li>• Definition</li> <li>• Etiology</li> <li>• types</li> <li>• Treatment</li> </ul>
5	UG/6/L/RS	Occupational lung diseases <ul style="list-style-type: none"> <li>• Occupational airway disease</li> <li>• Pneumoconiosis</li> <li>• Asbestosis related lung and pleural disease</li> <li>• Lung diseases due to organic dust</li> </ul>

		<ul style="list-style-type: none"> <li>Occupational lung cancer</li> <li>Occupational pneumonia</li> </ul>
6	UG/6/L/RS	Pulmonary thromboembolism <ul style="list-style-type: none"> <li>clinical features</li> <li>risk factors</li> <li>diagnosis</li> <li>management</li> </ul>
7	UG/6/L/RS	<ul style="list-style-type: none"> <li>Revision</li> </ul>
8	UG/6/L/RS	Sleep disordered breathing <ul style="list-style-type: none"> <li>etiology</li> <li>clinical features</li> <li>investigations</li> <li>management</li> </ul>
9	UG/6/L/RS	Mediastinal syndrome <ul style="list-style-type: none"> <li>clinical features</li> <li>investigations</li> </ul>
10	UG/6/L/RS	Carcinoma lung <ul style="list-style-type: none"> <li>risk factors</li> <li>pathology</li> <li>clinical features</li> <li>investigations</li> <li>management</li> </ul>
11	UG/6/L/RS	Pleural effusion <ul style="list-style-type: none"> <li>Types</li> <li>Causes</li> <li>Clinical features</li> <li>investigations</li> <li>Management.</li> </ul>
12	UG/6/L/RS	Pneumothorax <ul style="list-style-type: none"> <li>types</li> <li>causes</li> <li>treatment</li> </ul>
13	UG/6/L/RS	Interstitial lung diseases <ul style="list-style-type: none"> <li>diffuse parenchymal lung disease</li> <li>systemic inflammatory disease</li> <li>pulmonary eosinophilia</li> <li>Lung diseases due to irradiation drugs.</li> <li>Rare ILD</li> </ul>
14	UG/6/L/RS	<ul style="list-style-type: none"> <li>Revision</li> </ul>

Sr. No.	Code	6 <sup>th</sup> Semester
		Tutorial
1	UG/6/T/MISC	Blood Transfusion & Components Therapy <ul style="list-style-type: none"> <li>Types, indications, contra indication, adverse effects Blood components- eg :platelets, FFPs RDP's, cryoprecipitate</li> </ul>
2	UG/6/T/MISC	Obesity <ul style="list-style-type: none"> <li>Problems of obesity with changed life style</li> <li>Various causes of obesity</li> <li>Anthropometric measurements</li> <li>Complication of obesity,</li> <li>treatment options</li> </ul> Metabolic syndrome <ul style="list-style-type: none"> <li>definition</li> <li>management</li> </ul>
3	UG/6/T/MISC	Protein - Energy Malnutrition, anorexia nervosa <ul style="list-style-type: none"> <li>PEM in adults</li> <li>Methods to diagnose of PEM</li> </ul>

		<ul style="list-style-type: none"> <li>• Treatment of PEM Vitamin Deficiency States Beri - Beri, Pellagra, Scurvy, Vitamin A Deficiency, Thiamine Deficiency</li> <li>• Vitamin deficiency in adults</li> <li>• Signs , symptoms &amp; treatment</li> </ul>
4	UG/6/T/MISC	<p>Acid base imbalance</p> <ul style="list-style-type: none"> <li>• Metabolic acidosis &amp; alkalosis.</li> <li>• Respiratory acidosis &amp; alkosis.</li> <li>• Mixed acid base disorders.</li> <li>• Anionic gap disorders.</li> </ul>
5	UG/6/T/MISC	<p>Hyponatremia &amp; hypernatremia</p> <ul style="list-style-type: none"> <li>• Definition</li> <li>• Approach</li> <li>• Types</li> <li>• Management</li> </ul>
6	UG/6/T/MISC	<p>Hypokalemia &amp; hyperkalemia</p> <ul style="list-style-type: none"> <li>• Approach</li> <li>• Causes</li> <li>• ECG changes</li> <li>• Management</li> </ul>
7	UG/6/T/MISC	<p>Hypertensive emergencies</p> <ul style="list-style-type: none"> <li>• Etiology</li> <li>• Types</li> <li>• Investigation</li> <li>• Management</li> </ul>
8	UG/6/T/MISC	<p>Approach to dyspnoea</p> <ul style="list-style-type: none"> <li>• d/d</li> <li>• acute dyspnoea</li> <li>• chronic dyspnoea</li> </ul>
9	UG/6/T/MISC	<p>Approach to polyarthritis</p> <ul style="list-style-type: none"> <li>• causes</li> <li>• clinical features</li> <li>• investigations</li> <li>• management</li> </ul>
10	UG/6/T/MISC	<ul style="list-style-type: none"> <li>• Revision</li> </ul>
11	UG/6/T/MISC	<p>Fever with Rash</p> <ul style="list-style-type: none"> <li>• macular</li> <li>• maculopapular</li> <li>• vesicular, purpurial, petechial.</li> <li>• erythema multiforme</li> <li>• erythema nodosum</li> <li>• diffuse erythema</li> <li>• migrating erythema</li> </ul>
12	UG/6/T/MISC	<p>Pulmonary function tests.</p> <ul style="list-style-type: none"> <li>• Methods</li> <li>• Measurements</li> <li>• Lung volumes</li> <li>• Transfer factor</li> <li>• Arterial blood gas analysis</li> <li>• Exercise test</li> </ul>
13	UG/6/T/MISC	<p>Complementary medicine</p> <ul style="list-style-type: none"> <li>• Safety</li> <li>• Regulation</li> <li>• Integrated health care</li> </ul>
14	UG/6/T/MISC	<p>Acute severe asthma</p> <ul style="list-style-type: none"> <li>• Clinical features</li> <li>• Investigations</li> <li>• Management</li> </ul>
15	UG/6/T/MISC	<ul style="list-style-type: none"> <li>• Revision</li> </ul>

Sr. No.	Code	7 <sup>th</sup> - Semester Lectures
		Topic :- Hematology & Rheumatology
1	UG/7/L/RHEUM	Approach & Investigations to a Patients with Joint Disease <ul style="list-style-type: none"> <li>• Clinical approach</li> <li>• Physical examination, investigations, management</li> </ul>
2	UG/7/L/RHEUM	Rheumatoid Arthritis <ul style="list-style-type: none"> <li>• Etiology,</li> <li>• Genetic background,</li> <li>• Pathogenesis, criteria for diagnosis, radiological features, clinical features, extra articular manifestation,</li> <li>• Investigations &amp; management DMARD's, newer drugs</li> </ul>
3	UG/7/L/RHEUM	Seronegative Spondyloarthropathies <ul style="list-style-type: none"> <li>• Classification</li> <li>• Types</li> <li>• Investigations</li> <li>• Clinical approach</li> <li>• Management</li> </ul>
4	UG/7/L/RHEUM	Collagen vascular diseases - I <ul style="list-style-type: none"> <li>• SLE</li> <li>• Sysyemic sclerosis</li> <li>• MCTD</li> <li>• Sjogrens syndrome</li> <li>• Polymyositis,</li> <li>• Dermatomyositis, inclusion body myositis.</li> </ul>
5	UG/7/L/RHEUM	Collagen vascular diseases - II <ul style="list-style-type: none"> <li>• Takayasu disease</li> <li>• Kawasaki disease</li> <li>• Polyarterits nodosa</li> <li>• Giant cell arteritis</li> <li>• ANCA associated vasculitis</li> <li>• Churg strauss syndrome, henoch schonlein purpura</li> <li>• Cryoglobulinemic vasculitis, behchets and relapsing polychondritis</li> </ul>
6	UG/7/L/RHEUM	Gout & Pseudogout <ul style="list-style-type: none"> <li>• Etiology</li> <li>• Clinical features</li> <li>• Treatment</li> </ul> Osteoarthritis <ul style="list-style-type: none"> <li>• Etiology</li> <li>• Clinical features</li> <li>• Treatment</li> </ul>
7	UG/7/L/HEM	Classification of Anemia & Approach to Investigation <ul style="list-style-type: none"> <li>• Types of anemia physiology clinical approach</li> </ul>
8	UG/7/L/HEM	Iron Deficiency Anemia & Hypochromic Microcytic Anaemia <ul style="list-style-type: none"> <li>• Causes of IDA</li> <li>• Clinical features</li> <li>• Lab diagnosis</li> <li>• Treatment of IDA</li> <li>• Parenteral &amp; oral preparation</li> </ul>
9	UG/7/L/HEM	Megaloblastic Anaemia <ul style="list-style-type: none"> <li>• Classification &amp; causes of megaloblastic anaemia lab diagnosis bone marrow findings, pernicious aneamia management</li> </ul>
10	UG/7/L/HEM	Haemolytic Anaemia <ul style="list-style-type: none"> <li>• Classification of hemomolytic anaemia</li> <li>• G6PD deficiency hereditary spherocytes</li> <li>• Sicklecell syndrome- clinical features, complications management</li> </ul>
11	UG/7/L/HEM	Haemoglobinpathies <ul style="list-style-type: none"> <li>• Thalasemia alfa&amp; beta clinical features &amp; management</li> <li>• PNH hereditary &amp; acquired</li> </ul>

12	UG/7/L/HEM	Acute Leukemia's <ul style="list-style-type: none"> <li>• ALL- FAB classification physical examination</li> <li>• Clinical features- complications prognosis index</li> <li>• Management of ALL &amp; ANL</li> </ul>
13	UG/7/L/HEM	Chronic Leukemia's <ul style="list-style-type: none"> <li>• CML genetics- diagnosis, clinical features</li> <li>• Prognosis management</li> <li>• Recent advances</li> </ul>
14	UG/7/L/HEM	Lymphomas-Hodgkins & Non Hodgkin's Disease <ul style="list-style-type: none"> <li>• Classification- pathology, clinical approach bone marrow finding</li> <li>• Investigation &amp; management</li> </ul>
15	UG/7/L/HEM	Bleeding Disorders <ul style="list-style-type: none"> <li>• Physiology of coagulation</li> <li>• Clinical approach</li> <li>• Lab investigations</li> <li>• Diagnosis</li> <li>• Complications, DIC, management</li> <li>• Blood component therapy</li> </ul>
16	UG/7/L/HEM	Coagulation disorders <ul style="list-style-type: none"> <li>• Physiology of coagulation</li> <li>• Clinical approach</li> <li>• Lab investigation</li> <li>• Diagnosis</li> </ul>
17	UG/7/L/HEM	Myeloproliferative & myelodysplastic syndromes <ul style="list-style-type: none"> <li>• Classification</li> <li>• Management</li> </ul>
18	UG/7/L/HEM	<ul style="list-style-type: none"> <li>• Revision</li> </ul>

Sr. No.	Code	7 <sup>th</sup> - Semester Lectures
		Topic :- Nervous System
1	UG/7/L/NS	Introduction, applied Anatomy & Physiology of Brain & Spinal Cord <ul style="list-style-type: none"> <li>• Basic Anatomy &amp; Physiology.</li> <li>• Localising lesions</li> </ul>
2	UG/7/L/NS	History taking in Neurology & Investigation <ul style="list-style-type: none"> <li>• How to take CNS History</li> <li>• Neuroimaging CSF &amp; other Investigations</li> <li>• Neurophysiological testing</li> </ul>
3	UG/7/L/NS	Coma, Causes & Investigations <ul style="list-style-type: none"> <li>• Definition</li> <li>• History taken and examination in a patient with coma</li> <li>• Diagnosis and Management</li> </ul>
4	UG/7/L/NS	CVA -1 <ul style="list-style-type: none"> <li>• Blood supply to brain</li> <li>• Circle of Wills</li> <li>• Clinical presentation</li> </ul>
5	UG/7/L/NS	CVA-2 <ul style="list-style-type: none"> <li>• Concepts Types &amp; Differential predisposing factors Diagnosis &amp; Management</li> <li>• Types of cerebrovascular disorders</li> <li>• Risk factors</li> <li>• Diagnosis</li> </ul>
6	UG/7/L/NS	Space Occupying Lesions, Brain abscess & tumor <ul style="list-style-type: none"> <li>• Etiology</li> <li>• Clinical features</li> <li>• Investigation &amp; Management</li> </ul>
7	UG/7/L/NS	Encephalitis <ul style="list-style-type: none"> <li>• Etiology of encephalitis</li> <li>• Clinical features</li> <li>• Investigation</li> <li>• Management</li> </ul>

8	UG/7/L/NS	<p>Meningitis</p> <ul style="list-style-type: none"> <li>• Etiology of meningitis</li> <li>• Clinical features</li> <li>• Management</li> </ul>
9	UG/7/L/NS	<p>Epilepsy</p> <ul style="list-style-type: none"> <li>• Classifications</li> <li>• Different types</li> <li>• Investigations</li> <li>• Management</li> </ul>
10	UG/7/L/NS	<p>Parkinsonism</p> <ul style="list-style-type: none"> <li>• Etiology</li> <li>• Clinical features</li> <li>• Management</li> </ul>
11	UG/7/L/NS	<p>Cerebellar Syndrome</p> <ul style="list-style-type: none"> <li>• Etiology</li> <li>• Clinical features</li> <li>• Management</li> </ul>
12	UG/7/L/NS	<p>Demyelinating Disorders, Multiple Sclerosis, Heridofamilial disorders &amp; Motor Neuron Disease</p> <ul style="list-style-type: none"> <li>• Causes of demyelination disorders</li> <li>• Common Heridofamilial disorders</li> <li>• Etiology, clinical features and management of Multiple Sclerosis &amp; Motor Neuron Disease</li> </ul>
13	UG/7/L/NS	<p>Extrapyramidal disorders</p> <ul style="list-style-type: none"> <li>• Types</li> <li>• Clinical features</li> </ul> <p>Movement disorders</p> <ul style="list-style-type: none"> <li>• Different types of Involuntary Movements</li> <li>• Etiology, management</li> </ul>
14	UG/7/L/NS	<p>Toxic &amp; Nutritional disorders of CNS</p> <ul style="list-style-type: none"> <li>• Etiology</li> <li>• Clinical features</li> <li>• Management</li> </ul>
15	UG/7/L/NS	<p>Spinal Cord Disorders &amp; Paraplegia &amp; Quadriplegia</p> <ul style="list-style-type: none"> <li>• Compressive myelopathy-etiology ,Clinical features&amp; Management</li> </ul>
16	UG/7/L/NS	<p>Peripheral Neuropathy</p> <ul style="list-style-type: none"> <li>• Etiology of peripheral Neuropathy</li> <li>• Clinical features</li> <li>• Investigation &amp; Management</li> </ul> <p>GB Syndrome</p> <ul style="list-style-type: none"> <li>• Etiology clinical features &amp; management</li> </ul>
17	UG/7/L/NS	<p>Muscle Disorders in Brief</p> <ul style="list-style-type: none"> <li>• Types of myopathies including congenital, Metabolic inflammatory &amp; other</li> <li>• Clinical features&amp; Management</li> </ul> <p>Myasthenia Gravis</p> <ul style="list-style-type: none"> <li>• Etiology ,clinical features&amp; management</li> </ul>
18	UG/7/L/NS	<ul style="list-style-type: none"> <li>• Revision</li> </ul>

Sr. No.	Code	8 <sup>th</sup> Semester Lectures - I
		Topic:- Nephrology / General
1	UG/8/L/GEN	Genetic Disorders – introduction, common genetic disorders & prevention <ul style="list-style-type: none"> <li>• Importance of genetics</li> <li>• Structure of chromosome &amp; gene</li> <li>• Identification of genetic disease</li> <li>• Methods to prevention.</li> </ul>
2	UG/8/L/IMM	Immunology, anatomy, & physiology of immune system. Stem cells in clinical Medicine. <ul style="list-style-type: none"> <li>• Innate immunity</li> <li>• Adaptive</li> <li>• Use of Stem cells in clinical Medicine</li> </ul>
3	UG/8/L/IMM	Immune deficiency, SIRS <ul style="list-style-type: none"> <li>• Presenting problems</li> <li>• Recurrent infections</li> <li>• Primary phagocyte deficiency</li> <li>• Complement pathway deficiency</li> <li>• Primary deficiencies of adaptive immune system</li> <li>• Secondary immune deficiency.</li> </ul>
4	UG/8/L/IMM	Cancer & chemotherapy <ul style="list-style-type: none"> <li>• Hallmarks</li> <li>• Environmental and genetic determinants</li> <li>• Investigations</li> <li>• Presenting problems</li> <li>• Complications of cancer</li> <li>• Therapeutics in oncology</li> </ul>
5	UG/8/L/GEN	Human genome & Genetic Engineering and Gene Therapy <ul style="list-style-type: none"> <li>• Human genome project</li> <li>• Lab methods utilized in genetics</li> <li>• Concept of genetic engineering</li> <li>• Present &amp; future of genetic engineering</li> <li>• Gene Therapy</li> </ul>
6	UG/8/L/NUT	Protein - Energy Malnutrition, anorexia nervosa <ul style="list-style-type: none"> <li>• PEM in adults</li> <li>• Methods to diagnose of PEM</li> <li>• Treatment of PEM</li> </ul>
7	UG/8/L/NUT	Vitamin Deficiency States Beri - Beri, Pellagra, Scurvy, Vitamin A Deficiency, Thiamine Deficiency <ul style="list-style-type: none"> <li>• Vitamin deficiency in adults</li> <li>• Common vit deficiencies in adults</li> <li>• Signs , symptoms &amp; treatment</li> </ul>
8	UG/8/L/NUT	Obesity <ul style="list-style-type: none"> <li>• Problems of obesity with changed life style</li> <li>• Various causes of obesity</li> <li>• Anthropometric measurements</li> <li>• Complication of obesity</li> <li>• Treatment options</li> </ul>
9	UG/8/L/NUT	Balanced Diet & Diet in Various Disorders <ul style="list-style-type: none"> <li>• Concept of balanced diet</li> <li>• Diets recommended in various medical disorders</li> </ul>
10	UG/8/L/NUT	Fluid & electrolyte disorders <ul style="list-style-type: none"> <li>• Water &amp; electrolyte distribution</li> <li>• Investigation of water &amp; electrolyte disorders</li> <li>• Disorders of sodium balance</li> <li>• Disorders of water balance</li> <li>• Disorders of potassium balance</li> </ul>
11	UG/8/L/NEP	Applied Anatomy, Physiology of Urinary System and Renal function Tests <ul style="list-style-type: none"> <li>• In brief anatomy &amp; physiology of renal system</li> <li>• Laboratory investigation</li> <li>• Radiological investigations in renal system</li> </ul>

12	UG/8/L/NEP	Proteinuria, Haematuria, Renal Colic : Approach <ul style="list-style-type: none"> <li>• Proteinuria- etiology, investigation, management</li> <li>• Hematuria- etiology, investigation, management</li> </ul>
13	UG/8/L/NEP	Acute Glomerulonephritis <ul style="list-style-type: none"> <li>• Etiology,</li> <li>• Pathogenesis</li> <li>• Investigation</li> <li>• Management</li> </ul>
14	UG/8/L/NEP	Nephrotic Syndrome <ul style="list-style-type: none"> <li>• Clinical features,</li> <li>• Differential diagnosis</li> <li>• Management</li> </ul>
15	UG/8/L/NEP	Acute kidney injury <ul style="list-style-type: none"> <li>• Causes</li> <li>• Complication</li> <li>• Treatment of renal failure</li> </ul>
16	UG/8/L/NEP	Chronic kidney disease <ul style="list-style-type: none"> <li>• Clinical presentation</li> <li>• Complication of CRF</li> <li>• Treatment &amp; prevention</li> </ul>
17	UG/8/L/NEP	Dialysis & Renal Transplant <ul style="list-style-type: none"> <li>• Hemodialysis</li> <li>• Peritoneal dialysis</li> <li>• Renal transplantation</li> </ul>
18	UG/8/L/NEP	Infections of the Urinary System <ul style="list-style-type: none"> <li>• Upper &amp; lower UTI</li> <li>• Evaluation</li> <li>• Treatment</li> </ul>
19	UG/8/L/NEP	Tubulo interstitial diseases <ul style="list-style-type: none"> <li>• Etiology</li> <li>• Clinical features</li> <li>• Management</li> </ul>
20	UG/8/L/NEP	<ul style="list-style-type: none"> <li>• Revision</li> </ul>

Sr. No.	Code	8 <sup>th</sup> Semester Lectures - II
		Topic:- Endocrinology
1	UG/8/L/ENDO	Approach to patient with Endocrine Disorders <ul style="list-style-type: none"> <li>• Anatomy of various glands</li> <li>• physiology of glands</li> <li>• Action of Hormones</li> <li>• Common symptoms</li> </ul>
2	UG/8/L/ENDO	Applied Anatomy of Pituitary and Disorders of Pituitary – I <ul style="list-style-type: none"> <li>• Anatomy of pituitary gland</li> <li>• Physiology of hormones secreted by anterior pituitary gland</li> <li>• Prolactinoma</li> <li>• Microadenoma</li> <li>• Macroadenoma</li> <li>• Acromegaly</li> </ul>
3	UG/8/L/ENDO	Applied Anatomy of Pituitary and Disorders of Pituitary – II <ul style="list-style-type: none"> <li>• Anatomy</li> <li>• Physiology of posterior pituitary gland</li> <li>• SIADH</li> <li>• Diabetes insipidus</li> <li>• Treatment</li> </ul>
4	UG/8/L/ENDO	Thyroid Disorders – I <ul style="list-style-type: none"> <li>• Anatomy of thyroid gland</li> <li>• Physiology of thyroid gland with common signs and symptoms of hypothyroidism, lab diagnosis</li> <li>• Treatment of hypothyroidism</li> <li>• Autoimmune thyroiditis</li> </ul>

5	UG/8/L/ENDO	Thyroid Disorders – II <ul style="list-style-type: none"> <li>• Hyperthyroidism &amp; thyroid malignancies &amp; treatment</li> <li>• Subclinical hypothyroidism and hyperthyroidism</li> </ul>
6	UG/8/L/ENDO	Disorders of Adrenal gland – I <ul style="list-style-type: none"> <li>• Adrenal gland anatomy</li> <li>• Physiology &amp; action of adrenal gland hormones</li> <li>• Cushing disease</li> <li>• Treatment</li> </ul>
7	UG/8/L/ENDO	Disorders of Adrenal gland – II <ul style="list-style-type: none"> <li>• Addison’s disease</li> <li>• Pheochromocytoma</li> <li>• Treatment</li> <li>• Adrenal crisis</li> </ul>
8	UG/8/L/ENDO	<ul style="list-style-type: none"> <li>• Revision</li> </ul>
9	UG/8/L/ENDO	Vitamin D Metabolism Parathyroid Disorders with calcium metabolism-I <ul style="list-style-type: none"> <li>• Vit D metabolism</li> <li>• Hyperparathyroidism</li> <li>• Hypoparathyroidism</li> <li>• Osteoporosis</li> </ul>
10	UG/8/L/ENDO	Vitamin D Metabolism Parathyroid Disorders with calcium metabolism –II <ul style="list-style-type: none"> <li>• Hypercalcemia</li> <li>• Hypocalcaemia</li> <li>• Familial hypocalciuric hypercalcemia</li> </ul>
11	UG/8/L/ENDO	Osteomalacia, Osteopetrosis & Rickets <ul style="list-style-type: none"> <li>• Causes , Clinical Features &amp; treatment osteomalacia, rickets</li> <li>• Causes, types, Pathophysiology, osteoporosis &amp; Treatment</li> </ul>
12	UG/8/L/ENDO	FSH, Estrogen, Progesterone & their Disorders <ul style="list-style-type: none"> <li>• Physiology of FSH, Estrogen, Progesterone secretion</li> <li>• Disorders due to hypo and hyper secretion of FSH, Estrogen, Progesterone</li> </ul>
13	UG/8/L/ENDO	Gynaecomastia,Hirsutism <ul style="list-style-type: none"> <li>• Causes</li> <li>• Factors associated</li> <li>• Management</li> </ul> Turner’s syndrome,klinefelters syndrome. <ul style="list-style-type: none"> <li>• Genetics</li> <li>• Features.</li> </ul>
14	UG/8/L/ENDO	Testicular disorders & male hypogonadism <ul style="list-style-type: none"> <li>• Clinical features</li> <li>• Investigations</li> <li>• Infertility</li> <li>• Androgen replacement therapy and management</li> </ul>
15	UG/8/L/ENDO	Neuroendocrine tumours and MEN <ul style="list-style-type: none"> <li>• Multiple endocrine neoplasia type1(werners syndrome) and type 2(sipples syndrome)</li> <li>• Autoimmune polyendocrine syndromes.</li> </ul>
16	UG/8/L/ENDO	Diabetics Mellitus-I <ul style="list-style-type: none"> <li>• Etiology, theories</li> <li>• Genetic inheritance</li> <li>• Management of type- I D M</li> <li>• DKA</li> </ul>
17	UG/8/L/ENDO	Diabetics Mellitus-II <ul style="list-style-type: none"> <li>• Insulin resistance, syndrome x</li> <li>• OHA / insulin</li> <li>• Complications</li> </ul>
18	UG/8/L/ENDO	<ul style="list-style-type: none"> <li>• Revision</li> </ul>

Sr. No.	Code	8 <sup>th</sup> Semester	
		Topic:- Tutorial & Seminar Programme	
1	UG/8/T&S/MISC	Poisoning –I <ul style="list-style-type: none"> <li>• Different types of poisoning</li> <li>• Classification of Poisonous agents</li> </ul>	
2	UG/8/T&S/MISC	Poisoning -II <ul style="list-style-type: none"> <li>• First Aid measures</li> <li>• Decontamination removal of poisons</li> <li>• Organophosphorus poisons, opium, alcohol, etc</li> </ul>	

3	UG/8/T&S/MISC	<p>Animal bites</p> <ul style="list-style-type: none"> <li>• Classification of poisons snakes</li> <li>• Clinical features</li> <li>• Management</li> <li>• Complications</li> <li>• Scorpion bite clinical features, management.</li> </ul>
4	UG/8/T&S/MISC	<p>ECG – I</p> <ul style="list-style-type: none"> <li>• Simplest, cheapest, easily available, noninvasive, investigation, physiology of myocardial contraction, action potential, conducting system of heart, lead systems, intervals, rhythm &amp; heart rate</li> </ul>
5	UG/8/T&S/MISC	<p>ECG – II</p> <ul style="list-style-type: none"> <li>• Acute coronary syndrome</li> <li>• Stable CAD, TMT</li> </ul>
6	UG/8/T&S/MISC	<p>ECG – III</p> <ul style="list-style-type: none"> <li>• Arrhythmias</li> <li>• AV blocks</li> <li>• AF, SVT etc</li> </ul>
7	UG/8/T&S/MISC	<p>X-Ray Chest</p> <ul style="list-style-type: none"> <li>• Normal chest x ray PA view , AP view, lateral view, decubitus view Pneumonia</li> <li>• Lung abscess</li> <li>• Pleural effusion</li> <li>• Cavitory lesion</li> </ul>
8	UG/8/T&S/MISC	<p>Other X-Rays &amp; imaging procedures – USG</p> <ul style="list-style-type: none"> <li>• CT Scan</li> <li>• MRI</li> </ul>
9	UG/8/T&S/MISC	<p>Pleural Tap ICD, Pleural Fluid &amp; PFT</p> <ul style="list-style-type: none"> <li>• Indications</li> <li>• Procedures &amp; precautions</li> <li>• Complications</li> <li>• PFT- obstructive and restrictive lung disease</li> </ul>
10	UG/8/T&S/MISC	<ul style="list-style-type: none"> <li>• Revision</li> </ul>
11	UG/8/T&S/MISC	<p>Liver biopsy, LFT, Jaundice evaluation &amp; Ascitic fluid Interpretation, anaphylaxis</p> <ul style="list-style-type: none"> <li>• Indications</li> <li>• Procedures</li> <li>• Contraindications</li> <li>• LFT- Different tests,</li> <li>• Ascitic fluid tapping- Indications &amp; Procedure</li> </ul>
12	UG/8/T&S/MISC	<p>Haematology reports - analysis, Bone marrow report</p> <ul style="list-style-type: none"> <li>• Types of anemia</li> <li>• Acute lymphoblastic leukemia</li> <li>• Acute myloblastic leukemia</li> <li>• Chronic myeloid leukemia</li> <li>• Chronic lymphocitic leukemia</li> <li>• Multiple myeloma</li> </ul>
13	UG/8/T&S/MISC	<p>Shock</p> <ul style="list-style-type: none"> <li>• Definitions</li> <li>• Types of shock</li> <li>• Etiology</li> <li>• Management</li> </ul>
14	UG/8/T&S/MISC	<p>IV Fluids, ABG CVP</p> <ul style="list-style-type: none"> <li>• Types of IV fluids and indications</li> <li>• ABG- metabolic/ respiratory, acidosis, metabolic/ respiratory alkalosis</li> <li>• CVP- indication, procedures, contra indication</li> </ul>
15	UG/8/T&S/MISC	<p>CSF - Anatomy &amp; Physiology, interpretation</p> <ul style="list-style-type: none"> <li>• Indication &amp; contra indications of LP</li> <li>• Meningitis's Pyogenic, TB, Viral &amp; SAH</li> </ul>
16	UG/8/T&S/MISC	<p>Uranalysis, RFT, Kidney biopsy</p> <ul style="list-style-type: none"> <li>• Albinurea, glycosuria</li> <li>• Pus cells, RBC, culture</li> <li>• Kidney biopsy</li> </ul>
17	UG/8/T&S/MISC	<p>Electrical injury hyperpyrexia, heat exhaustion &amp; hyperthermia</p> <ul style="list-style-type: none"> <li>• Temperatures regulation</li> <li>• Hyperthermia</li> <li>• Heart stroke- heat exhaustion</li> <li>• Electrical injury</li> </ul>
18	UG/8/T&S/MISC	<ul style="list-style-type: none"> <li>• Revision</li> </ul>

Sr. No.	Code	9 <sup>th</sup> Semester
		Seminars
1	UG/9/S/ID	Malaria & Kalazar <ul style="list-style-type: none"> <li>• Life cycle of malaria parasite &amp; leishmaniasis</li> <li>• Clinical features of vivax, falcifarum malaria, kalazar</li> <li>• Complication of falcifarum malaria, &amp; kalazar</li> <li>• Management of malaria &amp; kalazar</li> </ul>
2	UG/9/S/ID	HIV – I <ul style="list-style-type: none"> <li>• Biology of HIV virus, Prevalance of HIV, acute HIV syndrome</li> <li>• Early &amp; late magnification of HIV disease</li> <li>• Diagnosis of HIV &amp; follow up</li> </ul>
3	UG/9/S/ID	HIV – II <ul style="list-style-type: none"> <li>• Opportunistic infections in HIV</li> <li>• Malignancy in HIV</li> <li>• Antiretroviral drugs, treatment strategy</li> <li>• Postexposure prophylaxis</li> </ul>
4	UG/9/S/ID	Dengue, Chikungunya <ul style="list-style-type: none"> <li>• Causative agents</li> <li>• Epidemiology</li> <li>• Pathogenesis</li> <li>• Clinical features</li> <li>• Complications</li> <li>• Investigations</li> <li>• Management</li> </ul>
5	UG/9/S/ID	Leptospirosis ,plague <ul style="list-style-type: none"> <li>• Causative agents</li> <li>• Epidemiology</li> <li>• Pathogenesis</li> <li>• Clinical features</li> <li>• Complications</li> <li>• Investigations</li> <li>• Management</li> </ul>
6	UG/9/S/ID	Extrapulmonary tuberculosis <ul style="list-style-type: none"> <li>• Clinical presentations</li> <li>• Investigations</li> <li>• Management</li> </ul>
7	UG/9/T/MISC	PUO <ul style="list-style-type: none"> <li>• Definition</li> <li>• Classification</li> <li>• Cause of PUO</li> <li>• Investigation</li> </ul>
8	UG/9/T/MISC	Diabetes Mellitus – I <ul style="list-style-type: none"> <li>• Etiology, theories</li> <li>• Genetic inheritance</li> <li>• Management of type I DM</li> <li>• Diabetic ketoacidosis</li> </ul>
9	UG/9/T/MISC	Diabetes Mellitus – II <ul style="list-style-type: none"> <li>• Insulin resistance, syndrome x</li> <li>• OHA/ insulin</li> <li>• Complications</li> </ul>
10	UG/9/T/MISC	Acute coronary syndromes <ul style="list-style-type: none"> <li>• Clinical features</li> <li>• Investigations</li> <li>• Management</li> </ul>
11	UG/9/T/MISC	Respiratory Failure <ul style="list-style-type: none"> <li>• Definition</li> <li>• Types of respiratory failure</li> <li>• Causes of respiratory failure</li> <li>• Management</li> </ul>
12	UG/9/T/MISC	Valvular Heart Disease –I <ul style="list-style-type: none"> <li>• Etiology of valvular heart disease</li> <li>• Clinical features of MS MR Investigations</li> <li>• Complications</li> </ul>

13	UG/9/T/MISC	Valvular Heart Disease II <ul style="list-style-type: none"> <li>• Etiology of valvular heart disease</li> <li>• Clinical features of AS AR TR</li> <li>• Investigations</li> <li>• Complications</li> </ul>
14	UG/9/T/MISC	CCF <ul style="list-style-type: none"> <li>• Definition of CCF</li> <li>• Type of failure</li> <li>• Clinical features</li> <li>• Management of CCF</li> </ul>
15	UG/9/T/MISC	Hypertension <ul style="list-style-type: none"> <li>• Definition ,</li> <li>• JNC classification,</li> <li>• causes,</li> <li>• secondary causes</li> <li>• investigation</li> <li>• Management</li> </ul>
16	UG/9/T/MISC	<ul style="list-style-type: none"> <li>• Revision</li> </ul>

Sr. No.	Code	9 <sup>th</sup> – Semester Lecture Programme
		Topic:- Ethics / Geriatrics Medicine, Life Support Ventilation
1	UG/9/L/MISC	Sudden death, issues in organ transplant <ul style="list-style-type: none"> <li>• Sudden death; causes cardiac/noncardiac, use of defibrillators</li> <li>• Organ transplant; bioethical issues, types of transplant</li> </ul>
2	UG/9/L/EGM	Ethics in Medicine <ul style="list-style-type: none"> <li>• Consent</li> <li>• Medical negligence</li> <li>• Medical- consumer protection act</li> <li>• Ethics in medicine; definition, values in ethics, consent, confidentiality, medical research</li> </ul>
3	UG/9/L/MISC	Medico legal aspects, consumer protection act, medical insurance <ul style="list-style-type: none"> <li>• consumer protection act, medical insurance</li> </ul>
4	UG/9/L/MISC	Medical documentation, Death certificate & other certifications <ul style="list-style-type: none"> <li>• Doctors records. Electronic database</li> <li>• Death certificate; nature &amp; medical importance</li> </ul>
5	UG/9/L/EGM	Geriatrics Medicine 1 <ul style="list-style-type: none"> <li>• Introduction to Geriatric Medicine</li> <li>• Changing population structure</li> <li>• Changes in body due to aging</li> <li>• Assessment of Geriatric patient</li> </ul>
6	UG/9/L/EGM	Geriatrics Medicine 2 <ul style="list-style-type: none"> <li>• Uncommon presentation of illness in geriatric age</li> <li>• Common Geriatric disorders</li> <li>• Causes of falls in elderly</li> <li>• Dementia, delirium, osteoporosis, osteomalacia</li> <li>• Incontinence of urine in elderly</li> </ul>
7	UG/9/L/MISC	Palliative care <ul style="list-style-type: none"> <li>• Concept of palliative care</li> <li>• Assessment of Pain &amp; visual analogue scale</li> <li>• Psychological aspects of terminally ill</li> <li>• Management of Common Problems.</li> </ul>
8	UG/9/L/MISC	Alcohol related disorders <ul style="list-style-type: none"> <li>• Alcohol; signs &amp; symptoms, medical problems , social problems, genetic factors, prevention &amp; management</li> </ul>
9	UG/9/L/MISC	Jaundice <ul style="list-style-type: none"> <li>• Types of jaundice</li> <li>• Bilirubin metabolism</li> <li>• Investigations in a case of jaundice dice</li> </ul>
10	UG/9/L/MISC	Portal hypertension <ul style="list-style-type: none"> <li>• Defination</li> <li>• Causes &amp; classification</li> <li>• Clinical features</li> </ul>

		<ul style="list-style-type: none"> <li>• Management</li> </ul>
11	UG/9/L/MISC	<p>Upper GI Bleed</p> <ul style="list-style-type: none"> <li>• Etiology, approach to diagnosis</li> <li>• General management</li> <li>• Management with special reference to peptic ulcer &amp; variceal bleed</li> </ul>
12	UG/9/L/MISC	<p>Biosafety precautions</p> <ul style="list-style-type: none"> <li>• importance of biosafety precautions</li> <li>• Methods</li> <li>• Post exposure prophylaxis</li> </ul>
13	UG/9/L/MISC	<p>Principles of Critical care Basic &amp; advance life support</p> <ul style="list-style-type: none"> <li>• Principals of Critical care</li> <li>• BLS; emergency medical services , training in basic CPR &amp; ABC of life support</li> <li>• ALS; out of hospital/ in hospital; components ALS algorithms</li> </ul>
14	UG/9/L/MISC	<p>Mechanical ventilation</p> <ul style="list-style-type: none"> <li>• Indication types / modes / monitoring</li> <li>• Types of Ventilators</li> <li>• Weaning from ventilator</li> </ul>
15	UG/9/L/MISC	<p>Fluid &amp; electrolyte balance</p> <ul style="list-style-type: none"> <li>• Hyponatramia &amp; hypernatramia</li> <li>• Hypokalamia &amp; hyperkalamia</li> <li>• SIADH</li> </ul>
16	UG/9/L/MISC	<p>Dialysis (Peritoneal Hemodialysis)</p> <ul style="list-style-type: none"> <li>• Indications</li> <li>• Methods</li> <li>• Complications</li> </ul>
17	UG/9/L/MISC	<p>High Altitude medicine</p> <ul style="list-style-type: none"> <li>• Problems Related to High Altitude Approach &amp; Management.</li> </ul>
18	UG/9/L/MISC	<ul style="list-style-type: none"> <li>• Revision</li> </ul>

Sr. No.	Code	9 <sup>th</sup> – Semester
		Lecture Cum Demonstration
1	UG/9/LD/MISC	<p>Alcohol related diseases</p> <ul style="list-style-type: none"> <li>• Acute intoxication, alcohol abuse, misuse, dependence</li> <li>• Alcohol withdrawal</li> <li>• Medical consequences ( neurological, hepatic, gastrointestinal, respiratory, cardiac etc)</li> <li>• Psychiatry and cerebral consequences</li> </ul>
2	UG/9/LD/MISC	<p>Approach to anaphylaxis</p> <ul style="list-style-type: none"> <li>• Clinical assesment</li> <li>• Causes</li> <li>• Differential diagnosis</li> <li>• Investigations</li> <li>• Management</li> <li>• Prescription of self injectable adrenaline</li> </ul>
3	UG/9/LD/MISC	<p>Status epilepticus</p> <ul style="list-style-type: none"> <li>• Definition</li> <li>• Diagnosis</li> <li>• Management</li> <li>• Investigations</li> </ul>
4	UG/9/LD/MISC	<p>Vertigo ,dizziness, giddiness</p> <ul style="list-style-type: none"> <li>• Definitions</li> <li>• Causes</li> <li>• History, examination.</li> <li>• BPPV, acute prolonged vertigo</li> <li>• Treatment</li> </ul>
5	UG/9/LD/MISC	<p>Approach to headache</p> <ul style="list-style-type: none"> <li>• General principles</li> <li>• Anatomy and physiology of headache</li> <li>• Clinical evaluation</li> <li>• Types</li> <li>• Causes</li> <li>• Management</li> </ul>
6	UG/9/LD/MISC	<p>Approach to diarrhea</p> <ul style="list-style-type: none"> <li>• Definition</li> <li>• Acute diarrhea- causes, pathological organisms, investigations, management</li> </ul>

		<ul style="list-style-type: none"> <li>• Chronic diarrhea- causes, pathological organisms, investigations, management</li> <li>• Clinical evaluation</li> <li>• Management</li> </ul>
7	UG/9/LD/MISC	<p>Approach to chest pain</p> <ul style="list-style-type: none"> <li>• Clinical evaluation</li> <li>• Causes ( cardiac, respiratory, gastrointestinal, musculoskeletal etc)</li> <li>• Investigations</li> <li>• Management</li> </ul>
8	UG/9/LD/MISC	<p>Disaster management –I</p> <ul style="list-style-type: none"> <li>• Types (natural, environmental, complex, pandemic)</li> <li>• Disaster prevention</li> <li>• Disaster preparedness</li> </ul>
9	UG/9/LD/MISC	<p>Disaster management-II</p> <ul style="list-style-type: none"> <li>• Disaster relief.</li> <li>• Disaster recovery.</li> <li>• Use of resources</li> <li>• Triage</li> </ul>
10	UG/9/LD/MISC	<p>Approach to dementia</p> <ul style="list-style-type: none"> <li>• Etiology ( vascular, degenerative, neoplastic, inflammatory, traumatic, toxic, inflammatory)</li> <li>• Clinical features</li> <li>• Investigations</li> <li>• Management</li> <li>• Alzheimers disease, lewy body dementia</li> </ul>
11	UG/9/LD/MISC	<p>Sudden death syndromes</p> <ul style="list-style-type: none"> <li>• causes cardiac/noncardiac</li> <li>• Prevention , early detection</li> </ul>
12	UG/9/LD/MISC	<p>Medical diseases in pregnancy</p> <ul style="list-style-type: none"> <li>• Hypertension</li> <li>• Diabetes mellitus in pregnancy</li> <li>• Pre eclampsia</li> <li>• Hyperthyroidism in pregnancy</li> <li>• Deep vein thrombosis.</li> </ul>
13	UG/9/LD/MISC	<p>Travel medicine</p> <ul style="list-style-type: none"> <li>• International travel and health</li> <li>• Disease information</li> <li>• Vaccines</li> <li>• Travel health risks</li> <li>• General precautions</li> </ul>
14	UG/9/LD/MISC	<p>Adult immunization</p> <ul style="list-style-type: none"> <li>• Mumps measles and rubella</li> <li>• Pneumococcal vaccines</li> <li>• Influenza</li> <li>• Tetanus and others.</li> <li>• Recent advances and newer vaccines.</li> </ul>
15	UG/9/LD/MISC	<p>Skin manifestation in systemic diseases</p> <ul style="list-style-type: none"> <li>• Various skin manifestations in infections and malignancies.</li> <li>• Skin problems in general medicine (vasculitis, tuberous sclerosis, neurofibromatosis etc)</li> <li>• Skin problems associated with (CVS,RS,CNS, Hepatic &amp; GIT Diseases)</li> </ul>
16	UG/9/LD/MISC	<p>Paraneoplastic syndromes</p> <ul style="list-style-type: none"> <li>• Peripheral; neuropathy</li> <li>• Encephalomyelitis</li> <li>• Cerebellar degeneration</li> <li>• Lambert eaton syndrome</li> </ul>
17	UG/9/LD/MISC	<p>Brain death</p> <ul style="list-style-type: none"> <li>• Criteria for brain death</li> <li>• Tests for confirming brain death</li> <li>• Clinical evaluation</li> </ul>
18	UG/9/LD/MISC	<p>Concept of Nano Medicine</p> <ul style="list-style-type: none"> <li>• Introduction to nano technology</li> <li>• Use of nano technology in medicine</li> </ul>
19	UG/9/LD/MISC	<ul style="list-style-type: none"> <li>• Revision</li> </ul>

### Abbreviation for subject codes

CS04 Clinical Subject 04 (code for Medicine) ,UG-Under Graduate, LD-Lecture Demo, FL- Flip Lecture, T-Tutorial, TSP-Tutorial & Seminar Program, S-Seminars, LCD-Lecture Cum Demonstration ID-Infection Diseases, CVS-Cardiovascular System, GL- GIT / Liver, RS- Respiratory System, HR-Hematology & Rheumatology, NS-Nervous System, NG- Nephrology / General, Endo-Endocrinology, EGM-Ethics / Geriatrics Medicine, LSV-Life Support & Ventilation.

### Training & Examination Schedule for 3<sup>rd</sup> to 9<sup>th</sup> term of Under Graduate students posted in Medicine Department

Term	Training Schedule	Examination Schedule
3 <sup>rd</sup> Term	History taking & General Examination.	History taking & General Examination.
4 <sup>th</sup> Term	All above mentioned in 3 <sup>rd</sup> Term + Examination of Cardio-Vascular System. Respiratory System & Abdominal System.	History taking + General Examination + Examination of Respiratory System, Abdominal System and Cardio-Vascular System.
5 <sup>th</sup> Term	All above mentioned in 4 <sup>th</sup> Term + Examination of Central Nervous System.	No Examination.
6 <sup>th</sup> Term	All Systems	History taking & Examination of all systems
7 <sup>th</sup> Term	All Systems	History taking & Examination of all systems+ Exercises in Problem Based Learning.
8 <sup>th</sup> Term	All Systems	History taking & Examination of all systems + Table Viva (ECG/X- ray/Drugs/Instruments).
9 <sup>th</sup> Term (Prelims)	All Systems	History taking & Examination of all systems+ Table Viva (ECG/X-ray/Drugs/Instruments).

- 75% attendance is mandatory for eligibility to appear in term and examination.
- Journals should be completed and duly signed by head of the unit before appearing for term end examination. **10% Marks Allotted to Journal for Each Term End Practical Exam.**

### Methods of Internal Assessment: Theory, Practical & Viva (Medicine) Internal Assessment

#### CLINICAL

Term	Subject	Marks
III	Medicine	60 marks
IV	Medicine	60 marks
VI	Medicine	60 marks
VII	Medicine	60 marks
VII	Skin	20 marks
VIII	Medicine	60 marks
VIII	Psychiatry	20 marks
VIII	TB & Chest	20 marks
	<b>Total</b>	<b>240 marks</b>
		<b>240/16 = 15 marks</b>
IX	Preliminary Examination	120 marks
		<b>120/8 = 15 marks</b>
	<b>Total Marks</b>	<b>15+15 = 30 marks</b>

- Best 3 to be counted for internal assessment except prelim marks for medicine.
- **THEORY**

Term	Marks
VI	60 marks
VIII	60 marks
<b>Total</b>	<b>120 / 8 = 15</b>
IX Prelims	120 / 8 = 15
<b>Total Marks</b>	<b>15 + 15 = 30</b>

## THEORY PAPERS:

**Paper I:** Contents: This paper shall have questions from Cardiovascular System, Respiratory System, including TB, Infectious & Tropical Diseases, Haematology, Nephrology, and Fluid & Electrolyte disorders.

**Paper II:** Contents: Nervous System, GIT, Hepatology, Pancreatic Disorders, Endocrine, Metabolic & Nutritional Disorders, Connective Tissue & Musculoskeletal Disorders, Poisoning & Environmental Diseases, Geriatrics, Skin & Psychiatry Disorders.

- Prelim exam pattern is same as university examination pattern.

### University Examination (Medicine)

- Each paper shall have two sections.

#### (a) Medicine:

**Theory-** Two papers of 60 marks each-

**120 marks**

- **Paper I** - General Medicine (Cardiovascular System, Respiratory System, including TB, Infectious & Tropical Diseases, Haematology, Nephrology, and Fluid & Electrolyte disorders.)
- **Paper II**- General Medicine (Nervous System, GIT, Hepatology, Pancreatic Disorders, Endocrine, Metabolic & Nutritional Disorders, Connective Tissue & Musculoskeletal Disorders, Poisoning & Environmental Diseases, Geriatrics, Skin & Psychiatry Disorders including Psychiatry, Dermatology and S.T.D.)  
(Shall contain one question on basic sciences and allied subjects)

- **Oral** (Viva) Interpretation of X-ray ECG, etc. - **20 marks**
- **Clinical** (Bed side) - **100 marks**
- **University theory** (paper- 1 and paper- 2) - **120 marks**
- **Internal assessment** (Theory-30; Practical-30) - **60 marks**
- **Total** - **300 marks**

#### • Marks Distribution Pattern Theory Paper- 1

Subject	Group	Duration	Question Paper Pattern	Marks
<b>Medicine Paper- 1</b> (CVS,RS,TB, Infectious diseases, Hematology, Nephrology, and Fluid & Electrolyte disorders)	60 Marks	3. Hrs.	<b>a) Sec-A-(30)</b>	
			i. One line answer questions(Answer any 12 out of 14)	12 X 1 = 12
			ii. Long answer question(Answer any 2 out of 3)	2 X 9 = 18
			<b>b) Sec-B-(30)</b>	
i. Short answer questions(Answer any 6 out of 8)	6 X 5 = 30			
			<b>Total 60</b>	

• **Marks Distribution Pattern Theory Paper-2**

<b>Subject</b>	<b>Group</b>	<b>Duration</b>	<b>Question Paper Pattern</b>	<b>Marks</b>
<b>Medicine Paper- 2</b> (Neurology, GIT including liver & pancreatic disorders, Endocrine, Metabolic & Nutritional Disorders, Connective Tissue & Musculoskeletal Disorders, Poisoning & Environmental Diseases, Geriatrics, Psychiatry, Dermatology and S.T.D)	60 Marks	3. Hrs.	<b>a) Sec-A-(30)</b> i. One line answer questions Answer (any 12 out of 14)	12 X 1 = 12
			ii. Long answer question(Answer any 2 out of 3)	2 X 9 = 18
			<b>b) Sec-B-(30)</b> i. Short answer questions Answer any 6 out of 8 (It should contain at least one short answer question on TB, Skin & STD and Psychiatry)	6 X 5 = 30
				<b>Total = 60</b>

**University Practical Examination in Medicine**

<b>CLINICAL</b>			
<b>Long Case</b>	<b>Short case 1</b>	<b>Short case 2</b>	<b>TOTAL Clinical</b>
<b>50</b>	<b>25</b>	<b>25</b>	<b>100</b>

<b>VIVA</b>		
<b>VIVA-1</b>	<b>VIVA-2</b>	<b>TOTAL</b>
<b>10</b>	<b>10</b>	<b>20</b>

# CURRICULUM FOR GENERAL SURGERY

## (1) GOAL

The broad goal of teaching of undergraduate students in Surgery is to produce graduates capable of delivering efficient first contact surgical care.

## (2) OBJECTIVES:

### 2.1 Knowledge

At the end of the course the students shall be able to:

- a. Describe aetiology, pathophysiology, principles of diagnosis and management of common surgical problems including emergencies in adults and children.
- b. Define indications and methods for fluid and electrolyte replacement therapy including blood transfusion;
- c. Define asepsis, disinfection and sterilization and recommend judicious use of antibiotics;
- d. Describe common malignancies in the country and their management including prevention;
- e. Enumerate different types of anesthetic agents, their indications, mode of administration, contraindications and side effects.
- f. Diagnose common surgical conditions both acute and chronic, in adult and children

### 2.2 Skills

At the end of the course, the student should be able to:

- a. Plan various laboratory tests for surgical conditions and interpret the results;
- b. Identify and manage patients of haemorrhagic, septicaemic and other types of shock;
- c. Be able to maintain patient air-way and resuscitate;
  - i. A critically injured patient:
  - ii. Patient with cardio respiratory failure.
  - iii. Drowning case.

- d. Monitor patients of head, chest, spinal and abdominal injuries, both in adults and children;
- e. Provide primary care for a patient of burns;
- f. Acquire principles of operative surgery, including pre-operative, operative and postoperative care and monitoring.
- g. Treat open wounds including preventive measures against tetanus and gas gangrene;
- h. Diagnose neonatal and paediatric surgical emergencies and provide sound primary care before referring the patient to secondary / tertiary centres;
- i. Identify congenital anomalies and refer them for appropriate management.

He / she shall have observed/assisted performed the following :

- i. Incision and drainage of abscess
- ii. Debridement and suturing open wound
- iii. Venesection.
- iv. Excision of simple cyst and tumours
- v. Biopsy of surface malignancy
- vi. Catheterisation
- vii. Nasogastric incubation
- viii. Circumcision
- ix. Meatotomy
- x. Vasectomy
- xi. Peritoneal and pleural aspirations;
- xii. Diagnostic Proctoscopy
- xiii. Hydrocele operations
- xiv. Endotracheal intubation;
- xv. Tracheostomy
- xvi. Chest tube insertion.

## (3) INTEGRATION:

The undergraduate teaching in surgery shall be integrated at various stages with different pre and para and other clinical departments.

## SYLLABUS FOR MBBS COURSE IN GENERAL SURGERY

Semester	Lectures	Tutorials	Demonstration	Clinics
3 <sup>rd</sup> Sem	-	-	-	6 weeks
4 <sup>th</sup> Sem	1 (16 hours)	-	-	4 weeks
5 <sup>th</sup> Sem	-	-	-	-
6 <sup>th</sup> Sem	2 (32 hours)	2 (32 hours)	16 hours	4 weeks
7 <sup>th</sup> Sem	2 (32 hours)	-	-	4 weeks
8 <sup>th</sup> Sem	3 (48 hours)	2 (32 hours)	16 hours	4 weeks
9 <sup>th</sup> Sem	2 (32 hours)	2 (32 hours)	12 hours	4 weeks
	<b>(160 hours)</b>	<b>(96 hours)</b>	<b>(44 hours)</b>	<b>26 weeks</b>

### Lectures- (List enclosed)

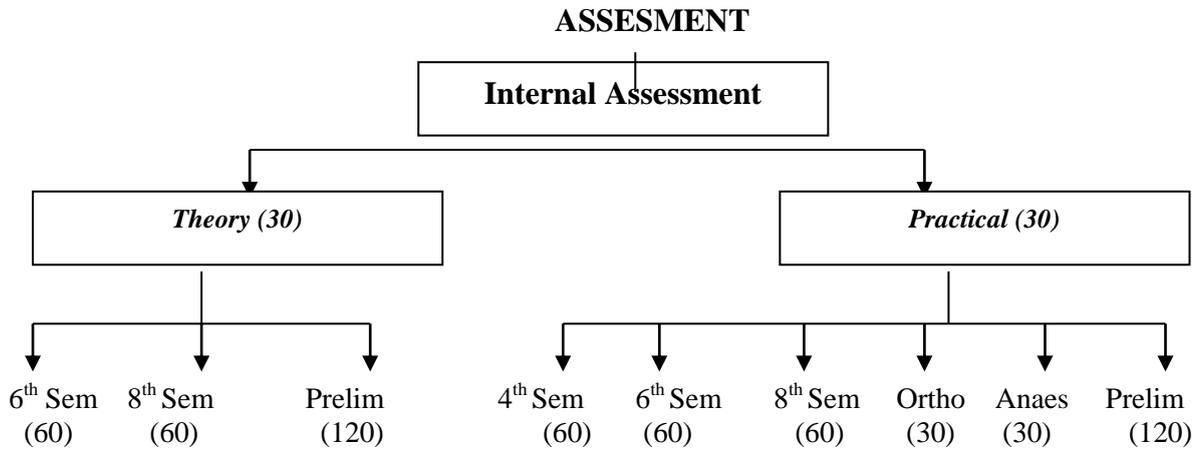
4 <sup>th</sup> Sem	General Surgery Part I
6 <sup>th</sup> Sem	General Surgery Part II + Head, Face, Neck + Breast + Endocrine + Neurosurgery + Plastic Surgery
7 <sup>th</sup> Sem	GIT Part I + Hepatobiliary + Cardiothoracic Surgery + Pediatric Surgery
8 <sup>th</sup> Sem	GIT Part II + GUT + Tropical Surgery
9 <sup>th</sup> Sem	Recent Advances + Revision Lectures

### TUTORIALS –

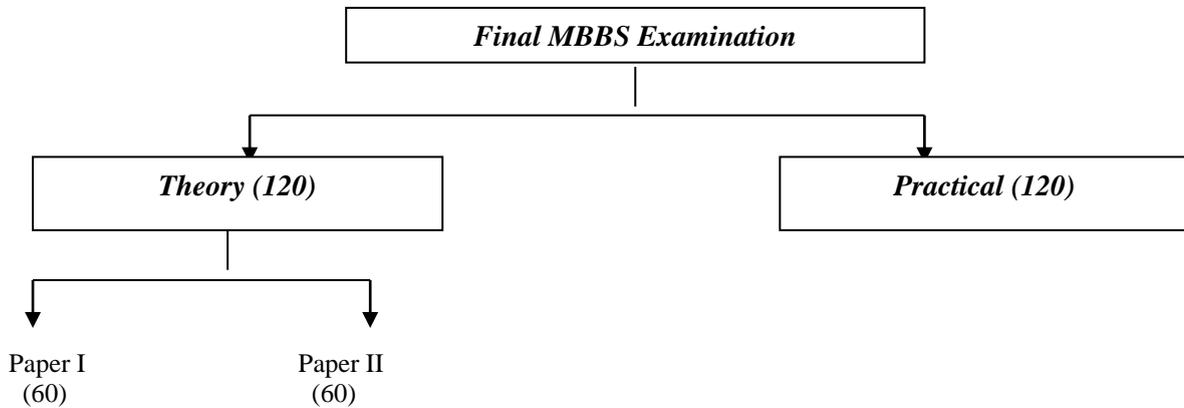
6 <sup>th</sup> Sem	Operative Surgery + Instruments
8 <sup>th</sup> Sem	Surgical Pathology + X-Ray
9 <sup>th</sup> Sem	Revision

### 3<sup>RD</sup> SEMESTER CLINICAL POSTING – 4 WEEKS

- 2 Weeks - One Lecturer daily for 2 weeks
  - 4 Weeks - Ward Posting
- (Orientation programme Lecture – on lecture daily 12 days)



- Marks of Internal Assessment will be sent to the University before the commencement of Theory examination.
- Passing in internal assessment (min 35%) will be prerequisite for appearing for final examination.
- Combined theory and practical marks will be considered for passing in Internal Assessment.



## THEORY (120 MARKS)

**Paper I - 3 hours \*  
60 marks**

Section A (15)	Section B (25)	Section C (20)
<ul style="list-style-type: none"> <li>• 30 MCQs (1/2 Mark each)</li> <li>• Single response type</li> <li>• (24 MCQs – Surgery + 6 MCQs – Ortho)</li> </ul>	<ul style="list-style-type: none"> <li>• General Surgery</li> <li>• Head, Face &amp; Neck</li> <li>• Breast</li> <li>• Endocrine</li> <li>• Trauma</li> <li>• 2 LAQs (8 marks each)= 16</li> <li>• 3 SAQs (3 out of 4) (3 marks each) = 09</li> </ul>	<p style="text-align: center;">Orthopaedics</p> <ul style="list-style-type: none"> <li>• 1 LAQs(8 marks)</li> <li>• 4 SAQs (4 out of 5) (3 marks each)= 12</li> </ul>

**\* Time for section A – 30 minutes**

**Section B & Section C – 2 ½ hours**

Section A will be given to candidates at the beginning of the examination.

After 30 minutes, Section A (Question paper + Answer Sheet) will be collected. Section B and Section C Paper will then be handed over to candidates.

**Paper II - 3 hours \*  
60 marks**

Section A (15)	Section B (25)	Section C (20)
<ul style="list-style-type: none"> <li>• 30 MCQs</li> <li>• 1/2 Marks each</li> <li>• Single response type</li> <li>• (24 MCQs – GIT/GUT/Hepatobiliary /Spleen MCQs – Allied (Plastic/CVTS/Paed/Radio/Anesthesiology</li> </ul>	<ul style="list-style-type: none"> <li>• GIT</li> <li>• Hepatobiliary</li> <li>• Spleen</li> <li>• 2 LAQs (8 marks each) = 16</li> <li>• SAQs (3 out of 4) (3 marks each) = 09</li> </ul>	<ul style="list-style-type: none"> <li>• GUT</li> <li>• Allied- (Plastic/CVTS/Paed/Radio/Anesthesiology</li> <li>• 1 LAQs (8 marks)</li> <li>• 4 SAQs (4 out of 5) (3 marks each)= 12</li> </ul>

**\* Time for section A – 30 minutes**

**Section B & Section C – 2 ½ hours**

Section A will be given to candidates at the beginning of the examination.

After 30 minutes, Section A (Question paper + Answer Sheet) will be collected. Section B and Section C Paper will then be handed over to candidates.

### **PRACTICAL (120 MARKS)**

Clinical (100)	Long Case (Surgery)	50 Marks
	Short Case I (Surgery)	25 Marks
	Short Case II (Orthopaedics)	25 Marks

- Time for Long Case - 40 minutes
- Time for short Case - 20 minutes each

Viva - Viva I - Surgical Pathology + Instruments + Tubes  
(10 marks) Catheters + Operative Surgery + Radiology

Viva II - Radiology + Orthopaedics  
(10 marks)

**Clinical and Viva examinations will be carried by a pair of examiners.**

**2 Out of 6 practical examiners will be from Orthopedics (1 Internal + 1 External).**

## RESULT

Passing will be in three separate headings –

Exam	Total	Minimum marks for passing
Theory + Viva	140 (120 + 20)	70
Clinical	100	50
Internal Assessment	60	30
<b>Total</b>	<b>300</b>	<b>150</b>

### 4<sup>th</sup> Semester – Lecture Programme

Sr. No	Topic
1	Introduction / History of Surgery / Acute Infections – Leadership Qualities
2	Wound Healing
3	Haemostasis / Haemorrhage / Blood Transfusion
4	Chronic Infections
5	Shock
6	Burns
7	Fluid Electrolyte Balance / Disorders
8	Acid Base Balance / Disorders
9	Gas Gangrene
10	Neoplasia
11	Surgical Nutrition & Pre-operative Preparation & Patients
12	Nosocomial Infections
13	Tetanus
14	Hand Infections
15	Sterilization – including newer methods of sterilization
16	OT techniques / Preoperative and Postoperative Care

### 6<sup>th</sup> Semester – Lecture Programme

Sr. No	Topics
1	HIV & Surgeon
2	Benign Breast Diseases
3	Ca Breast (Two Lectures)
4	Diabetic Foot
5	Diseases of Veins (Two Lectures)
6	Neck Swellings (Two Lectures)
7	Diseases of Lymphatics
8	Disease of Arteries (Two Lectures)
9	Oral Malignancy
10	Thyroid – Anatomy/Physio/Investigations
11	Benign Disorders of Thyroid
12	Thyroid Malignancies
13	Cleft Lip & Cleft Palate
14	Peripheral Nerve Injuries
15	Hyperparathyroidism – Parathyroid Hyperplasia & Adenoma
16	Head Injury
17	Polytrauma (Two Lectures)
18	Skin Grafting
19	Jaw Tumours
20	Salivary Gland Tumours / Sialoadenitis
21	CNS Tumours
22	Adrenals Gland – Hyper / Hypofunction – Adrenal Tumors
23	Principles of Minimally Invasive Surgery
24	Principles of Radiotherapy
25	Maxillofacial Injuries
26	Congenital Disorders – Hydrocephalus, Spina Bifida

## 7<sup>th</sup> Semester – Lecture Programme

Sr. No	Topics
1	Oesophagus - Anatomy / Physiology / Investigations / Causes of Dysphagia
2	Liver –Anatomy / Physiology / Investigations
3	GERD
4	Liver Abscess
5	Oesophageal Motility Disorders
6	Liver Trauma
7	Carcinoma Oesophagus
8	Liver Tumours
9	Stomach – Anatomy / Physiology / CHPS
10	Hydatid cyst of Liver – Cytic diseases & Liver
11	Peptic Ulcer
12	Peptic ulcer – Complication & Management
13	Extra Hepatic Biliary Apparatus – Anatomy / Physiology / Investigations
14	Obstructive Jaundice
15	Carcinoma Stomach
16	Cholelithiasis & Choledocholithiasis
17	Upper GI Bleed- Aetiology and Principles of Management
18	Cholecystitis
19	Intestinal Tuberculosis
20	Carcinoma Gall Bladder & Choledochal cyst
21	Peritonitis – Aetiology, Principles of Management
22	Intraperitoneal Abscesses
23	Spleen – Anatomy / Splenomegaly / Splenectomy
24	Chest Injuries
25	Portal Hypertension
26	Cardiac Arrest / Resuscitation
27	Acute Pancreatitis
28	Principles of Surgery of Ischaemic Heart disease
29	Pseudocyst of Pancreases & Chronic Pancreatitis
30	Pancreatic Tumours
	Diagnostic & therapeutic endoscopy in GI & Hepato Pancreatic Biliary System
31	Congenital Heart Diseases
32	Revision

## 8<sup>th</sup> Semester – Lecture Programme

Sr. No	Topic
1	Anatomy of Anterior Abdominal wall & Diaphragm
1	Anatomy of Anterior Abdominal wall & Diaphragm
2	Incisional Hernia / Epigastric Hernia
3	Inguinal Hernia
4	Femoral Hernia, Umbilical Hernia & Other Hernias
5	Hirschsprung's Disease
6	Lower GI Bleed – Aetiology & Principles of management
7	Meckel's Diverticulum
8	Atresia – Oesophageal / Intestinal, T-O Fistula
9	Intestinal Obstruction In Neonates & Infants
10	Haemorrhoids / Fistula in Ano / Fissure in Ano
11	Biliary Atresia / Congenital Diaphragmatic Hernia
13	Acute Abdomen – D/D & Principles of management
14	Abdominal Tuberculosis – Aetiopathology & Principles of management
15	Acute Appendicitis
16	Inflammatory Bowel Disease
17	Phimosis / Paraphimosis & Cancer Penis
18	Surgical Consideration in Enteric Fever / Ascariasis
19	Filariasis / Madura Foot
20	Carcinoma Colon
21	Diverticular Disease / Colostomy
22	Skin Malignancies
23	Surgical Anatomy of Rectum & Anal Canal
24	Anorectal Anomalies
25	Rectal Prolapse / Anorectal Abscesses
26	Principles of Organ Transplantation
27	Intestinal Obstruction in Adults
28	Adrenal Tumours
29	Surgical Anatomy, Embryology and Developmental Anomalies of GUT
30	Symptoms and Investigations of urinary tract
31	Urinary Tract Infection
32	Pathophysiology of urinary tract obstruction
33	PUJ Obstruction
34	Urolithiasis
35	Renal Tuberculosis
36	Renal Tumours
37	Carcinoma Urinary Bladder
38	Ectopia Vesicae / Posterior Urethral Valves / Hypospadias
39	Carcinoma Returns & Anal Canal
40	BEP Benign Prostatic Hyperplasia
41	Carcinoma Prostate
42	Undescended Testis / Torsion Testis
43	Testicular Tumours
44	Hydrocoele / Varicocele
45	Urodynamic Studies / Neurogenic Bladder
46	Retention of Urine – Aetiology & Principles of management
47	Acute Renal Failure
48	Renal Transplant
49	GUT Trauma
50	Stricture Urethra

## 9<sup>th</sup> Semester - Lecture Programme

Sr. No	Topic
1	LASER in Surgery
2	Staplers in Surgery
3	Universal Safety Precautions
4	Revision Lectures

## 6<sup>th</sup> Semester – Tutorial Programme

Sr. No	Topic
1	Instruments - I
2	Incision and Drainage / Debridement / CLW suturing
3	Instruments – II
4	Venesection / Circumcision
5	Instruments – III
6	Cyst excision / Biopsies
7	Instruments – IV
8	FNAC / Pleural Tap/ Ascitic Tap
9	Instruments – V
10	Intercostal Drainage
11	Instruments – VI
12	Tracheostomy
13	Foley's catheter/ Nelaton's catheter
14	Suprapubic cystostomy
15	Ryles tube / Infant feeding tube
16	Preoperative care
17	Simple Rubber catheter / Flatus tube
18	Postoperative care
19	Dressing Trolley
20	Surgeries for Hernia
21	Bandages
22	Surgeries for Hydrocoele
23	I/V Set, Intracath, Scalp-Vein, 3 way
24	Resuscitation
25	Blood Transfusion
26	Sutures & Needles – I
27	Use of Drains
28	Sutures & Needles - II
29	Sterilization
30	Arterial disorders
31	Acute Infections
32	Venous disorders
33	Chronic Infections

### 8<sup>th</sup> Semester – Tutorial Programme

Sr. No	Topic
1	Radiology – I (GIT)
2	Radiology – II (GUT)
3	Radiology – III (Miscell)
4	Radiology – IV (GUT)
5	Short Procedures - I
6	Instruments – I (Urology)
7	Short Procedures – II
8	Instruments – II (Urology)
9	Instruments – III
10	Short Procedures – III (Urology)
11	Instruments – IV
12	Short Procedures – IV (Urology)
13	Short Procedures – V
14	Tube & Catheters – I (Urology)
15	Short Procedures – VI
16	Tube & Catheters – II (Urology)
17	Tube & Catheters – III
18	Surgical Pathology I (GUT)
19	Tube & Catheters – IV
20	Surgical Pathology II (GUT)
21	Surgical Pathology III (GIT)
22	Retention of Urine
23	Surgical Pathology IV (GIT)
24	Genitourinary Trauma
25	Surgical Pathology V (GIT)
26	Principles of Urinary Diversion
27	Surgical Pathology VI (Miscell)
28	Urolithiasis
29	Resuscitation
30	Upper GI Bleed
31	Lower GI Bleed
32	Scans in Urology
33	Portal Hypertension
34	Endoscopy in Urology
35	Obstructive Jaundice
36	Acute & Chronic Infections

## 9<sup>th</sup> Semester – Tutorial Programme

Sr. No	Topics
1	Revisions

**Examination Theory: 120 marks**

### **SURGERY PAPER I**

Total marks: 60

Duration: 3 hours

#### **Section A: 38 marks**

Q 1. One Line Answer Questions (8 out of 10)

8x1= 8 marks

Q 2. Structured Long Answer Questions (2 out of 3)

2x9= 18 marks

Q 3. Short Answer Question (3 out of 5)

3x4= 12 marks

#### **Section B: 22 marks (ORTHOPAEDICS)**

Q 4. One Line Answer Questions (5 out of 7)

5x1= 5 marks

Q 2. Structured Long Answer Questions (1 out of 2)

1x9= 9 marks

Q 3. Short Answer Question (2 out of 3)

2x4= 8marks

Total

**60 Marks**

## **Surgery Paper II**

Total marks: 60

Duration: 3 hours

### **Section A: 30 marks**

Q 1. One Line Answer Questions (12 out of 14)

12x1= 12 marks

Q 2. Structured Long Answer Questions (2 out of 3)

2x9= 18 marks

### **Section B: 30 marks**

Q 3. Short Answer Question (6 out of 8)

6x5= 30 marks

Total

**60 Marks**

Practicals- 120 marks

Clinical:

100 marks

- 1 Long Case – 50 marks
- 1 Short Case (Surgery) – 25 marks
- 1 Short Case (Orthopaedics)-25 marks

Viva:

20 marks

- Table I – Operative Surgery, Instruments, Tubes Catheters (5 marks)
- Table II – Surgical Pathology (5 marks)
- Table III – Radiology (5 marks)
- Table VI – Orthopaedics (5 marks)

# SYLLABUS OF OBSTETRICS AND GYNAECOLOGY

## 1. Goals

The main aim of the post graduate courses in the subject of OBSTETRICS AND GYNAECOLOGY is to make the student well-versed with the knowledge of -

- 1.1 Anatomy and physiology of female genital tract.
- 1.2 Conception & physiology of pregnancy
- 1.3 Contraception, Family planning & demography.
- 1.4 Gynecological conditions & Operative gynaecology
- 1.5 Gynecological Endocrinology.
- 1.6 Infertility and recent advances & ART, IVF ET
- 1.7 To train the student, to be able to diagnose & manage the diseases of female genital tract.
  - 1.7.1 To give sufficient exposure about all routine & emergency OBSTETRICS AND GYNAECOLOGY operative procedures.
  - 1.7.2 To train them in family planning procedures like MTP, tubectomy so as to enable them to actively participate in National family welfare programs.

## OBJECTIVES

### 2. KNOWLEDGE :

At the end of tenure of 3 years DEGREE course, the student should be able to -

- 2.1 Know the Anatomy, Physiology & Pathophysiology of reproductive system and its common condition.
- 2.2 To diagnose pregnancy & manage Antepartum, Intrapartum & Postpartum condition including emergencies.
- 2.3 To undertake the effective measures & to reduce maternal perinatal morbidity and mortality.
- 2.4 To understand the knowledge about contraception, MTP, sterilization & their complications.
- 2.5 To know the proper pharmacology of drugs used during pregnancy and lactation & drugs like hormones, antibiotics, chemotherapeutic agents used in Gynecological practice.
- 2.6 To identify and manage gynecological conditions & emergencies.
- 2.7 To have detailed knowledge about adolescent and geriatric Gynecological problems and their management.

### 3. SKILLS :

At the end of 3 years P.G. DEGREE curriculum the candidate shall be able to make the student well-versed with the knowledge of -

- 3.1 To diagnose pregnancy and manage ANC in normal & high risk pregnancies.
- 3.2 To conduct normal and instrumental deliveries as well as caesarian sections.
- 3.3 To manage the complications of labour, instrumental delivery.
- 3.4 To perform at least 25 MTPs under supervision and 25 independently as well as to perform 25 tubectomies under supervision and 25 independently.
- 3.5 To screen and diagnose female genital tract malignancies & to manage them.
- 3.6 To diagnose and manage female reproductive tract benign conditions and RTI infections including HIV.
- 3.7 To manage infertile couple investigations, diagnosis and treatment.

### 4. INTEGRATED TEACHING :

- 4.1 The candidate should have adequate knowledge of conditions related to Gynecological urology, Neonatology, Neonatal resuscitation.
- 4.2 To get skill and knowledge regarding radio-diagnosis and Ultrasonography & HSG, Pelvimetry, laboratory diagnostic techniques.
- 4.3 To have the knowledge of immunology, virology, and bacteriology related to OB-GYN specialty.
- 4.4 To have basic knowledge about endocrine conditions related to obstetrics & gynecology.
- 4.5 To have knowledge about medical & surgical conditions in pregnancy.
- 4.6 To have knowledge about oncopathology, hematology & Histopathology.

### 5. GENERAL GUIDELINES OF TRAINING COURSES:

- 5.1 To train students to diagnose and manage disease of female genital tract.
- 5.2 To diagnose pregnancy and give antenatal, intrapartum and postpartum care and treat related emergencies.
- 5.3 To train them in National family welfare programmes viz; MTP, Tubectomies, IUCD insertions and contraceptive advice.
- 5.4 To train them to conduct normal labours, episiotomies and manage IIIrd stage of labour.

- 5.5 To train them in major & minor obstetric procedures.
- 5.6 To conduct high risk clinic and diagnose high risk pregnancy.
- 5.9 To have full knowledge regarding diagnostic and lab. Investigations.
- 5.10 To diagnose and treat infections of female genital tract
- 5.11 To undergo training in screening and diagnosing female genital tract malignancies
- 5.12 To train student in major & minor Gynecological procedure.
- 5.13 To train them to conduct abnormal labours and instrumental deliveries like forceps and vacuum.
- 5.14 To conduct 25 MTPs under supervision & 25 independently. Also perform Tubectomies under supervision and independently.
- 5.15 To perform caesarian section under supervision and independently.
- 5.16 To have knowledge about Neonatology, urology and Sonography, for which the student will be posted for 4 weeks in each department by rotation. To conduct specialised OPDs like infertility OPD and colposcopic clinics.
- 5.17 To perform major Gynecological operations like abdominal ad vaginal hysterectomies under supervision and independently.
- 5.18 To independently manage obstetric emergencies.
- 5.19 To assist surgeries like wertheim's hysterectomy, debulking surgeries and sling operations.
- 5.20 To assist basic endoscopic operations like diagnostic hysteroscopy and laparoscopy.
- 5.21 The student should complete & submit the assigned dissertation topic and its write six months before appearing for the examination.
- 5.22 The degree and diploma candidate should also actively participate in departmental research works & outreach activities.

### 1) OBSTETRIC :

- 1.1 Applied anatomy of female genital tract – Knowledge of fetal skull and maternal pelvis. Development of genital tract. Physiology of menstruation.
- 1.2 Physiology of ovulation / conception / implantation -
- 1.3 Early development of human embryo. Fetal physiology, fetal circulation and fetal malformation.
- 1.4 Amniotic fluid – Formation & Function
- 1.5 Structure, Function and anomalies of Placenta.
- 1.6 Physiological changes during pregnancy and maternal adaptation to pregnancy Diagnosis of pregnancy.

- 5.7 To have full knowledge of pharmacology of drugs safe in pregnancy and lactation.

- 5.8 To diagnose & manage obstetric emergencies.

### 1.7 Antenatal care.

- 1.8 Normal Labour – Physiology, Mechanism, clinical course and management, partography, pain relief in labour- Oanaesthesia and analgesia in labour, endocrinology of labour.

### 1.9 Normal puerperium and Breast – Feeding

#### 1.10 Complication in early pregnancy.

- 1.10.1 Hyperemesis gravidarum
- 1.10.2 Abortion
- 1.10.3 Ectopic pregnancy
- 1.10.4 Gestational trophoblastic disease
- 1.11 Obstetrical complications during pregnancy
- 1.11.1 APH – Accidental haemorrhage
- 1.11.2 Placenta praevia
- 1.11.3 Poly hydramnios / Oligohydramnios
- 1.11.4 Multifoetal pregnancy
- 1.11.5 Medical disorders in pregnancy
- 1.11.6 Anaemia
- 1.11.7 Heart diseases
- 1.11.8 Hypertensive disorder – PIH and Eclampsia
- 1.11.9 Diabetes
- 1.11.10 Jaundice
- 1.11.11 Pulmonary diseases in pregnancy
- 1.12 Infections in pregnancy
- 1.12.1 Urinary tract infections
- 1.12.2 Sexually transmitted infections including HIV
- 1.12.3 TORCH infections
- 1.13 Gynecological and surgical conditions in pregnancy. Fibroid with pregnancy, ovarian tumours, acute abdomen, genital prolapse.

#### 1.14 High risk pregnancy

- 1.14.1 Pre-term labour
- 1.14.2 Post term pregnancy
- 1.14.3 IUGR
- 1.14.4 IUFD
- 1.14.5 Pregnancy wastages Rh incompatibility
- 1.14.6 Post caesarean pregnancy
- 1.15 Induction and augmentation of labour & knowledge about partogram.
- 1.16 Abnormal position & presentation
- 1.16.1 Occipitio posterior
- 1.16.2 Breech
- 1.16.3 Transverse lie
- 1.16.4 Face & Brow
- 1.16.5 Compound
- 1.16.6 Cord Presentation and Prolapse
- 1.17 Abnormal labour
- 1.17.1 Abnormal uterine contraction
- 1.17.2 CPD
- 1.17.3 Obstructured labour
- 1.17.4 Uterine rupture

## **2) GYNECOLOGY:**

- 2.1 Development of genital tract, congenital anomalies of uterus and clinical significance, chromosomal abnormalities inter sex.
- 2.2 Physiology of Menstruation Ovarian Steroid genesis Adrenal in Gynaecology Thyroid in Gynaecology Hyper Prolactinemia Hirsutism
- 2.3 Menstrual abnormalities – Primary Amenorrhoea Dysmenorrhoea PMS
- 2.4 Abnormal uterine Bleeding DUB
- 2.5 Puberty and its disorder -
- 2.6 Adolescent Gynecological problems
- 2.7 Infertility – Male Infertility female Tubal micro surgery PCOD ART IVF-ET
- 2.8 Infection of genital tract Acute PID Chr PID Genital TB
- 2.9 Leucorrhoea
- 2.10 Pruritus vulvae
- 2.11 Chr Pelvic Pain Cervicitis
- 2.12 Sexually transmitted infections including HIV infection
- 2.13 Benign tumours of the genital tract. Fibroid Uterus Ovarian Tumours Benign Vulval Lesions
- 2.14 Malignant Lesions of CaVulva Ca Vagina Ca Cx Ca Uterus Ca Fallopian tube Ca Ovary
- 2.15 Other Gynecological disorders
- 2.16 Adenomyosis endometriosis
- 2.17 Genital prolapse Nulliparous prolapse Sling surgery Vaginal hysterectomy
- 2.18 Genital tract displacement, Urinary disorders in Gynecology SUI Urge incontinence VVF
- 2.19 Perineal tears Genital Fistulae, RVF
- 2.20 Radiotherapy & Chemotherapy in Gynecology
- 2.21 Drugs & Hormones in Gynecology Hormones in Gynecology
- 2.22 Ultrasonography, Radiology & Endoscopy in Gynecological diagnosis
- 2.26 Pre & Post-operative care in Gynecology
- 2.27 Menopause & HRT

## **3) FAMILY PLANNING:**

- 3.1 Demography & Population Dynamics
- 3.2 Contraception – Temporary methods Barrier methods Oral Pills IUCD Newer –IUCD
- 3.3 Permanent methods TL Lap TL Vasectomy
- 3.4 Newer contraceptives
- 3.5 MTP Act & Procedures of MTP in first trimester.

Procedures of MTP in second trimester Medico legal aspects in Gynaecology Medical records keeping PNDT Act

# **CURRICULUM FOR COMMUNITY MEDICINE (PSM)**

## **Preventive and Social Medicine / Community Medicine (PSM)**

- A. The teaching of Social & Preventive Medicine shall take place throughout the teaching period.
- B. Field experience in rural health is included in pre-clinical as well as during clinical period
- C. During attendance at various departments which is now required under medicine and surgery, such as infectious diseases. T.B. Leprosy, V.D. etc. emphasis shall be laid as much on the preventive as on the clinical and therapeutic aspects of these diseases.
- D. In addition to the teaching undertaken by the department of Social & Preventive Medicine, a joint programme with other departments is essential in order to give the students a comprehensive picture of man, his health and illness.
- E. Stress shall be laid on national programmes, including those of control of communicable diseases and family planning and health education.
- F. An epidemiological unit should be established as an integral part of every hospital in order to achieve a comprehensive study of disease by the students.
- G. The objective of the internship shall be clearly defined and a proper training programme be oriented for this period. Objectives and the methods by which the internship could be made into a satisfying and fruitful experience should be laid down. Planning in this phase of education shall be done.
- H. As regards the qualifications of the teachers it is highly important that all teachers in Preventive and Social Medicine should as far as possible have had adequate administrative experience in addition to the teaching experience. They should also be encouraged to acquire skills in clinical subject specially related to community medicine.
- I. Practical Skills: Due stress shall be laid on the students acquiring practical skill in the various procedures.

# Community Medicine including Humanities

(Preventive and Social Medicine)

## GOALS:

The broad goal of the teaching of undergraduate students in community medicine is to prepare them to function as community and first level physicians in accordance with the institutional goals.

## OBJECTIVES:

**Knowledge:** At the end of the course the student shall be able to

- Explain the principles of sociology including demographic population dynamics.
- Identify social factors related to health, disease and disability in the context of urban and rural societies.
- Appreciate the impact of urbanization on health and disease.
- Observe and interpret the dynamics of community behavior.
- Describe the elements of normal psychology and social psychology.
- Observe the principles of practice of medicine in hospital and community settings.
- Describe the health care delivery systems including rehabilitation of the disabled in the country.
- Describe the National Health Programmes with particular emphasis on reproductive and child health programmes and population control.
- List the epidemiological methods and techniques.
- Outline the demographic pattern of the country and appreciate the roles of the individuals, family, community and socio-cultural milieu in health and disease.
- Describe the health information systems.
- Enunciate the principles and components of primary health care and the national health policies to achieve the goal of "Health for all".
- Identify the environmental and occupational hazards and their control.
- Describe the importance of water and sanitation in human health.
- Understand the principles of health economics, health administration, health education in relation to community.

## Skills:-

At the end of the course, the student shall be able to make use of

- The principles and practice of medicine in hospital and community settings and familiarization with elementary practices.
- Use the art of communication with patients including history taking and medico social work.
- Use epidemiology as a scientific tool to make rational decisions relevant to community and individual patient.
- Collect, analyse, interpret and present simple community and hospital based data.
- Diagnose and manage common health problems and emergencies at the individual, family and community levels keeping in mind the existing health care resources in the context of the prevailing socio-culture beliefs.
- Diagnose and manage common nutritional problems at the individual, family and community level.
- Plan, implement and evaluate a health education programme with skill to use simple audio-visual aids.
- Interact with other members of the health care team and participate in the organization of health care services and implementation of national health programmes.

## Integration:

Develop capabilities of synthesis between cause of illness in the environment or community and individual health and respond with leadership qualities to institute remedial measures for this.

## Course Content:

Total hours of teaching in community medicine and humanities are 376. The distribution of them shall be as follows.

Phase	Semester	Theory	Practical Hours
I	I & II	30	30
II	III & IV	68	132
III Part 1 <sup>st</sup>	VI & VII	50	66

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# **COMMUNITY MEDICINE (P.S.M.)**

## **List of theory lectures**

### **Phase I (1<sup>st</sup> and 2<sup>nd</sup> semester) 30 Hours**

1. Introduction – Evolution of Community Medicine.
2. Health – Definition, spectrum of health, factors affecting health and indicators of health.
3. Health Problem of World – Urban and Rural – Indian Health.
4. Health Care Delivery system in India – Urban and Rural.
5. Health Education and Communication.
6. Hospital Management.
7. Nutrition and Health.
  - Constituents of food.
  - Food and food groups.
  - Diet planning and recommended dietary allowances.
  - Nutritional diseases.
  - Iodine deficiency disorders.
  - Diseases due to vitamin and mineral imbalance
  - Toxins in the food.
  - Assessment of Nutritional status.
8. Examination

## **List of theory lecture (4<sup>th</sup> semester)**

1. Demography, Demographic cycle, Population trends – World and India.
2. Fertility and factors affecting it.
3. Family welfare and population control and National Population Policy.
4. Medical ethics and doctor – patient relationship – Consumer Protection Act.
5. Sociology and Social factors effecting health.
6. Social Psychology – Introduction, Group Behaviour, Motivation Personality.
7. Economics and health.

### **Phase II – (3<sup>rd</sup> and 4<sup>th</sup> Semester) 68 Hours**

#### **General Epidemiology**

- The concepts of disease.
- Natural history of disease.
- Epidemiological triad.
- Dynamics of diseases transmission.
- Concept of disease control.

#### **Epidemiology**

- Definition, types, measurements in epidemiology, epidemiological studies, and clinical trial, investigation of an epidemic.
- Uses of epidemiology.
- Screening for disease.
- Disinfection, sterilization and control of Hospital acquired infections.
- Immunity.

#### **Environmental health**

- Introduction to environment health.
- Water in relation to health and disease.
- Air pollution and ecological balance.
- Housing and health.
- Effects of radiation on human health ( Ionizing, Non-ionizing & Nuclear warfare)
- Effects of Noise on human health.

- Meteorological environment including effects of global warming.
- Effects of heat and cold
- Solid and Liquid waste disposal
- Disposal of hospital waste.

### **Medical entomology**

Arthropods of medical importance and their control.

### **Biostatistics (Theory and Practical)**

- Introduction and uses.
- Data- Types, Collection and Presentation.
- Centering constants.
- Measures of Variation.
- Normal distribution.
- Sampling methods and Sampling variability.
- Tests of significance.
  - SE of mean and difference between two means.
  - SE of proportion and difference between two proportions
  - $X^2$  tests. ( Chi-square)
  - Students 't' test – Paired and Unpaired.
- Statistical fallacies.

### **Computers in Medicine**

Their use at all the stages to be demonstrated. The students should use computers in analysis and presentation of data

### **Epidemiology of communicable diseases.(6<sup>th</sup> and 7<sup>th</sup> semester)**

- Air borne infections.
  - Exanthematous fevers.
  - Chicken pox, Rubella, and Measles
  - Factors responsible for eradication of small pox.
  - Influenza,SARS and ARI.
  - Diphtheria, Pertussis, meningococcal meningitis, mumps
  - Tuberculosis.
- Faeco-oral infections.
  - Poliomyelitis.
  - Hepatitis.
  - Enteric Fever ,Cholera and Food poisoning
  - Acute diarrheal diseases including Bacillary,Amoebic dysentery,Hookworm infection & Dracunculioses
- Soil transmitted and other Helminthes.
- Tetanus
- Rabies and other Viral Zoonotic disease.
- Leprosy & bacterial Zoonotic, Rickettsial diseases and Parasitic Zoonoses.
- Malaria
- Filariasis.
- Arthropod borne diseases.
- Sexually transmitted diseases and their control.
- AIDS
- Emerging and Re-emerging Infections.

Examinations at the end of 3<sup>rd</sup> and 4<sup>th</sup> semester.

### **(Phase III (6<sup>th</sup> and 7<sup>th</sup> Semester)**

**50 hrs.**

(Teaching in 7<sup>th</sup> semester includes tutorials also.)

- Community development programmes and multisectoral cooperation
- Comprehensive medical care and Primary health care.
- National Health Policy (to date).
- Reproductive and Child Health care.
- Epidemiology of Non-communicable diseases.
- Occupational health.
- Problems of adolescence including Drug dependence.
- Geriatrics and problems of ageing population
- Vital statistics – sources and uses, Census, Fertility statistics.
- Management information system.
- Mental health.
- Genetics in public health.
- Health planning and management.
- National Health Programmes including rural health mission.
- Millenium development goals,sustainable development goals.
- International health and Voluntary Health Agencies.
- Disaster Management
  - ❖ Pre-Conception and Prenatal Diagnostic Technique Act

Tutorials.

Examination at the end of 6<sup>th</sup> and 7<sup>th</sup> semester.

### **Phase I (1<sup>st</sup> And 2<sup>nd</sup> semester) 30 hours.**

## **Field visit-**

Every Medical College should have

adequate transport facilities to take medical undergraduate for field visits. In the phase I total 15 visits, each of 2 hours duration or total 10 visits – each of 3 hours duration (depending on distances) are to be planned by the departments of community medicine. The broad outline of place for educational field visits is given below.

- Hospital visits (O.P.D., Casualty, Immunization clinic, different wards, Kitchen, FW Centre, PPP, Blood Bank, Sterilization section, Infectious disease ward, Minor operation theatre, etc.)
- Rural Health Training Centre.
- Primary Health Centre.
- Urban Health Centre.
- District Health Office (DHO).
- District Training Team (DTT)/IEC Bureau.
- District Tuberculosis Centre.
- Public Health Laboratory.
- District Malaria Office.
- Remand Home.
- Rehabilitation Centre.

**III<sup>rd</sup> Semester, I<sup>st</sup> Clinical Posting - 66 hours.**  
Lecture – Cum – Demonstration, at appropriate places

S. No.	Topic	Demonstration
1	Visit to Urban / Rural health Training Centre.	Functions of UHC/ RHTC Manpower & Duty arrangements
2	Immunization Programme	I (demonstration)
3	Immunization Programme	II ( Cold Chain)
4	Antenatal care	Demonstration of Antenatal case
5	Care of Infant	Demonstration of case
6	Post-natal case of mother/child.	Demonstration of case
7	Contraceptives	Situation to be given and sex education.
8	Exclusive breast feeding	Visit to Baby Friendly Hospital
9	Weaning foods	Demonstration
10	Nutritional demonstration	Explain nutritive values of Indian foodstuff
11	Nutritional assessment	Demonstration
12	Anthropometric measurements	Demonstration
13	Nutritional deficiency disorders	With A/V aids or case, Road to Health Chart
14	Protein Energy Malnutrition	With A/V aids or case
15	Diarrhea as a community health problem	With A/V aids or case, ORS preparation and composition
16	ARI as a community health problem	With A/V aids or case
17	Elementary essential drugs	Visit to drug store, Inventory control
18	Examination	

**4<sup>th</sup> Semester 2<sup>nd</sup> Clinical Posting 66 hours.**

The broad guidelines for planning programmes are as follows.

- 1) Posting for family care study - 5 days
  - Principle of clinical epidemiology
  - Morbidity Survey.
  - Data analysis and presentation.
- 2) Posting for School Health - 3 days
  - Health check-up of school children.
  - Data analysis and presentation.
  - Health education activities in the school by the students.
- 3) Visit to anganwadi and ICDS scheme block - 1 days
- 4) Students' seminars on topics like - 5 days
  - Disaster management
  - Road traffic accidents
  - PBL topics
  - Geriatric, children under difficult circumstances etc.
  - Socioeconomically, ethical issues on brain death & organ donation
- 5) Introduction of statistical package and assessment Examinations 1days.

**Phase III (6<sup>th</sup> and 7<sup>th</sup> Semester)**  
**3<sup>rd</sup> Clinical Posting** -

**66 hours**

Posting: Clinical case presentation by students

1. Introduction to infectious diseases – history taking
2. Exanthemata's fevers.
3. Diarrhea / Cholera / Dysentery.
4. Tuberculosis
5. Leprosy.
6. Dog – bite case and abies.
7. Tetanus.
8. PUO / Enteric fever / Malaria.
9. STD / AIDS.
10. Hepatitis
11. Non- communicable diseases.
  - CHD, RHD, hypertension.
  - Cancer.
  - Obesity / diabetes.
12. Examination.

## MARKS OF INTERNAL ASSESSMENT: -

Theory –20 marks and practical 20 marks. The students must secure at least 50% marks of the total marks fixed for internal assessment in the subject in order to clear the subject.

I)	Theory		
	1) 3 <sup>rd</sup> Semester	50 Marks	
	2) 4 <sup>th</sup> Semester	50 Marks	
	3) 6 <sup>th</sup> Semester	<u>50 Marks</u>	
		Total 150 Marks	Convert it to out of 10 marks
	4) Prelim exam. Theory	Paper I - 60 Marks	
		Paper II - <u>60 Marks</u>	
		Total 120 Marks,	Convert it to out of 10 marks
		Total Theory Internal Assessment marks will be 20.	

II)	Practicals	-	
	1) 1 <sup>st</sup> Clinical rotation exam. -	3 <sup>rd</sup> Semester -	50 Marks
	2) 2 <sup>nd</sup> Clinical rotation exam. -	4 <sup>th</sup> Semester -	50 Marks
	3) 3 <sup>rd</sup> Clinical rotation exam. -	6 <sup>th</sup> Semester -	50 Marks
	4) Practicle Exam	- 3 <sup>rd</sup> Semester -	50 Marks
	5) Practicle Exam	- 4 <sup>rd</sup> Semester -	50 Marks
		(Best 3 out of 5)Total -	<u>150 Marks</u>
			Convert it to out of 10 Marks

4) Prelim exam.	-	40 Marks	
		<u>10 Marks for Journals</u>	
		Total 50 Marks	
			Convert it to out of 10 marks
		Total Practical Internal Assessment marks will be 20.	

### **BOOKS RECOMMENDED.**

1. Text book of Community Medicine; Kulkarni A.P. and Baride J.P.
2. Principles of Preventive and Social Medicine; K. Mahajan
3. Textbook of Community Medicine; Sunderlal, Adarsh and Pankaj
4. Park's Textbook of Preventive and Social Medicine, Park
5. Textbook of Biostatistics; B. K. Mahajan

### **FURTHER READING.**

1. Epidemiology and Management for health care for all P.V. Sathe and A.P. Sathe.
2. Essentials of Preventive Medicine O.P. Ghai and Piyush Gupta.

### **Record Book :**

- 1) The case records will have to be entered in a record book separately for General Medicine, for Paediatrics and for PSM.
- 2) In the record book of General Medicine, number of case records for Medicine shall be 12, for Skin & V.D. & Leprosy shall be 3, for Psychiatry shall be 2 and for Chest & TB shall be 3 cases.
- 3) The certificate of satisfactory completion of all Clinical postings will be entered based on similar certificates from all postings in all the above subjects.
- 4) In addition, details of the marks secured in the posting ending examination shall be entered on the second page on which the calculations of the internal assessments shall also be stated. Record book will not carry any marks but its satisfactory completion will be a prerequisite for appearing in examination.

## University Examinations in Community Medicine :-

Theory 2 papers of 60 marks each	= 120 marks.
Includes problems showing applied aspects of management at primary level including essential drugs, occupational (agro based) diseases, rehabilitation and social aspects of community.	
Oral (Viva)	= 10 marks
Practical /Project evaluation	= 30 marks
Internal Assessment	= 40 marks
(Theory 20 Marks, Practical 20 Marks)	
Grand Total	= 200 marks

### *Criteria of passing in various subjects at III MBBS Examination*

Sr. No.	Subject	Theory Paper ./ Oral/ Practical / Internal Assessment		Maximum Marks in each of the subject	Minimum marks required to pass in each part of any subject		Minimum marks required to pass in each subject out of
01)	Community Medicine	a) Theory	Paper - I	60	60	65	100 <hr/> 200
			Paper - II	60			
		b) Oral		10			
		c) Practical		30		15	
		d) Internal Assessment	Theory	20			
			Practical	20		20	

### **It is compulsory to obtain 50% marks in theory.**

It is mandatory to obtain 50% marks in theory +viva/oral.

The Frequency & other details of Internal Assessment Examinations shall be as laid down. Passing in Internal Assessment is prerequisite for eligibility to clear the subject. For passing in Internal Assessment student should secure minimum 30 out of 60 marks (theory & practical combined)

The Internal Assessment Examination shall consist of one clinical case paired with viva-voce for the periodical tests. However, the preliminary examination shall be carried out in a pattern similar to final University examination.

## **University (Final) Exam: Preventive and Social Medicine**

The distribution of marks at final examination

Theory: two papers of 60 marks each	120 Marks
Oral (Viva)	10 Marks
Practicals	30 Marks
Internal assessment	40 Marks
• (Theory 20 Marks)	
• (Practical 20 Marks)	
<hr/>	
<b>Total</b>	<b>200 Marks</b>

## **PATTERN :**

### **THEORY : TWO PAPERS OF 60 MARKS EACH 120 MARKS :-**

- **Paper I** include Concepts in Health & Disease, Sociology / Humanities, Epidemiology, Biostatistics, Communicable and non- communicable diseases, Genetics and Environmental Health.
- **Paper II** includes Demography & Family Planning, Maternal and child health Nutrition, Occupational Health, Mental Health, Health Education, Health Planning & Management, Health Care Delivery System, National Health Programmes, International Health,
- These are broad divisions. There are some chances of overlapping.

#### **NATURE OF THEORY QUESTION PAPERS:**

##### **Final MBBS Examination of subject-Community Medicine**

#### **Theory**

- **Two papers: Paper I & Paper II** (Paper pattern for both papers is same)

Paper –I (Duration- 3hrs.)Total = 60 Mark

Paper-II (Duration- 3hrs.)Total = 60 Mark

- **Paper pattern**

**Duration- 3 hrs**

**Total = 60 Marks**

**a) Sec-A**

**30 Marks**

i) One line answer questions (Answer any 12 out of 14)

12x1=12

ii) Structural long answer question (Answer any 2out of 3)

2x9=18

**b) Sec-B**

**30 Marks**

i) Short answer question (Answer any 6 out of 8)

6x5=30

## **PATTERN AT PRACTICAL EXAMINATION**

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	Marks
Orals (Viva)	10
Practical	30

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The distribution of 30 marks of practical shall be -

- 1) Spots - 10 Marks (5 spots of 2 marks each) Time 10 min.
- 2) Exercises - 10 Marks (6 marks for Epidemiological and 4 marks for Bio statistical exercises) Time 10 min
- 3) Clinical case - 10 Marks Time 45 min.  
Presentation

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Total 30 Marks

**It is compulsory to obtain 50% marks in theory.**

**It is mandatory to obtain 50% marks in theory +viva/oral.**

# CURRICULUM FOR OPHTHALMOLOGY

## DEPARTMENT OF OPHTHALMOLOGY

These guidelines are based on MCI recommendations. Teaching has to be done keeping in mind the goal and Objectives to be achieved by medical students

### (1) GOAL

The broad goal of the teaching of students in ophthalmology is to provide such knowledge and skills to the student that shall enable him/her to practice as a clinician and as a primary eye care physician and also to function effectively as a community health leader to assist in the implementation of National Programme for the prevention of blindness and rehabilitation of the visually impaired.

### (2) OBJECTIVES

#### 2.1 Knowledge : -

At the end of the course, student shall have the knowledge of –

- 2.1.1 Common problems affecting the eye,
- 2.1.2 Principles of management of major ophthalmic emergencies,
- 2.1.3 Main systemic diseases affecting the eye;
- 2.1.4 Effects of local and systemic diseases on patient's vision and the necessary action required to minimize the sequelae of such diseases;
- 2.1.5 Adverse drug reactions with special reference to ophthalmic manifestations;
- 2.1.6 Magnitude of blindness in India and its main causes;
- 2.1.7 National programme for control of blindness and its implementation at various levels.
- 2.1.8 Eye care education for prevention of eye problems 24
- 2.1.9 Role of primary health center in organization of eye camps;
- 2.1.10 Organization of primary health care and the functioning of the ophthalmic assistant;

2.1.11 Integration of the national programme for control of blindness with the other national health

2.1.12 Programmes.

2.1.13 Eye bank organization

#### 2.2 Skills :-

At the end of the course, the student shall be able to: elicit a history pertinent to general health and ocular status;

- 2.2.1 assist in diagnostic procedures such as visual acuity testing, examination of eye, Schiötz tonometry, staining of Corneal pathology, confrontational perimetry, subjective refraction including correction of presbyopia and aphakia, direct ophthalmoscopy and conjunctival smear examination and Cover test;
- 2.2.2 diagnose and treat common problems affecting the eye;
- 2.2.3 interpret ophthalmic signs in relation to common systemic disorders,
- 2.2.4 assist/observe therapeutic procedures such as subconjunctival injection, corneal conjunctival foreign body removal, carbolic cautery for
- 2.2.5 corneal ulcers, Nasolacrimal duct syringing and tarsorrhaphy;
- 2.2.6 provide first aid in major ophthalmic emergencies;
- 2.2.7 assist to organize community surveys for visual check-up; 25
- 2.2.8 assist to organize primary eye care service through primary health centers.
- 2.2.9 use effective means of communication with the public and individual to motivate for surgery in cataract and for eye donation.
- 2.2.10 establish rapport with his seniors, colleagues and paramedical workers, so as to effectively function as a member of the eye care team.

#### (3) INTEGRATION

The undergraduate training in Ophthalmology will provide an integrated approach towards other disciplines

especially Neuro-sciences, ENT, General Surgery and Medicine.

#### **(4) LEARNING METHODS**

**4.1** Total teaching hours: - 100

**4.2** Theory lectures: -70 (6<sup>th</sup>,7<sup>th</sup> term).  
Tutorials-30 (6<sup>th</sup>+7<sup>th</sup> term)

**4.3** Clinical postings : Three clinical postings of total 10 weeks

4.3.1 1st in 4th semester (2 weeks)

4.3.2 2nd in 6th semester (4 weeks)

4.3.3 3rd in 7th semester (4 weeks) Clinical postings will also include bedside clinics

#### **(5) SYLLABUS**

##### **5.1 Anatomy & Physiology of the eye, Orbit, – 3 Lectures**

5.1.1 Introduction to eye

5.1.2 Anatomy of the eye

5.1.3 Physiology of the eye

5.1.4 Neurology of the eye 26

##### **5.2 Conjunctiva- 4 lectures**

5.2.1 Symptomatic conditions

(a) Hyperemia, subconjunctival haemorrhage

5.2.2 Diseases

(a) Classification of conjunctivitis

(b) Mucopurulent Conjunctivitis

(c) Trachoma

(d) Membranous Conjunctivitis, spring catarrh

(e) Degenerations: - Pinguecula and Pterygium

(f) ophthalmia neonatorum

##### **5.3 Cornea - 5 lectures**

5.3.1 Corneal ulcers: Bacterial, fungal, viral

5.3.2 Hypopyon ulcer

5.3.3 Complication of corneal ulcer

5.3.4 Management of complication of corneal ulcer

5.3.5 Fascicular ulcer

5.3.6 Interstitial keratitis

5.3.7 Herpes zoster ophthalmicus

5.3.8 Keratoconus

5.3.9 Corneal opacities

5.3.10 Keratomalacia (Vit A deficiency)

5.3.11 Pannus

5.3.12 Keratoplasty-eye donation

5.3.13 Eye banking

##### **5.4 Sclera – 1 lecture**

5.4.1 Episcleritis

5.4.2 Scleritis

5.4.3 Staphyloma

##### **5.5 Uvea - 3 lectures**

5.5.1 Classification of uveitis

5.5.2 Gen. Etiology, investigation and principle management of uveitis

5.5.3 Acute & chronic iridocyclitis

5.5.4 Panophthalmitis

5.5.5 Endophthalmitis

5.5.6 Choroiditis

5.5.7 Chorioretinitis

5.5.8 D/D of Red eye

##### **5.6 Lens – 5 lectures**

5.6.1 Cataract- Aetiological classification

5.6.2 Senile mature cataract

5.6.3 Management of cataract 1) Medical 2) Surgical

5.6.4 Anesthesia

5.6.5 Treatment of aphakia

5.6.6 IOL implant (Phacoemulsification)

5.6.7 Recent advances in cataract management

5.6.8 Role of eye camp

##### **5.7 Glaucoma – 4 lectures**

5.7.1 Aqueous Humor Dynamics

5.7.2 Factors Controlling Normal IOP

5.7.3 Tonometry, Automated perimetry

5.7.4 Provocative tests

5.7.5 Classification of Glaucoma

5.7.6 Congenital Glaucoma

5.7.7 Angle Closure Glaucoma

5.7.8 Open Angle Glaucoma

5.7.9 Secondary Glaucoma

5.7.10 Recent advances in treatment of glaucoma

##### **5.8 Vitreous – 1 lecture**

5.8.1 Vitreous Haemorrhage & Opacities

5.8.2 PVD

5.8.3 Proliferative vitreo – retinopathy

**5.9 Intraocular Tumors – 2 lectures**

5.9.1 Retinoblastoma

5.9.2 Malignant Melanoma

**5.10 Retina – 3 lectures**

5.10.1 Vascular Retinopathies: Diabetic, Hypertensive, Toxemia of pregnancy

5.10.2 Retinal Detachment – classification, aetiology & management

5.10.3 Retinitis Pigmentosa

**5.11 Optic nerve – 2 lectures**

5.11.1 Optic Neuritis

5.11.2 Papilloedema

5.11.3 Optic Atrophy

**5.12 Optics - 5 lectures**

5.12.1 Basic Optics

5.12.2 Principles: V.A. testing, Retinoscopy, Ophthalmoscopy (distant direct, direct, indirect)

5.12.3 Refractive errors – Myopia, Hypermetropia, Astigmatism

5.12.4 Accommodation & Presbyopia

5.12.5 Spectacles, Contact Lens

5.12.6 Surgical treatment of Refractive Errors  
1) RK 2) PRK 3) LASIK

**5.13 Orbit – 2 lectures**

5.13.1 Proptosis- Aetiology, Clinical Evaluation, Investigations & Principles of Management

5.13.2 Endocrinal Exophthalmos

5.13.3 Orbital Haemorrhage

**5.14 Lids – 3 lectures**

5.14.1 Inflammation of various lid glands

5.14.2 Blepharitis

5.14.3 Trichiasis, Entropion

5.14.4 Ectropion

5.14.5 Symblepharon

5.14.6 Ptosis

**5.15 Lacrimal System – 3 lectures**

5.15.1 Epiphora

5.15.2 Dry Eye – etiology & treatment

5.15.3 Nasolacrimal Duct Obstruction

5.15.4 Dacrocystitis – Acute & Chronic

5.15.5 Lacrimal gland tumors 29

**5.16 Ocular Mobility – 4 lectures**

5.16.1 Extraocular muscles-Basic anatomy & actions

5.16.2 Squint: Gen. Etiology, Diagnosis and principles of management

5.16.3 Paralytic and Non Paralytic Squint

5.16.4 Heterophoria

5.16.5 Nystagmus

**5.17 Miscellaneous – 3 lectures**

5.17.1 Colour Blindness

5.17.2 Lasers in Ophthalmology- Principles

5.17.3 Recent advances in ophthalmology

**5.18 Ocular trauma – 3 lectures**

5.18.1 Blunt Trauma

5.18.2 Perforating Trauma

5.18.3 Chemical Burns

5.18.4 Sympathetic Ophthalmitis

**5.19 Principles of Management of Major Ophthalmic Emergencies – 2 lectures**

5.19.1 Acute Congestive Glaucoma

5.19.2 Corneal Ulcer

5.19.3 Intraocular Trauma

5.19.4 Chemical Burns

5.19.5 Sudden Loss of Vision

5.19.6 Acute Iridocyclitis

5.19.7 Secondary Glaucoma

5.19.8 Endophthalmitis

**5.20 Systemic Diseases Affecting the Eye – 2 lectures**

5.20.1 Tuberculosis

5.20.2 Syphilis

5.20.3 Leprosy

5.20.4 AIDS

5.20.5 Diabetes

5.20.6 Hypertension 30

**5.21 Drugs – 2 lectures**

5.21.1 Antibiotics

5.21.2 Steroids

5.21.3 Anti Glaucoma Drugs

5.21.4 Mydriatics & Cycloplegics

5.21.5 Viscoelastics

- 5.21.6 Fluorescein dye
- 5.21.7 Adverse reactions affecting the eye
- 5.22 Community Ophthalmology – 2 lectures**
- 5.22.1 Blindness: Definition, causes & Magnitude
- 5.22.2 N.P.C.B- Vision 2020
- 5.22.3 Preventable Blindness – causes & treatment
- 5.22.4 Role of PHCs in Eye Care
- 5.22.5 Nutritional deficiencies
- 5.22.6 Role of camp in vision 2020

**(6) TUTORIALS (Total 30 Hours)**

**6.1 Surgical Techniques Cataract - ECCE**

- ICCE
- IOL Implantation
- Phaco-emulsification.
- Pterygium
- Chalazion
- Glaucoma
- Foreign Body Removal
- Enucleation
- Keratoplasty
- Basic of squint, L 10

**6.2 Instruments**

- OPD
- Operative
- Basic Examination and Diagnostic instruments Tonometer, Sac Syringing, Slit Lamp.

**6.3 Optics - Lenses – Spherical, Cylindrical, Prisms,**

- Pinhole, Slit, Maddox Rod & Maddox wing,
- Red & Green Glasses.
- IOLs
- Ophthalmoscopy 31
- Retinoscopy
- Contact Lenses
- Colour Vision

**6.4 Drugs**

Miotics, Antibiotics, Antiglaucoma, Mydriatics, Steroids, Anti virals, NSAIDS, Anti Fungals Viscoelastics Pre-Op. & Post – Op.

**(7) Brief Summary of theory lectures held in 6th & 7th Terms**

- 7.1 Anatomy & Physiology 3
- 7.2 Optics 5
- 7.3 Conjunctiva 4
- 7.4 Cornea 5

- 7.5 Sclera 1
- 7.6 Uvea 3
- 7.7 Cataract 5
- 7.8 Glaucoma 4
- 7.9. Optic Nerve 2
- 7.10 Retina 3
- 7.11 Vitreous 1
- 7.12 Squint 4
- 7.13 Community Ophthalmology 2
- 7.14 Lids 3
- 7.15 Orbit 2
- 7.16 Lacrimal Apparatus and Dry Eye 3
- 7.17 Miscellaneous & Others 20

<b>Total Lectures</b>	<b>70</b>
<b>Tutorials</b>	<b>30</b>
	<b>100</b>

**(8) Evaluation Methods**

(Theory, Practical and Viva)

**8.1 Internal assessment: 20 (Theory 10 +Practical 10)**

- 8.1.1 Marks of Internal Assessment should be sent to University before the commencement of Theory examination.
- 8.1.2 Passing in internal assessment is essential for passing, as Internal assessment is separate head of passing. in examination.
- 8.1.3 It will also be considered for grace marks as per existing rules
- 8.1.4 Combined theory and practical of internal assessment will be considered for passing in internal assessment.
- 8.1.5 Student will be allowed to appear for both theory and practical exam independent of marks obtained in internal assessment but he if fails in that head even after including the grace marks he will be declared “Fail in that Subject”.

**8.2 Internal Assessment in Theory**

- 8.2.1 Examinations during semesters : This will be carried out by conducting theory examinations during 6th semester (50 marks). Total of 50 marks to be converted into 5 marks. (A/5)
- 8.2.2 Prelim examination : This shall be carried out during 7th semester. One theory papers of 40 marks as per university examination. Total of 40 marks to be converted into 5 marks. ( B/5) Total marks of Internal assessment- Theory will be addition of A and B.

**8.3 Internal assessment in Practical**

Examinations at end of Clinical postings:

8.3.1 There will be practical examination at the end of each clinical posting of Ophthalmology, 6th and 7<sup>th</sup> semester. Each examination will be of 50 marks. Best of two- 50marks, will be converted to 5 marks.( C/5)

8.3.2 Preliminary examination: This will be conducted for 40 marks as per university pattern and marks will be converted to 5 (D/5).

**Total marks of Internal of Practical will be addition of C and D.**

**(9) PATTERN OF FINAL EXAMINATION**  
(Including distribution of marks, questions and time)

Pattern of theory examination including distribution of marks -

**9.1 There shall be one theory paper, carrying 40 marks**

**9.2 The paper will have two sections, A and B**

**9.3 The paper will be of 2.5 hours duration.**

**9.4 Section A and Section B will have to be written in separate answer sheets.**

**9.5 Theory :40 marks Duration : Two and half hours (2 & 1/2 ) hours**

9.5.1 Section A(22)

i) One line answer questions. Answer any 8 out of 10 (8marks)

ii) Structured Long Answer question- Answer any 2 out of 3 (2X7=14 marks)

9.5.2 Section B

9.5.3

i) Short answer question—Answer any 6 out of 8 (18 marks)

**9.6 Practical: 40 marks**

9.6.1 Clinical : One long case : 25 marks :30 min. for taking case and 10 minutes for

assessment,  
Drugs:5 marks

9.6.2 Oral (viva voce) :10 marks:10 min. duration

1. Optics 05 marks
2. Instruments 05 marks

## **(10) BOOKS RECOMMENDED**

### **10.1 Text books :**

10.1.1 Parson` Diseases of Eye 22nd Edition – 2014 publisher Butterworth-Heinemann

10.1.2 elsevier publication

10.1.3 Text book of diseases of eye by Vasudev Anand Rao- ISBN -13 3rd edition 2015 Published by A.I.T.R.S publisher & distributors

10.1.4 Comprehensive Ophthalmology by A K Khurana 6th edition 2015 Jaypee publication

10.1.5 Basic Ophthalmology by Renu Jogi- 5th edition 2016 Published by Jaypee Brothers Medical Publisher (P)Ltd.

10.1.6 Essential of Ophthalmology by Samar K. Basak- 6th edition Published by jaypee brothers

### **10.2 Reference Books :**

10.2.1 Clinical Ophthalmology Jack J Kanski, 8th edition, 2015 elsevier publication -

10.2.2 Essentials of Ophthalmology Pradeep Sharma, 3rd edition CBS Publishers

10.2.3 Manual of Ocular Diagnostic & Therapy Pavan Langston, 6th edition, 2008 wolterkluw

# CURRICULUM FOR E.N.T. (OTORHINOLARNOLOGY)

## 1. GOAL

The broad goal of the teaching of undergraduate students in Otorhinolaryngology is that the undergraduate students have acquired adequate knowledge and skills for optimally dealing with common disorders and emergencies and principles of rehabilitation of the impaired hearing.

## 2. OBJECTIVES

### 2.1 KNOWLEDGE

At the end of the course, the student should be able to:

1. Describe the basic pathophysiology of common ENT diseases and emergencies.
2. Adopt the rational use of commonly used drugs, keeping in mind their adverse reactions.
3. Suggest common investigative procedures and their interpretation.

### 2.2 SKILLS

At the end of the course, the student should be able to:

1. Examine and diagnose common ENT problems including the pre-malignant and malignant disorders of the head and neck.
2. Manage ENT problems at the first level of care and be able to refer whenever necessary.
3. Assist/carry out minor surgical procedures like ear syringing, ear dressings, nasal packing etc.
4. Assist in certain procedures such as tracheostomy, endoscopies and removal of foreign bodies.

### 2.3 INTEGRATION

The undergraduate training in ENT will provide an integrated approach towards other disciplines especially neurosciences, ophthalmology and general surgery.

## EAR

1. Introduction to Otology Anatomy of the external ear including brief embryology
2. Anatomy of the middle ear Eustachian tube, middle ear Aditus and antrum, mastoid antrum, MacEvan's triangle, mastoid air cell system, embryology of the middle ear
3. Anatomy of the Inner ear, role of inner ear in hearing
4. Physiology of Hearing
5. Physiology of the Vestibular Apparatus and vestibular function tests
6. Audiological evaluation Tuning fork tests, tests for Eustachian tube function, Pure tone audiometry Impedance audiometry, Speech audiometry, BERA
7. External ear diseases Congenital anomalies, traumatic conditions, haematoma auris, avulsion and lacerations of the pin, Foreign body ear.  
Inflammatory conditions, otitis externa including classifications of otitis externa, viral infections, furuncle, otomycosis. Miscellaneous conditions like pseudocyst of the pinna, cerumen, keratosis obturans, malignant otitis externa, and neoplastic conditions of the external ear
8. Acute suppurative otitis media and  
Definition of ASOM, etiopathology, clinical features and management.
9. Baro trauma Biomechanics, clinical features management and prevention.
10. Acute mastoiditis Definition, etiopathology, clinical features and management and complications
11. Eustachian tube dysfunction and secretory otitis media
12. Chronic Otitis media - mucosal disease  
Definition, etiopathology, clinical features, stages, investigations and treatment
13. Chronic Otitis media - squamous disease  
Definition, etiopathology, clinical features, stages, investigations and treatment
14. Complications of Chronic Otitis media –  
Extra cranial, Mastoid abscess, petrositis, labyrinthitis, facial palsy, Intra cranial -Meningitis, extradural abscess, subdural abscess, brain abscess, lateral sinus thrombophlebitis, otogenic hydrocephalus.

15. Mastoid surgeries
16. Otosclerosis Definition, etiopathology, clinical features stages, investigations and treatment
17. Anatomy of the facial nerve
18. Facial nerve paralysis Causes, features, management and prevention
19. Vertigo Definition, causes, evaluation and management
20. Tinnitus Definition, causes, evaluation and management
21. Conductive Hearing Loss Etiology, investigations and management
22. Sensorineural Hearing Loss Etiology, investigations and management
  
23. Labyrinthitis Serous labyrinthitis, circumscribed labyrinthitis, Suppurative labyrinthitis
24. Traumatic condition Fractures of the temporal bone, CSF otorrhoea, perilymph fistula
25. Acoustic trauma and Noise induced Hearing loss
26. Meniere's disease Etiology, investigations and management
27. Tumors of the ear and the mastoid  
Glomus tumors, Acoustic neuroma

### **1. NOSE**

1. Anatomy of the nose, vestibule and nasal septum
2. Anatomy of the lateral wall of the nose
3. Anatomy of paranasal sinuses
4. Physiology of the nose and paranasal sinuses including olfaction
5. Radiology of the nose and paranasal sinuses
6. Congenital and developmental anomalies. Embryology of the nose and paranasal sinuses, External nasal deformities Choanal atresia, cleft lip, cleft palate
7. Epistaxis Applied anatomy, etiology, management
8. Inflammatory conditions of the Nose  
Vestibulitis, Furunculosis, Cellulitis, Dangerous area of the face
9. Traumatic conditions including fracture of the nasal bones, Fracture of the nasal Septum, Lefort fracture, CSF rhinorrhoea, Foreign body nose, Myiasis
10. Deviated nasal septum Etiopathology, clinical features, management, Septoplasty and SMR
11. Acute Rhinitis Etiopathology, clinical features, management
12. Chronic specific Rhinitis Tuberculosis, Leprosy, Syphilis, Rhinitis medicamentosa, Rhinitis caseosa
13. Atrophic Rhinitis, Allergic Rhinitis, Vasomotor Rhinitis.
14. Granulomatous diseases of nose  
Rhinoscleroma, Rhinosporidiosis, and other fungal infections
15. Acute Sinusitis Etiopathology, Types, Clinical features, investigations and treatment
16. Chronic Sinusitis  
Etiopathology, Types, Clinical features, investigations and treatment
17. Complications of Sinusitis
18. Nasal Polyposis Etiopathology, Types, Clinical features, investigations and treatment
19. Neoplastic conditions of the nose and paranasal sinuses
20. Juvenile Nasal Angiofibroma
21. Snoring and Sleep Apnoea Syndrome

### **LARYNX AND PHARYNX**

22. Anatomy and Physiology of the Pharynx
23. Tonsillitis, Adenoiditis & Adenotonsillectomy
24. Neoplasms of nasal Cavity, PNS and Nasopharynx
25. Tumours of Oropharynx & miscellaneous diseases of Pharynx
26. Anatomy & physiology of larynx
27. Acute and Chronic Inflammations of Larynx, Congenital Lesions of Larynx & Laryngotracheal trauma and Stridor

28. Laryngeal Paralysis, Voice Disorders and Speech Therapy
29. Laryngeal Paralysis, Voice Disorders and Speech Therapy
30. Tumours of the Larynx
31. Tracheostomy and Airway Management
32. Anatomy and Physiology of Oesophagus, Deglutition
33. Disorders of Oesophagus & Dysphagia, FB in oesophagus & oesophagoscopy
34. Voice and Speech disorders

### **HEAD AND NECK AND RECENT ADVANCES**

1. Anatomy of the neck & neck spaces and lymphatic drainage
2. Deep neck space infections
3. Thyroid gland anatomy and physiology
4. Thyroid swellings and surgeries
5. Metastatic neck disease and neck dissections
6. Salivary glands
7. AIDS and Lasers in ENT
8. Radiotherapy and chemotherapy

#### **1) PROPOSED PATTERN OF EXAMINATION FOR MBBS-III (Part –I)**

For MBBS-III (Part –I) program in ENT the overall evaluation of the students will consist of

1. Internal Assessment Examination
2. Preliminary examination
3. Final (University) examination.

##### **1.1 Internal Assessment Examination**

Internal assessment examination for all UG students will be held as follows:

- (i) At the end of every clinical term a post end examination will be held for each batch in the sixth and seventh semester.  
Total marks = 50.
- (ii) A term end theory examination will be held at the end of the sixth term. The results of these examinations are sent to the Dean by the head of the department for compilation of internal assessment marks.  
Total marks =50

##### **1.2 Preliminary Examination**

Preliminary examination shall be conducted by the college at the end of the seventh semester. This examination is compulsory and the marks have to considered for computing the final internal assessment examination marks. Only those candidates who pass this examination will be permitted to appear for the final examination.

Theory: Total marks = 40

Practical: Total marks = 50

##### **1.3 Final Examination**

There shall be final examination at the end of seventh term. This examination will be conducted by the university.

#### 1.4 Pattern for final examination III MBB (Part-I)

Both the preliminary examination and final examination will carry marks as follows.

**Theory: 40 marks+10 marks of viva-voce**

**Practical: 30marks (long case + short case) + 20 internal marks**

**Total: 100 marks**

#### 2.5 Pattern of Preliminary and Final (University) Examinations –

##### 2.6 Theory:

There will be one theory paper as follows:

The papers will be of 2 ½ **hours duration** and will have the following pattern

The paper will have two sections:

##### **Section A (22 marks)**

One line answer, questions of one mark each (Any eight out of ten)

Two LAQs of 7 marks each (Any two out of three)

##### **Section B (18 marks)**

SAQs of 3 marks each (Any six out of eight)

Total: Section A + Section B = 40 marks

#### 1.6 Pattern for Practical Examination

Long Case (1) - 20 marks

Short Case (1) - 10 marks

Table Viva (4 tables)- 10 marks

Total 40 marks

(i) One **long case**: The long case will be structured, comprising history taking, clinical examination, investigations, proposed treatment modalities.

(ii) One **short case**: The short case will also be structured in which only one particular system and therapy decision/discussion may be considered.

#### **The table viva will comprise of four tables of 10 marks**

Table 1: Instruments 2 marks

Table 2: X-rays 4 marks

Table 3: Audiometry 2 marks

Table 4: Specimens 2 marks

#### 1.7 Examiners/ Final Examinations

(i) There shall be three examiners including two internal and one external. One of the internal examiners will be Chairman/Convener. All examiners must be a full time teacher with requisite experience as per MCI guidelines.

(ii) All examiners shall be jointly responsible for the examination. In presence of the external examiners, the Chairman and the internal examiner shall make the necessary arrangements for conducting the Final examination. While preparing the Final Results, Formative assessment of the students shall be taken into consideration and the results will be sent to the university in a sealed cover.

# CURRICULUM FOR ORTHOPEDICS

## 1. GOAL :

The student shall be able to :

1. Take relevant points in the history, Clinical examination to diagnose fractures and deformities.
2. Deliver first aid measures for common fractures and sprains
3. Use techniques of splinting, plaster, immobilization
4. Diagnose congenital anomalies, skeletal deformity and metabolic bone diseases, infections of bone and joint, joint arthritis,

## 2. SKILLS

At the end of the course, the student should be able to:

1. Detect sprains and deliver first aid measures for common fractures and sprains and manage uncomplicated fractures of clavicle, Colles's, forearm, phalanges etc.
2. Techniques of splinting, plaster, immobilization etc.
3. Management of common bone infections, learn indications for sequestration, amputations and corrective measures for bone deformities.
4. Aspect of rehabilitation for Polio, Cerebral Palsy and Amputation.

## 3. APPLICATION

Be able to perform certain orthopedic skills, provide sound advice of skeletal and related conditions at primary or secondary health care level.

## 4. INTEGRATION

Integration with anatomy, surgery, pathology, radiology and Forensic Medicine be don

## 5<sup>th</sup> Semester

1. Students must be able to take relevant points in the history
2. Clinical examination to diagnose fractures and deformities.
3. Evaluations done by post term completion examinations

## 6<sup>th</sup> Semester

1. Students must know the basic physiology of fracture healing, types of fractures and complication of fractures.
2. Basic principles of plaster techniques and complications.
3. Lectures on injuries of upper limb.

## 7<sup>th</sup> Semester

1. Lectures on injuries of lower extremities.
2. Clinically, Student must be able to examine & diagnose common diseases of upper limb.

## 3. GOAL

The broad goal of the teaching of undergraduate students in Otorhinolaryngology is that the undergraduate students have acquired adequate knowledge and skills for optimally dealing with common disorders and emergencies and principles of rehabilitation of the impaired hearing.

## 4. OBJECTIVES

### 2.1 KNOWLEDGE

At the end of the course, the student should be able to:

1. Describe the basic pathophysiology of common ENT diseases and emergencies.

2. Adopt the rational use of commonly used drugs, keeping in mind their adverse reactions.
3. Suggest common investigative procedures and their interpretation.

### 2.2 SKILLS

At the end of the course, the student should be able to:

1. Examine and diagnose common ENT problems including the pre-malignant and malignant disorders of the head and neck.
2. Manage ENT problems at the first level of care and be able to refer whenever necessary.
3. Assist/carry out minor surgical procedures like ear syringing, ear dressings, nasal packing etc.
4. Assist in certain procedures such as tracheostomy, endoscopies and removal of foreign bodies.

### 2.3 INTEGRATION

The undergraduate training in ENT will provide an integrated approach towards other disciplines especially neurosciences, ophthalmology and general surgery.

#### EAR

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52. Acoustic trauma and Noise induced Hearing loss
53. Meniere's disease Etiology, investigations and management
54. Tumors of the ear and the mastoid Glomus tumors, Acoustic neuroma

#### 2. NOSE

35. Anatomy of the nose, vestibule and nasal septum
36. Anatomy of the lateral wall of the nose
37. Anatomy of paranasal sinuses
38. Physiology of the nose and paranasal sinuses including olfaction
39. Radiology of the nose and paranasal sinuses
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55. Snoring and Sleep Apnoea Syndrome

#### **LARYNX AND PHARYNX**

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#### **HEAD AND NECK AND RECENT ADVANCES**

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12. Thyroid swellings and surgeries
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14. Salivary glands
15. AIDS and Lasers in ENT
16. Radiotherapy and chemotherapy

## **2) PROPOSED PATTERN OF**

### **EXAMINATION FOR MBBS-III (Part –I)**

For MBBS-III (Part –I) program in ENT the overall evaluation of the students will consist of

4. Internal Assessment Examination
5. Preliminary examination
6. Final (University) examination.

#### **1.3 Internal Assessment Examination**

Internal assessment examination for all UG students will be held as follows:

- (iii) At the end of every clinical term a post end examination will be held for each batch in the sixth and seventh semester.

Total marks = 50.

- (iv) A term end theory examination will be held at the end of the sixth term. The results of these examinations are sent to the Dean by the head of the department for compilation of internal assessment marks.

Total marks =50

#### **1.4 Preliminary Examination**

Preliminary examination shall be conducted by the college at the end of the seventh semester. This examination is compulsory and the marks have to be considered for computing the final internal assessment examination marks. Only those candidates who pass this examination will be permitted to appear for the final examination.

Theory: Total marks = 40

Practical:

Total marks = 50

#### **1.3 Final Examination**

There shall be final examination at the end of seventh term. This examination will be conducted by the university.

#### 1.4 Pattern for final examination III MBB (Part-I)

Both the preliminary examination and final examination will carry marks as follows.

**Theory: 40 marks+10 marks of viva-voce**

**Practical: 30marks (long case + short case) + 20 internal marks**

**Total: 100 marks**

#### 4.5 Pattern of Preliminary and Final (University) Examinations –

##### 4.6 Theory:

There will be one theory paper as follows:

The papers will be of 2 ½ hours duration and will have the following pattern

The paper will have two sections:

##### Section A (22 marks)

One line answer, questions of one mark each

(Any eight out of ten)

Two LAQs of 7 marks each (Any two out of three)

##### Section B (18 marks)

SAQs of 3 marks each (Any six out of eight)

Total: Section A + Section B = 40 marks

#### 1.6 Pattern for Practical Examination

Long Case (1) - 20 marks

Short Case (1) - 10 marks

Table Viva (4 tables)- 10 marks

Total 40 marks

(i) One **long case**: The long case will be structured, comprising history taking, clinical examination, investigations, proposed treatment modalities.

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**The table viva will comprise of four tables of 10 marks**

Table 1: Instruments 2 marks

Table 2: X-rays 4 marks

Table 3: Audiometry 2 marks

Table 4: Specimens 2 marks

#### 1.7 Examiners/ Final Examinations

(i) There shall be three examiners including two internal and one external. One of the internal examiners will be Chairman/Convener. All examiners must be a full time teacher with requisite experience as per MCI guidelines.

(ii) All examiners shall be jointly responsible for the examination. In presence of the external examiners, the Chairman and the internal examiner shall make the necessary arrangements for conducting the Final examination. While preparing the Final Results, Formative assessment of the students shall be taken into consideration and the results will be sent to the university in a sealed cover.

#### 8<sup>th</sup> Semester

1. Students are taught about injuries of the pelvis and spine
2. Common congenital anomalies
3. Common arthritic conditions, neoplastic & neurological conditions like poliomyelitis, cerebral palsy etc.
4. Theoretical knowledge regarding chronic & acute infection of bone & joints
5. During their clinical posting they are taught to examine various orthopedic conditions of spine.

#### 9<sup>th</sup> Semester

1. Tutorial & Lectures include revision of all orthopaedic conditions & diseases.
2. In Clinical posting, they are trained to examination various orthopaedic conditions involving bones & joints by taking history, clinical examination & relevant investigations
3. Evaluation done by post-term completion examination.

#### 3.Integration :

Lectures for 6, 7, 8, 9 semesters Revision lectures for 9 semester Tutorials for 9 semester Bed side for clinics for 5, 6, 7,8, 8 semester followed by term end exam.

#### 4.Learning Methods :

Lectures, Tutorials bedside clinics and lecture cum demonstrations.

Distribution of Teaching hours

- Lectures – 50 hours
- Tutorials and revision – 50 hours
- Clinical postings in Orthopaedics

Total clinical Posting of 10 weeks of 180 hours

5<sup>th</sup> Semester - 4 weeks

6<sup>th</sup> Semester - 4 weeks 9<sup>th</sup> Semester - 2 weeks

## Course contents and suggested lecture program of Orthopaedics (Total 100 hours)

This is suggested programme and can vary at institute  
Total 100 hours of teaching has to be done in Orthopaedics including Tutorials  
Details of syllabus in given separately below after distribution as per semester

- 6<sup>th</sup> Semester Lectures 1 to 16
- 7<sup>th</sup> Semester Lectures 17 to 32
- 8<sup>th</sup> Semester Lectures 33 to 48
- 9<sup>th</sup> Semester Revision Lectures 49 to 60
- 8<sup>th</sup> Semester Tutorial 61 to 81
- 9<sup>th</sup> semester Tutorial 82 to 100

5.

6.

7.

### 8. Syllabus :

#### Topic : General Orthopaedics Lectures

1. Introduction and scope of Orthopaedics Traumatology and Orthopaedic Diseases. Idea about Scheme of Examination.
2. Definition and Classification of Fracture and Dislocation Signs, Symptoms and diagnosis of sprain, contusion fracture and dislocation.
3. First aid measures in Poly-trauma patient, spinal cord injury patient and knowledge about various splints.

#### PDD

Principles of Management of sprain Fracture and Dislocation with emphasis on various aspects of closed reduction, immobilization including internal fixation and rehabilitation.

6, 7, 8 Complications of fracture and its management with specific reference to malunion Delayed union, Non union, Myositis Ossificans, Sudeck's dystrophy, Volkman's ischaemia, Avascular Necrosis, Fat embolism, secondary Osteoarthritis and injury to Muscles, Tendon, Nerve and Bpkd vessels

9. Plaster technique, plaster complications and plaster disease

10. Fracture Healing in cortical and cancellous bones and factors affecting fracture healing.

#### Topic: Orthopaedic Traumatology

11. Fracture clavicle, scapula, neck humerus and shaft humours.
12. Supracondylar fracture humerus with complications
13. Fracture Forearm bones, Monteggia and Galeassi fracture dislocations, fracture olecranon head and neck radius.
14. Fractures scaphoid, Metacarpals and phalanges
15. Colles fracture and complications.
16. Dislocation (Acute and Recurrent) of shoulder and elbow
17. Fracture of Vertebrae with complications
18. Fracture of Pelvis with complications

19. Fracture shaft femur and fractures around knee
20. Fracture neck femur and trochanteric fracture.
21. Meniscus and ligaments injury at knee Fracture Tibia- fibula, fracture of tarsals, metatarsals and phalanges.
22. Fracture dislocation around ankle.
23. Dislocation of Hip, knee, ankle, tarsals and small bones in foot

#### Topic : Orthopaedic Diseases

- 25, 26 Congenital skeletal anomalies with emphasis on congenital Talipes Equino Varus (CTEV)
27. Congenital dislocation of hip (CDH), Osteogenesis Imperfecta spina Bifida and Torticollis
28. Osteochondritis - Various types PDDYPU 192 MBBS Syllabus
29. Post Polio Residual Palsy with stress on preventive and rehabilitation aspect.
30. Acute Osteomyelitis.
31. Chronic Osteomyelitis
32. Pyogenic arthritis of Hip, knee
- 33, 34 Osteo-articular Tuberculosis with special reference to tuberculosis with special reference to Tuberculosis of Hip, knee and elbow:
34. Tuberculosis spine and paraplegia
35. Fungal infections and leprosy in Orthopaedics
36. Cerebral palsy, Diagnosis and rehabilitation
37. Rheumatoid arthritis
38. Degenerative arthritis
39. Nerve injuries and principles of management
35. Amputation and Disarticulation - Indications methods and complications.
36. Metabolic bone disease: Rickets, Osteomalacia and Osteoporosis.
- 43, 44 Tumours of bones and its classification, Benign : osteochondroma, Giant cell tumour Unicameral Bone cyst, Aneurysmal cyst, Aneurysmal cyst.
- 45, 46 Malignant – Osteogenic sarcoma, Ewing's tumour, Fibrosarcoma, Chondrosarcoma, Multiple Myeloma, Secondaries from Primary Carcinoma (Metastatic tumours)
37. Back ache
38. Frozen shoulder, Tennis Elbow, Dequervain's disease, Dupuytren's Contracture, Osgood – Schlatter's disease, planter fasciitis.

#### Practical and Lecture cum Demonstration Classes, in MBBS in Orthopaedics

Once a week class for two hours in 8<sup>th</sup> / 9<sup>th</sup> semester  
Topics of Demonstrations

39. Plaster technique and splint applications.
40. Traction, application, orthopaedic appliances demonstration, Demonstration of Physiotherapy equipments.
41. Specimens of sequestrum and Tumours, Madura foot etc.
42. Common instruments and Implants
- 5 to 7 Common X-Ray of traumatology, bony infection, joint infection and tuberculosis, Malunited

Colle's fracture, forearm or Supracondylar humerus fracture.

PDDYPU 193 MBBS Syllabus

8 to 10 Chronic osteomyelitis case, knee effusion case, Non-union case, bony tumour case

**Seminar Topics :**

11. Osteomyelitis
12. Tuberculosis
13. Bone tumours
14. First aid and Acute Trauma Life Saving (ATLS) measures.

**Tutorials Topics**

1. Supracondylar fracture Humerus
2. Colle's fracture

3. Fracture neck femur
4. Spine examination, Pott's spine and paraplegia
5. CTEV
6. Shoulder, Elbow and wrist examination
7. Hip examination
8. Knee, ankle foot examination
9. Nerve examination and nerve injuries

**6. Lectures, Tutorials (Total Number, Topics) In Each Semester :-**

## 6<sup>th</sup> Semester Lectures

Topic	Lesson Plan
1) Basic of fractures Polytrauma	a) Introduction b) Local examination c) Classification d)Diagnosis a) Definition b) management
2) Principles of fracture management. Stages of fracture healding	a) Conservative b) Operative a) Cortical bonehealing b) Cancellous bone healing
3) Complications of fractures	a) Immediate b) Early c) Late
4) Injuries to nerves, tendons muscles ligaments	Injuries to nerves , tendons ,muscles ligaments
5) Plaster technique, plaster complications and plaster diseases	Plaster technique ,plaster complications and plaster disease
6) Fractures of carpels, metacarpels, phalanges	a) classification treatment
7) Fracture of both bones forearm Monteggia & galleazzi fracture Diseases	a) signs symptoms b) treatment
8) Injuries around the elbow	a) Dislocations elbow b) Fracture olecraon a) Classification b) Signs and symptoms a)Treatment b) Fracture radial head a) Classification b) Signs and symptoms c) Treatment
9) Fractures of the distel humerus	a) Supra condylar fractures of the humerus a) Classification b) Signs and symptoms c) Closed treatment d) Operative treatment e) Complications b) Condylar fractures
10) Fractures of clavical and Acromioclavicular joint	a) Closed treatment b) Pperative treatment
11) Fractures of proximal humerus and shaft	a)Classification b) Signs and symptoms c)Treatment
12) Dislocation Shoulder	a)Classification b) Signs and symptoms c)Treatment
13) Fractures of the foot	Fracture talus and calcaneum a) Classification b) Signs and symptoms c) Treatment Metatarsal and phalanx fracture
14) Ankle Fractures	a) Classification b) Signs and symptoms c) Radiological features d) treatment
15) Fractures of the tibial shaft and fibula  Fractures of the proximal tibia	a) classification b) signs and symptoms c) treatment  a) classification b) signs and symptoms c) treatment
16) Fractures of patella	a)classification b)signs and symptoms c)treatment

## 7<sup>th</sup> Semester Lectures

Topic
17) Fracture olecranon a) Classification b) Signs and symptoms c) Treatment
18) Fracture radial head a) Classification b) Signs and symptoms c) treatment
19) Dislocations elbow
20) Supracondylar fractures of the humerus a) Classification b) Signs and symptoms c) Closed treatment d) Operative treatment
21) Fractures of the clavicle a) Closed treatment b) Operative treatment
22) Fractures proximal humerus and shaft a) Classification b) Sign and symptoms c) treatment
23) Dislocation shoulder a) classification b) signs and symptoms c) treatment
24) Injuries of the acromioclavicular joint
25) Fractures talus and calcaneum a) classification b) signs and symptoms c) treatment
26) Metatarsal and phalanx fractures
27) Ankle fractures a) classification b) signs and symptoms c) radiological features d) treatment
28) Fractures of the tibial shaft and fibula a) classification b) signs and treatment c) treatment
29) Fractures of patella a) classification b) signs and symptoms c) treatment
30) Fractures of the proximal tibia a) classification b) signs and symptoms c) treatment
31) Supracondylar fractures of femur a) classification b) signs and treatment c) treatment
32) Fractures of the femoral shaft a) classification b) signs and symptoms c) treatment

## 8<sup>th</sup> Semester Lectures

Topic	Lesson Plan
33) Supracondylar Fractures of the Femur.  Fractures of the femoral shaft.	1) Classification 2) Signs and symptoms 3) Treatment  a) Classification b) Signs and symptoms c) Treatment
34) Inter Trochanteric fracture.  Sub Trochanteric Fracture .  Fracture Neck Femur.	a) Classification b) Signs and symptoms c) Radiological features d) Treatment  a) Classification b) Signs and symptoms c) Radiological features d) Treatment  a) Classification b) Signs and symptoms c) Radiological features d) Treatment
35) Dislocation of hip joint	a) Classification b) Signs and symptoms c) Radiological features d) Treatment
36) Acetabular fracture fracture Pelvis	Acetabular fracture Fracture Pelvis
37) Injuries to the spine Fracture s Pelvis	Injuries to Spine Fractures and complications
38) Introduction of peripheral nerve injury Brachial Plexus injury	Introduction of peripheral Nerve injury Brachial Plexus Injury
39) Peripheral nerve injury cont...	a) Ulnar nerve Median nerve Radial nerve b) Lateral popliteal nerve Sciatic nerve
40) Amputation.	a) Definition Types and level b) Complications Rehabilitation
41) Osteomyelitis	a) Definition Types b) Clinical and radiological features c) treatment
42) Septic arthritis	a) Clinical Features Investigations b Treatment
43) Tuberculosis of joint	a) Hip joint Knee joint Shoulder joint Treatment
44) Tuberculosis of spine	a) Clinical Features b) Investigations c) Treatment
45) Regional examination of foot and and ankle	a) History  b) General examination c) Inspection d) Palpation
46) Regional examination of knee	a) History b) General examination c) Inspection d) Palpation
47) Regional examination of hip	a) History b) General examination c) Inspection d) Palpation
48) Revision	Revision

## 9<sup>th</sup> Semester Revision Lectures

Topic	Lesson Plan
49) Fractures around wrist & hand	1) Fracture of Phalanx & metacarpal 2) Bennett's Fracture Dislocation, Rolan Fracture, Kaplan dislocation, Fracture Scaphoid, dislocation of lunate 3) Colles Fracture, smith fracture, barton Fracture dislocation
50) Complication of fracture dislocation end radius	1) Carpel tunnel Syndrome, 2) Sudeck's osteodyystrophy
51) Fractures of fracture dislocation end radius	3) Galeazzi Fracture Dislocation 4) Monteggia fracture Dislocation 5) Supracondylar fracture Humers 6) Lateral condylar fracture 7) Olecranon Fracture 8) Radial head Fracture 9) Dislocation of elbow
52) Complication of Supracondylar fracture of humerus	1) Cubitus varus 2) Myositis ossification 3) Volkmann's ischaemic contracture 4) Acromio clavicular joint dislocation
53) Fractures around shoulder joint	1) Proximal humerus Dislocation Of Shoulder 2) Fracture Of clavicle 3) Acromio clavicular joint dislocation
54) Fractures around Hip	1) Dislocation of Hip Fracture Neck Femur
55) Fracture Of Spine	1) Fracture of Cervical Spine 2) Fracture of Dorsolumbar spine
56) Case presentation	Tumors of Bones
57) Fractures of femur around knee	1) Fracture femur 2) Fracture of surfaces around knee
58) Fractures of Tibia	Fractures of Tibia
59) Fractures around ankle & foot	Bimalleolar fracture, ankle dislocation Fracture & Dislocation of foot
60) Revision	Revision

## 8<sup>th</sup> Semester Tutorial

Topic
61) First aid and acute trauma Life saving (ATLS) measures (Seminar)
62) Case taking general
63) Tuberculosis (Seminar)
64) Tuberculosis (Seminar)
65) X-ray & disease of Lower limb
66) Bone tumours (Seminar)
67) Examination – implants
68) Case taking general
69) Case taking diseases
70) X-rays & disease of Lower limb
71) X-ray of tumors
72) University examination pattern
73) Osteomyelitis (Seminar)
74) X-rays & disease of upper limb
75) X-rays & Disease of spine and pelvis
76) Examination – specimen
77) Examination – orthosis
78) Case taking trauma
79) X-ray & disease of upper limb
80) X-ray & disease of spine and pelvis
81) Examination - specimen

## 9<sup>th</sup> Semester Tutorial

Topic	Lesson Plan
82) Introduction	Introduction
83) University examination pattern	University Examination Pattern
84) Case taking general	Case taking general
85) Case taking trauma	Case taking Trauma
86) Case taking diseases	Case taking disease
87) X-rays & disease of Lower limb	X-rays & disease of Upper Limb
88) X-rays & disease of Lower limb	X-rays & disease of Lower Limb
89) X-rays & disease of spine and pelvis	X-rays & disease of spine and Pelvis
90) X-rays of tumors	X-rays of tumors
91) Examination specimen	Examination-specimen
92) Examination - implants	Examination-implants
93) Reconstructive surgeries in polio & CP	Reconstructive surgeries in polio & CP
94) Orthotics-Lower limb	Orthotics-Lower limb
95) Orthotics-Upper limb	Orthotics-Upper limb
96) Role of MRI in Orthopaedics	Role of MRI in Orthopaedics
97) Role of C.T. in Orthopaedics	Role of C.T. in Orthopaedics
98) Back pain & its M/M	Back pain & its M/M
99) Vascular disorders (AVN, Perthe's disease)	Vascular disorders (AVN, Perthe's disease)
100) Splints commonly used in Orthopaedics	Splints commonly used in Orthopaedics

### 7. Evaluation methods

7.1 Internal assessment : Total **100 Marks** (Theory **50 Marks** + Practical **50 Marks**)

7.2 Internal Assessment in Theory **50 Marks**

7.3 Internal Assessment in Practical **50 Marks**

### 8. Pattern of final Examination (Surgery Paper –I Section - C)

Long Question                      1 x 8 = 8 Marks    Short notes      4 x 3 = Marks

### 9. Books Recommended

9.1 Text books;

- Maheshwari
- Ebnesar
- Surgery Das

9.2 Reference Books;

- Campbell operative orthopaedics
- Rock wood & green Trauma
- Tureks Orthopaedics
- Macray Clinical examination.

# **SYLLABUS OF DERMATOLOGY AND SEXUALLY TRANSMITTED DISEASES**

## **1. GOAL**

The aim of teaching the undergraduate student in Dermatology, S.T.D. and Leprology is to impart such knowledge and skills that may enable him to diagnose and treat common ailments and to refer rare diseases or complication/unusual manifestations of common diseases, to the specialist.

## **2. OBJECTIVES**

### **a) KNOWLEDGE :**

At the end of the course of Dermato-S.T.D. and Leprology, the student Shall be able to :

1. Demonstrate sound knowledge of common diseases, their clinical manifestations, including emergent situations and of investigative procedures to confirm their diagnosis;
2. Demonstrate comprehensive knowledge of various modes of therapy used in treatment of dermatological diseases;
3. Describe the mode of action of commonly used drugs, their doses, side effects / toxicity, indications and contra-indications and interactions;
4. Describe commonly used modes of management including the medical and surgical procedures available for the treatment of various diseases and to offer a comprehensive plan of management for a given disorder.

### **b) SKILLS**

The student should be able to

1. Interview the patient, elicit relevant and correct information and describe the history in a chronological order.
2. Conduct clinical examination, elicit and interpret physical findings and diagnose common disorders and emergencies;
3. Perform simple, routine investigative and office procedures required for making the bed-side diagnosis, especially the examination of scrapings for fungus, preparation of slit smears and staining for AFB for leprosy patients and for STD cases;
4. Take a skin biopsy for diagnostic purposes;
5. Manage common diseases recognizing the need for referral for specialized care, in case of inappropriateness of therapeutic response;

### **c) INTEGRATION**

The broad goal of effective teaching can be obtained through integration with departments of Medicine, Surgery, Microbiology, Pathology, Pharmacology and Preventive & Social Medicine.

Lesson plan schedule for 6<sup>th</sup> & 8<sup>th</sup> semester Tutorial / lectures.

Sr. No.	Lect. No.	Topic
01	01	<b>Structure &amp; Function of skin</b> : introduction/General features, Epidermis; Its layers and cells, Hair; Morphology of the follicle, Nail : Physiology and structural components, Eccrine sweat glands, Apocrine glands, Sebaceous glands and Functions of skin.
02	02	<b>Bacterial diseases I</b> : Predisposing factors, Type of Pyodermas, Infections of Hair follicles, Erythrasma. Toxin Mediated-Bullous impetigo. SSSS, Toxic shock syndrome.
03	03	<b>Fungal infection</b> : Dermatomycoses: Pityriasis versicolor: Pathogenesis, Clinical types, Lab Diagnosis, Treatment and course.
04	04	<b>Candidiasis</b> : Organisms, Predisposing factors, Clinical features, Lab Diagnosis, Treatment
05	05	<b>Viral diseases I</b> : Herpes Simplex- Herpes Zoster:Definition, Clinical features, plications, Prophylaxis and Treatment
06	06	<b>Viral diseases II</b> : Molluscum: Warts: Organism, Transmission, Clinical features, Complications, Treatment.
07	07	<b>Papulosquamous Disorders</b> : Psoriasis- Epidemiology and Pathogenesis, Clinical features, Variants, Treatment.
08	08	<b>Lichen Planus</b> : Pityriasis Rosea: Erythroderma: Definition, Types, Etiology, Clinical features, Management
09	09	<b>Vesiculo-Bullous Disorders</b> : Types and mechanism of bullae formation. Pemphigus Vulgaris: Definition and Classification, Rx
10	10	<b>Bullous Pemphigoid</b> : Etiopathogenesis, Clinical manifestations, Diagnosis, Treatment, Prognosis.
11	11	<b>Acne Vulgaris</b> : Definition, Causative factors, Pathogenesis, Clinical Features, Acne form eruptions, Treatment.
12	12	<b>Alopecia Areata</b> : Definition, Cause, Course, Clinical Features, Treatment
13	13	<b>Vitiligo</b> : Definition, Cause, Clinical Features, Differential Diagnosis, Treatment.
14	14	<b>STDs I</b> : Anatomy of genital tract: Male and Female. Gonorrhoea: Clinical Features in males and females, Investigations, Treatment, Complications
15	15	<b>STDs II</b> : Syphilis: Definition, Etiology, Acquired syphilis, Congenital syphilis, Diagnosis, Treatment, Prozone Phenomenon, Jarisch Herxheimer reaction.
16	16	<b>Chancroid</b> : LGV: <b>Granuloma inguinale</b> : Definition, Etiology, Clinical Features, Diagnosis, D/D of inguinal bibe, Inguinal syndrome, genital syndrome, Urethral syndrome, Treatment, Course and Prognosis, Syndromic Management of STDs
17	17	<b>H.I.V.:</b> <b>Structure of virus</b> Transmission, Basic Biology, Classification of HIV associated diseases. Natural course, Diagnosis,
18	18	<b>Prevention</b> , Treatment, National AIDS control programme
19	19	<b>Eczemas</b> : Definition, classification, management
20	20	<b>Leprosy 1</b> : Definition, Epidemiology, Pathogenesis, Classification, Clinical features, Reactions in Leprosy, Types of reactions, Management of reactions.
21	21	<b>Leprosy 2</b> : Complications of Leprosy – Deformities in leprosy, Grades of deformities, Preventive measures, Diagnosis, Differential diagnosis, Treatment, Strategies of Leprosy Prevention, N.L.E.P., Modified National Leprosy Eradication Programme.
22	22	<b>Diagnostic Procedures</b> : Slit skin smear KOH mount Punch biopsies
23	23	<b>Collagen Vascular Disorders</b> : Systemic Lupus Erythematosus Systemic Sclerosis
24	24	<b>Photodermatitis</b> : Definition, causes, pathogenesis, clinical presentation, treatment

- Total 6 weeks of clinical posting of which 2 weeks in 3<sup>rd</sup> semester & 4 weeks in 5<sup>th</sup> semester is held.
- Internal assessment Examination: Examination is conducted after end of clinical posting of 20 marks each. The higher mark in any one of the examination is considered for internal assessment.
- Book recommended : A text book of Dermatology, Venerology & Leprosy by – Dr. Udaya Khopkar

# SYLLABUS OF PEDIATRICS

## **Pediatric including Neonatology**

The course includes systematic instructions in growth and development, nutritional needs of a child, immunization schedules, management of common diseases of infancy and childhood, scope of Social Pediatrics and Counseling.

### **1. GOAL**

The broad goal of the teaching of undergraduate students in Pediatrics is to acquire adequate knowledge and appropriate skills for optimally dealing with major health problems of children to ensure their optimal growth and development. To do promotive preventive & curative services.

### **2. OBJECTIVES**

#### **a. Knowledge**

At the end of the course, the student shall be able to:

- Describe the normal growth and development during fetal life, neonatal period, childhood and adolescence and outline deviations thereof;
- Describe the common pediatric disorders and emergencies in terms of epidemiology, etiopathogenesis, clinical manifestations, diagnosis, rational therapy and rehabilitation;
- State age related requirements of calories, nutrients, fluids, drugs, etc. in health and disease;
- Describe preventive strategies for common infectious disorders, malnutrition, genetic and metabolic disorders, poisonings, accidents and child abuse;
- Outline national programs relating to child health including immunization programs.

#### **b. Skills**

At the end of the course, the student shall be able to:

- Take a detailed pediatric history, conduct an appropriate physical examination of children including neonates, make clinical diagnosis, conduct common bedside investigative procedures, interpret common laboratory investigations and plan and institute therapy;
- Take anthropometric measurements, resuscitate newborn infants with bag and mask at birth, prepare oral rehydration solution, perform tuberculin test, administer vaccines available under current national programs, start an intravenous line and provide nasogastric feeding, observe venesection and intravenous infusion, if possible;
- Conduct diagnostic procedures such as lumbar puncture, bone marrow aspiration, pleural tap and ascitic tap; observe liver and kidney biopsy;
- Distinguish between normal newborn babies and those requiring special care and institute early care to all newborn babies including care of preterm and low birth weight babies, provide correct guidance and counseling in breastfeeding;
- Provide ambulatory care to sick children, identify indications for specialized/inpatient care and ensure timely referral of those who require hospitalization.

#### **c. Integration**

- The training in Pediatrics should be done in an integrated manner with other disciplines, such as Anatomy, Physiology, Forensic Medicine, Community Medicine, Obstetrics and Physical Medicine and Rehabilitation, to prepare the student to deliver preventive, promotive, curative and rehabilitative services for care of children both in the community and at hospital as part of a team.

#### **d. Other Areas**

- IMNCI / FBNC / FIMNCI
- Problem based learning
- Orientation to research activity
- Communication skills

### **Guidelines on Pediatric Teaching Schedule**

#### **1. Training schedule**

##### **❖ Clinical training During 4th Semester Learning Objective**

- Cognitive: Normal child, growth, development, feeding, immunization, normal new born.
- Specific Learning Objective (Skills)
  - Take a detailed Pediatric history & draw a pedigree chart
  - Understand normal growth and development.
  - Conduct physical examination of children.
  - Perform anthropometry and interpret growth.
  - Developmental assessment of a child.
  - Medical conduct during patient examination.

##### **❖ Clinical training in 6th Semester**

###### **I. Specific Learning Objectives (Skills)**

- Take a detailed Pediatric history.
- Conduct physical examination of children.
- Perform anthropometry and interpret growth of the child.
- Developmental assessment of a child.
- Distinguish between normal newborn babies and those requiring special care (including low birth weight and preterms).
- Care of newborn at birth and lying in ward.
- Counseling for breastfeeding/infant feeding.

###### **II. Clinical Posting (10.00 am to 1.00 pm)**

Clinical demonstration - newborn (for 1 week)

- Neonatal history taking
- Newborn — nomenclature and assessment of gestational age.
- Care of normal newborn at birth
- Examination of newborn.
- Breastfeeding.
- Identification of sick newborn (common danger signs).
- Low birth weight including temperature regulation and asepsis.
- \* One day of the posting should be for immunization related services
- Pediatrics Case discussion — History taking and examination for 3 weeks in wards.
- Assessment (End of Posting): Emphasis on detailed history, physical examination, interpretation and correlation of abnormal physical findings and normal newborn.

##### **❖ Clinical Training in 8th and 9th Semesters I. Specific Learning Objectives (Skills)**

- Take detailed pediatric history, conduct an appropriate physical and developmental examination of children including neonates, make clinical diagnosis, conduct common bedside procedures (peripheral smear, hemoglobin, urine and stool examination, CSF examination by microscope), interpret common laboratory investigations and plan and institute therapy.

- Recognize emergencies including neonatal resuscitation and CPR and care to be instituted and relevant procedures performed.
- Prepare oral rehydration solution, perform tuberculin test and administer vaccines.
- Observation of diagnostic and therapeutic procedures such as intravenous access, nasogastric feeding, venesection, pleural tap, ascitic tap, bone marrow aspiration, lumbar puncture, liver and kidney biopsy.

## II. Clinical Posting

### III. Assessment (End of Posting).

#### Course Content

##### ➤ Vital statistics

Must know

- Definition and overview of Pediatrics with special reference to age-related disorders. Population structure, pattern of morbidity and mortality in children.
- Maternal, perinatal, neonatal, infant and preschool mortality rates. Definition, causes, present status and measures for attainment of goals.
- Current National programs such as ICDS, RCH, Vitamin A prophylaxis, UIP, Pulse polio, ARI, Diarrhea Control Program, etc. Desirable to know
- Other National programs

##### ➤ Growth and Development

Must know

- Normal growth from conception to maturity.
- Anthropometry — measurement and interpretation of weight, length/height, head circumference, mid-arm circumference. Use of weighing machines, infantometer.
- Interpretation of Growth Charts: Road to Health card and percentile growth curves
- Abnormal growth patterns—failure to thrive, short stature.
- Growth patterns of different organ systems such as lymphoid, brain and sex organs.
- Normal pattern of teeth eruption.
- Principles of normal development.
- Important milestones in infancy and early childhood in the areas of gross motor, fine motor, language and personal-social development. 3-4 milestones in each of the developmental fields, age of normal appearance and the upper age of normal.
- Preventable causes and assessment of developmental retardation.
- Psychological and behavioral problems.
- Desirable to know
- Measurement and interpretation of sitting height, US: LS ratio and arm span.
- Age-independent anthropometric measurement- principles and application.
- Sexual maturity rating.

##### ➤ Nutrition

Must know

- Normal requirements of protein, carbohydrates, fat, minerals and vitamins for newborn, children and pregnant and lactating mother. Common food sources.
- Breastfeeding—physiology of lactation, composition of breast milk, colostrum, initiation and technique of feeding. Exclusive breastfeeding - Definition and benefits. Characteristics and advantages of breast milk. Hazards and demerits of prelacteal feed, top milk and bottle feeding. Feeding of LBW babies.
- Infant feeding/weaning foods, method of weaning.
- Assessment of nutritional status of a child based on history and physical examination.
- Protein energy malnutrition - Definition, classification according to IAP/Wellcome Trust, acute versus chronic malnutrition. Clinical features of marasmus and kwashiorkor. Causes and management of PEM including that of complications. Planning a diet for PEM.
- Vitamins—Recognition of vitamin deficiencies (A, D, K, C, B-Complex). Etiopathogenesis, clinical features, biochemical and radiological findings, differential diagnosis and management of

nutritional rickets and scurvy. Hypervitaminosis A and D.

Desirable to know

- Characteristics of transitional and mature milk (foremilk and hind milk). Prevention and management of lactation failure and feeding problems.
- Definition, causes and management of obesity.

### ➤ **Immunization**

Must know

- National Immunization Programme.
- Principles of Immunization. Vaccine preservation and cold-chain.
- Types, contents, efficacy storage, dose, site, route, contra-indications and adverse reactions of vaccines  
— BCG, DPT, OPV, Measles, MMR, and Typhoid: Rationale and methodology of Pulse Polio Immunization.
- Investigation and reporting of vaccine preventable diseases. AFP (Acute Flaccid Paralysis) surveillance.

Desirable to know

- Special vaccines like Hepatitis B, H. influenzae b, Pneumococcal, Hepatitis A, Chicken pox, Meningococcal, Rabies.

### ➤ **Infectious Diseases**

Must know

- Epidemiology, basic pathology, natural history, symptoms, signs, complications, investigations, differential diagnosis, management and prevention of common bacterial, viral and parasitic infections in the region, with special reference to vaccine- preventable diseases: Tuberculosis, poliomyelitis, diphtheria, whooping cough, tetanus including neonatal tetanus, measles, mumps, rubella, typhoid, viral hepatitis, cholera, chickenpox, giardiasis, amebiasis, intestinal helminthiasis, malaria, dengue fever, AIDS.

Desirable to know

- Kala-azar, leprosy, chlamydia infection

### ➤ **Hematology**

Must know

- Causes of anemia in childhood. Classification based on etiology and morphology.
- Epidemiology, recognition, diagnosis, management and prevention of nutritional anemia-iron deficiency, megaloblastic.
- Clinical approach to a child with anemia with lymphadenopathy and/or hepato-splenomegaly.
- Epidemiology, clinical features, investigations and management of thalassemia.
- Approach to a bleeding child.
- Diagnosis of acute lymphoblastic leukemia and principles of treatment .
- Clinical features and management of hemophilia, purpura.
- Diagnosis and principles of management of lymphomas.
- Desirable to know
- Types, clinical features and management of acute hemolytic anemia.

### ➤ **Respiratory system**

Must know

- Clinical approach to a child with cyanosis, respiratory distress, wheezing. Significance of recession, retraction.
- Etiopathogenesis, clinical features, complications, investigations, differential diagnosis and management of acute upper respiratory infections, pneumonia with emphasis on bronchopneumonia, bronchio-litis, bronchitis. Acute and chronic otitis media.
- Etiopathogenesis, clinical features, diagnosis, classification and management of bronchial asthma. Treatment of acute severe asthma.
- Pulmonary tuberculosis- infection versus disease, difference between primary and post-primary tuberculosis. Etiopatho-genesis, diagnostic criteria in children versus adults. Diagnostic aids - technique and interpretation of Mantoux test and BCG test. Radiological patterns, chemoprophylaxis and treatment.

- Diagnosis and management of foreign body aspiration. Differential diagnosis of stridor.
- Pathogenesis, clinical features and management of pneumothorax, pleural effusion and empyema.

Desirable to know

- Multidrug resistant tuberculosis, (MPR/XDR) bronchi-ectasis, pulmonary cysts

### ➤ **Gastrointestinal tract**

Must know

- Clinical approach to a child with jaundice, vomiting, abdominal pain, bleeding, hepatosplenomegaly.
- Acute diarrhea disease - Etiopathogenesis, clinical differentiation of watery and invasive diarrhea, complications of diarr-heal illness. Assessment of dehydration, treatment at home and in hospital. Fluid and electrolyte management. Oral rehydra- tion, composition of ORS.
- Clinical features and management of acute viral hepatitis, causes and diagnosis of chronic liver disease.
- Common causes of constipation.
- Abdominal tuberculosis

Desirable to know

- Causes, clinical features and management of portal hypertension, Reye's syndrome, Celiac disease.
- Drug induced hepatitis

### ➤ **Central Nervous System**

Must know

- Clinical approach to a child with coma, convulsions, mental retardation.
- Clinical diagnosis, investigations and treatment of acute pyogenic meningitis, encephalitis and tubercular meningitis.
- Seizure disorders - Causes and types of convulsions at different ages. Diagnosis, categorization and management of epi-lepsy (broad outline). Febrile convulsions - definition, types, management.
- Causes, diagnosis and management of cerebral palsy.
- Acute flaccid paralysis - Differentiation between Polio and Gullain-Barre syndrome.
- Microcephaly, hydrocephalus, chorea

Desirable to know

- Infantile tremor syndrome, infantile hemiplegia

### ➤ **Cardiovascular system**

Must know

- Clinical features, diagnosis, investigation, treatment and prevention of acute rheumatic fever. Common forms of rheumatic heart disease in childhood. Differentiation between rheumatic and rheumatoid arthritis.
- Recognition of congenital acyanotic and cyanotic heart disease. Hemodynamics, clinical features and management of VSD, PDA, ASD and Fallot's tetralogy.
- Recognition of congestive cardiac failure in infants and children.
- Hypertension in children-recognition, etiology, referral.

Desirable to know

- Diagnosis and management of bacterial endocarditis, pericardial effusion, myo-carditis.

### ➤ **Genitourinary system**

Must know

- Etiopathogenesis, clinical features, diagnosis, complications and management of acute post-streptococcal glomeruloneph-ritis and nephrotic syndrome.
- Etiology, clinical features, diagnosis and management of urinary tract infection - related problems.
- Etiology, diagnosis and principles of management of acute renal failure.
- Causes and diagnosis of obstructive uropathy in children.
- Diagnosis and principles of management of chronic renal failure.
- Causes and diagnosis of hematuria.

Desirable to know

- Renal and bladder stones
- Hemolytic-uremic syndrome

### ➤ **Endocrinology / Hypothyroidism**

Must know

- Etiology clinical features and diagnosis of diabetes and hypothyroidism, hyper-thyroidism and goiter in children.
- Desirable to know
- Delayed and precocious puberty

### ➤ **Neonatology**

Must know

- Definition - live birth, neonatal period, classification according to weight and gestation, mortality rates.
- Delivery room management including neonatal resuscitation and temperature control
- Etiology, clinical features, principles of management and prevention of birth asphyxia.
- Birth injuries - causes and their recognition.
- Care of the normal newborn in the first week of life. Normal variations and clinical signs in the neonate.
- Breastfeeding - physiology and its clinical management
- Identification of congenital anomalies at birth with special reference to anorectal anomalies, tracheo- esophageal fistula, diaphragmatic hernia, neural tube defects.
- Neonatal jaundice: causes, diagnosis and principles of management.
- Neonatal infection - etiology, diagnosis, principles of management. Superficial infections, sepsis.
- Low birth weight babies - causes of prematurity and small-for-date baby, clinical features and differentiation. Principles of feeding and temperature regulation. Problems of low birth weight babies.
- Identification of sick newborn (i.e., detection of abnormal signs - cyanosis, jaundice, respiratory distress, bleeding, seizures, refusal to feed, abdominal distension, failure to pass meconium and urine).

Desirable to know

- Recognition and management of specific neonatal problems-hypoglycemia, hypo-calcemia, anemia, seizures, necrotizing enterocolitis, hemorrhage.
- Common intra-uterine infections.
- Transportation of a sick neonate.

### ➤ **Pediatrics Emergencies**

Must know

- Status intractable seizure
- Status / Acute severe asthma.
- Shock and anaphylaxis.
- Burns.
- Hypertensive emergencies.
- Gastrointestinal bleeding.
- Comatose child.
- Congestive cardiac failure.
- Acute renal failure.
- Dengue haemorrhagic fever.

### ➤ **Fluid-Electrolyte**

Must know

- Principles of fluid and electrolyte therapy in children
- Pathophysiology of acid-base imbalance and principle of management

### ➤ **Genetics**

Must know

- Principles of inheritance and diagnosis of genetic disorders
- Down's syndrome.

### ➤ **Behavioral Problems**

Must know

- Breath holding spells, nocturnal enuresis, temper tantrums, pica.

➤ **Pediatric Surgical Problems / Congenital anomalies**

Must know

- Diagnosis and timing of surgery of cleft lip/palate, hypospadias, undescended testis, tracheo-esophageal fistula, hydro-cephalus, CTEV, umbilical and inguinal hernia, anorectal malformations, hypertrophic pyloric stenosis

➤ **IMNCI / FIMNCI**

➤ **Adolescent Medicine.**

➤ **Therapeutics**

Must know

- Pediatric doses, drug combinations, drug interactions, age specific choice of antibiotics, etc.

**Assessment**

**Exam: Theory                    40 mark**

**No                                    MCQ**

**SAQ**

# SYLLABUS PULMONARY MEDICINE

## 1. GOALS:

The main aim of teaching the undergraduate students in Tuberculosis is to impart such knowledge and skill that may enable him/her to diagnose and manage common elements affecting the chest with the special emphasis on management and prevention of Tuberculosis, especially National TB control Programme and DOTS.

In view of rapid advances in the field of Pulmonology, the student will be given broad knowledge about modern diagnostic and critical care, therapeutic interventions in the field of Pulmonology.

## 2. OBJECTIVES:

### 2.1 Knowledge:

At the end of the course of Tuberculosis and Respiratory diseases, the student shall be able to:

- 2.1.1. Demonstrate sound knowledge of common Chest diseases, their clinical manifestations, including emergent situations and of investigative procedures to confirm their diagnosis.
- 2.1.2. Demonstrate comprehensive knowledge of various modes of therapy used in treatment of respiratory diseases.
- 2.1.3. Describe the mode of action of commonly used drugs, their doses, side-effects/toxicity, indications and contra-indications and drug-drug interactions.
- 2.1.4. Demonstrate commonly used modes of managements inclusive of National Tuberculosis Control Programme and DOTS.

### 2.2 Skills:

The student shall be able to:

- 2.2.1. Interview the patient, elicit relevant and correct information and describe the history in chronological order.
- 2.2.2. Conduct clinical examination, elicit and interpret clinical findings and diagnose common respiratory disorders and emergencies
- 2.2.3. Perform simple, routine investigative and office procedures required for making the bed side diagnosis, especially sputum collection and examination for etiologic organism especially Acid Fast Bacilli (AFB), interpretation of chest x-ray and respiratory
- 2.2.4. function tests, body plethysmography, bronchoscopy, pleuroscopy etc.
- 2.2.5. Interpret and manage blood gas and PH abnormalities in various respiratory diseases.
- 2.2.6. Manage common diseases, recognizing need for referral for specialized care, in case of less than expected therapeutic response.
- 2.2.7. Assist in the performance of common procedures, like laryngoscopic examination, pleural aspiration, respiratory physiotherapy, laryngeal intubation, Pleural aspiration and Intercostal drainage tube insertion.

### 2.3 Integration:

- 2.3.1. The broad goal of effective teaching can be obtained through integration with departments of Medicine, Intensive care unit, PSM, Microbiology, Radio diagnosis and Pediatrics.
- 2.3.2. Seminars can be arranged on particular topics and multiple departments can be involved to discuss various angles to the topic.

## LECTURE TOPICS: TUBERCULOS

3.1 : History and Epidemiology

3.2 : Pathogenesis and pathology of TB

3.3 : Clinical features and diagnosis of TB

3.4 : Anti-tubercular drugs and Basics of Chemotherapy

3.5: Managing treatment failure

3.6: RNTCP & DOTS – Modular training

3.7: HIV and Tuberculosis

3.8: Prevention of Tuberculosis (Including chemo prophylaxis and BCG)

3.9: Extra-pulmonary TB- Part 1(TB-GIT, TB-GUT)

3.10: Extra-pulmonary TB-Part 2 (TB-CNS, TB-spine) (TB-CNS, TB-spine)

3.11: Extra-pulmonary TB- Part 3 (TB-LN, TB- heart and others)

3.12: MDR and XDR TB

3.13: Role of surgery in TB

#### **4. LECTURE TOPICS : RESPIRATORY SYSTEM**

4.1: Applied anatomy and physiology of Respiratory System

4.2: Pneumonia

4.3: Suppurative lung diseases (Bronchiectasis, Lung abscess)

4.4: Pleural Effusion

4.5 : Bronchial Asthma

4.6 : COPD

4.7 : Occupational lung diseases

4.8: Mediastinal disorders

4.9: Respiratory Emergencies (Haemoptysis, Pneumothorax)

4.10: Lung and pleural malignancies

4.11: Syn-pneumonic effusion and Empyema

4.12: Respiratory Failure

4.13: Intestinal Lung disease

4.14: Pulmonary Hypertension

#### **5. LECTURE CUM DEMONSTRATIONS**

5.1 Lung function testing and ABG analysis

5.2 Asthma and Inhalational devices

5.3 Sputum collection and examination

5.4 Pulmonary Rehabilitation

5.5 Interventional (Tapping, ICD, Bronchoscopy, Pleuroscopy)

5.6 Oxygen Therapy

5.7 RNTCP- Modular training Part I

5.8 RNTCP- Modular training Part II

#### **6. CLINICAL POSTING - 15 days per batch**

6.1 Two days - 10am to 11am: Ward rounds

6.2 One day - 10am to 11am: Hands on training on spirometry, DLCO and Bodybox

6.3 One day – 10 am to 11am: bronchoscopy, Pleuroscopy and RNTCP (in Rotation)

6.4 Other days – Attend OPD from 10 am to 11am

6.5 All days: 11 am-12 noon – Bedside teaching (Bed side clinics for common respiratory diseases) as per following schedule:

No of days	Teaching topics
03	History taking
03	Respiratory system examination
01	X-ray readings
01	Instruments commonly used in various procedures
02	Sundays
01	Examination

## 7. FORMATIVE ASSESSMENT

An Internal assessment exam of 20 marks each is taken at the end of the clinical posting.

Evaluation pattern is as per university examination pattern which is as follows.

Total Marks (20)			
5 marks	5 marks	5 marks	5 marks
X-ray	Instruments	Clinical	General Viva

# SYLLABUS OF RADIODIAGNOSIS AND IMAGING

## 1) GOALS:

The goals of medical education shall be to produce competent medical graduates who shall recognize the health needs of the community, and carry out the professional obligations ethically in conformity with the objectives of the national policy.

## 2) OBJECTIVES :

- (i) It will be an endeavour of the University to produce quality medical graduates.
- (ii) Who shall be aware of the contemporary advances and developments in the discipline concerned.
- (iii) Who shall have acquired a spirit of scientific inquiry, learn basic concepts and oriented to the principles of research methodology and be able to critically analyze relevant published research literature.
- (iv) Who shall have developed skills as a self-directed learner, recognize continuing education needs, select & use appropriate learning resources. By the end of the course they should be well versed with all the modalities in the field of Radiodiagnosis.

## 3) SKILL

At the end of the course the student should be able to :

- (i) use basic protective techniques during various imaging procedures.
- (ii) Interpret common X-Ray, radio-diagnostic techniques in various community situations.
- (iii) Advise appropriate diagnostic procedures in specialized circumstances to appropriate specialist.

## 4 LESSON PLAY

1. 7 <sup>th</sup> MBBS Semester	15 hrs	Theory Lectu
2. 8 <sup>th</sup> MBBS Semester	40 hrs (2 week)	Clinical Posti
3. Post-end exam. Of 20 marks in 8 <sup>th</sup> Semester MBBS		

## DEPARTMENT OF RADIODIAGNOSIS AND IMAGING SYLLABUS/COURSE CONTENT MBBS

1. Introduction with production of X-rays / Radiation hazards & protection
2. The Chest
3. The Heart
4. The Vascular System
5. Bones and Joints
6. Gastro-intestinal system
7. The Biliary tract, Liver and Pancreas
8. The Urinary tract and Adrenals
9. Obstetrics and Gynecology
10. Central Nervous System
11. Soft tissues and Interventional Radiology
12. Recent (Advances & Techniques) in Radiology

# SYLLABUS OF PSYCHIATRY

## 1. GOALS

Undergraduate training in Psychiatry will be imparted to students who are undergoing their MBBS degree course recognized by the Medical Council of India and will have the following aims

- 1.1 To impart knowledge in Psychology, Neural Sciences, Neurology and Psychiatry.
- 1.2 To train the students in the clinical discipline in such a manner that they can investigate, diagnose and deal with neuropsychiatric disorders.

## 2. OBJECTIVES

### 2.1 KNOWLEDGE

At the end of the course the students should have knowledge of

- 2.1.1 Diagnosis and management of neuropsychiatric disorders.
- 2.1.2 Management of psychiatric emergencies.
- 2.1.3 Pharmacotherapy
- 2.1.4 Psychology and psychological therapies
- 2.1.5 Procedures used in Psychiatry like Electroconvulsive therapy, Narcoanalysis
- 2.1.6 The recent advances in the subject.

### 2.2 SKILLS

At the end of the course the candidate should be

- 2.2.1 Able to identify signs and symptoms of common psychiatric illnesses.
- 2.2.2 Able to identify developmental delays including cognitive delays.
- 2.2.3 Aware of common psychopharmacological interventions in Psychiatry.
- 2.2.4 Able to apply basic counseling skills and have comfort with discussing common psychiatric issues.
- 2.2.5 Able to understand the nature and development of normal human behavior.
- 2.2.6 Able to appreciate the interplay between psychological and physical factors in medical presentations.
- 2.2.7 Aware of statutory and educational provisions with regard to psychiatric illnesses and disability.
- 2.2.8 Able to develop helpful and humane attitude towards psychological, psychiatric and behavioural difficulties.
- 2.2.9 And overall, able to deliver mental health services at the primary level.

## 3. INTEGRATION OF TEACHING AND TRAINING SCHEDULE

The entire course duration will be covered in the 6<sup>th</sup> and 7<sup>th</sup> semester during which the following training schedule will be adhered to

- 3.1 Theory lectures.
- 3.2 Ward and OPD work.
- 3.3 Observation of procedures like ECT, Narcoanalysis, use of Bio-feedback machines and EEG recording.
- 3.4 Case presentations / Clinical meetings.
- 3.5 Tutorials / Demonstrations of specimens, EEG, psychological testing, neuroimaging etc.
- 3.6 Self study.

## 4. SYLLABUS

- 4.1 Introduction to Psychology, Biology of behaviour, Brain and behaviour.
- 4.2 Development during infancy, childhood, adolescence and adulthood.
- 4.3 Learning, memory, thinking and language.
- 4.4 Motivation, personality, attitude and perception.
- 4.5 Examination of a psychiatric patient, clinical manifestations of psychiatric disorders, doctor-patient relationship (2 lectures)
- 4.6 Classification of mental and behavioural disorders
- 4.7 Delirium, dementia, amnesic and other cognitive disorders.
- 4.8 Substance abuse.
- 4.9 Schizophrenia. (2 lectures)
- 4.10 Mood disorders. (2 lectures)
- 4.11 Other psychotic disorders.
- 4.12 Non-psychotic disorders, anxiety disorders, somatoform disorders, dissociative disorders, phobias and obsessional disorders. (2 lectures)
- 4.13 Child psychiatry.

- 4.14 Geriatric psychiatry.
- 4.15 Community and forensic psychiatry.
- 4.16 Normal human sexuality, sexual and gender identity disorders.
- 4.17 Eating disorders, disorders of sleep, adjustment disorders and personality disorders.
- 4.18 Stress and concepts of psychosomatic medicine.
- 4.19 Psychiatric emergencies.
- 4.20 Biological therapies.
- 4.21 Psychological therapies and counseling.

## **5. PRACTICALS**

- 5.1 Ward and OPD work.
- 5.2 Case presentations and clinical meetings.
- 5.3 Tutorials and demonstrations.

N.B. Entire course duration will be covered in 20 theory lectures of 1 hour duration, 15 days of clinical postings of 4 hour duration each and 10 sessions of tutorials / demonstrations of 2 hours duration.

## **6. EVALUATION**

At the end of the course, the students will be evaluated by an internal assessment out of total marks of 20. The internal assessment will consist of orals and practicals only. Assessment of theoretical knowledge will be done during the Final MBBS examination along with Medicine and allied specialties paper.

# SYLLABUS OF ANAESTHESIOLOGY

## 1. Introduction :

Anaesthesiology by virtue of its specialized and highly skill-oriented foundation is a post-graduate level subject. However, that goes without saying that even at UG level, understanding the basics and orientation of principles and practices of this relatively new but very rapidly evolving specialty is improving. Especially with the wider applications and needs of the services and skills of an anaesthesiologist especially in the areas of operating theatre, critical care, pain management, casualty and emergency medicine, various radiological and radio therapeutic procedure, psychiatric modalities, in addition on artificial ventilation and respiratory therapy units, it is absolutely essential that foundations of subject must be inculcated in the minds of budding doctors, viz. undergraduates. With this few ground realities in mind the syllabus has been designed to fulfill the needs of time without overtaxing the students.

## 2. Goals:

- 2.1 To introduce the undergraduate students to the principles and practices of various modalities of anaesthesia.
- 2.2 Orient the students to various additional applications of skill and knowledge of Anaesthesiology in areas of critical care, resuscitation, Pain and its management, execution of life saving; procedures and understanding of all the related equipment.

## 3. Departmental objectives:

### 3.1 Knowledge and skill:

At the end of training, the student will have acquired basic knowledge and understanding about various aspects involved in the patient care in peri-operative period, viz.

- 3.1.1 Preoperative assessment, preparation and preoperative medication.
- 3.1.2 Various methodologies of Anaesthesia and the drugs involved
- 3.1.3 Airway management and related equipment.
- 3.1.4 Principles of oxygen therapy and related equipment.
- 3.1.5 Monitoring of the patient and related equipment.
- 3.1.6 Postoperative patient care and management of pain.
- 3.1.7 Venous access and related equipment.
- 3.1.8 Cardio- pulmonary cerebral resuscitation and algorithms involved.

### 3.2 Integration:

The special nature and limited duration of Anaesthesia makes it rather unique and not much of integration is feasible at undergraduate level.

## 4. Learning Methodologies:

Lectures, tutorials and clinics in the operating theatre for on-line, hands on training.

The Clinics:

As the main basis of Anesthesiology is good understanding of Pharmacology with its clinical application, it is mandatory that the clinics must be conducted after students have cleared their pharmacology examination. Viz. after 5<sup>th</sup> Semester. In addition, after they have had understanding of various surgical specialties, they can understand the importance of Anesthetic management. So, it is proposed that, the clinical posting lasting up to 2 weeks 40-42hrs. (Three hour/ day) will be carried out in the 8<sup>th</sup> Semester. During this period, there will be practical and skill oriented training of the students in the operating room, while actual conduct of various Anesthetic procedures, and intraoperative management is going on. Last, one hour of each days posting will be devoted to tutorial, which will be conducted in the undergraduate class room of the operation theater complex. This will encompass orientation to various equipment's, devices and other paraphernalia.

The Lectures:-

There will be 10 lectures, of 1 hour each encompassing following topics:-

<b>Sr. No.</b>	<b>Topics for theory</b>
1	Introduction, Orientation, Scope and modalities of Anaesthesia.
2	Pre-operative assessment, preparation of patient and pre- anaesthetic medication.
3	Balanced General Anaesthesia.
4	Overview of intravenous and inhalational anaesthetic agents.
5	Airway and respiratory system. 1. Anatomy and various methods of airway management and oxygen therapy.
6	Neuro-muscular Junction and neuro-muscular blocking drugs.
7	Pain and its management (I):- Anatomy, Physiology, Pharmacology
8	Pain and its management(II):-Modalities and clinical aspects of pain management and concept of pain clinics.
9	Local analgesia and drugs Peripheral nerve blocks
10	Local analgesia:- Neuraxialtechniques:- Extra-dural and subarachanoid blocks, various field blocks, their complication and management.
11	Parenteral infusions, blood and its products, plasma volume expanders, IV fluids.
12	2 hours will be devoted to the actual execution of the algorithms of conducting Cardio-Pulmonary cerebral Resuscitation.
13	Introduction to principles of Critical care, understanding drugs used for resuscitation.
14	Resuscitation on a mannequin(Dummy) including introducing all the drugs and equipment involved in the conduct- clinic
15	Mechanical ventilation- basic principles and modes of ventilation
16	Trauma- pre hospital management and transportation of trauma patients to hospital.

# MENTORSHIP PROGRAMME

2019-20

Mentors for Third Year MBBS (6<sup>th</sup>&7<sup>th</sup> Semester)

Sr. No	Name of the Faculty	Department	Roll No	Mobile No.
1	Dr. Sudhir L. Jadhav	PSM	001 to 009	9890677638
2	Dr . Hetal K. Rathod	PSM	0010 to 18	9960511615
3	Dr. Devidas T. Khedkar	PSM	019 to 027	9422769916
4	Dr. Kajal Srivastava	PSM	028 to 036	8407966576
5	Dr. Swati Ghonge	PSM	037 to 045	7447781981
6	Dr. Atul Desale	PSM	046 to 054	8446146689
7	Dr. Sadhana V. Lakhute	PSM	055 to 063	9890648700
8	Dr. Chaitali A. Borgaonkar	PSM	064 to 072	7045102667
9	Dr. Bhargav V. Gaikwad	PSM	073 to 081	9423972727
10	Dr. James Thomas	ENT	082 to 090	9422015892
11	Dr. Girija Amit Ghate	ENT	091 to 99	9850973680
12	Dr. Vinod Shinde	ENT	0100 to 0108	9323954933
13	Dr. N. S. Karodpati	ENT	0109 to 0117	9823572842
14	Dr. Rashmi Prashant	ENT	0118 to 0126	8888426141
15	Dr. Paresh Chavan	ENT	0127 to 0135	8983005003
16	Dr. Mayur Ingale	ENT	0136 to 0144	9975788222
17	Dr. Aditi Moruskar	ENT	0145 to 0153	9421561094
18	Dr. O. K. Radhakrishnan	Ophthalmology	0154 to 0162	9860505535
19	Dr. Abhay Lune	Ophthalmology	0163 to 0171	9860330180
20	Dr. Shashi Prabha Prasad	Ophthalmology	0172 to 0180	9765608516
21	Dr. Rupali Maheshgauri	Ophthalmology	0181 to 0189	9561084723
22	Dr. Paranjpe Radhika	Ophthalmology	0190 to 0198	9881035078
23	Dr. Rakesh Goud	Ophthalmology	0199 to 0207	7038233578
24	Dr. Megha Kotecha	Ophthalmology	0208 to 0218	9819926115
25	Dr. Prachi Bakare	Ophthalmology	0219 to 0227	9890976701
26	Dr. Iqra Mustaq	Ophthalmology	0228 to 0237	8408087666
27	Dr. Deepaswi Bhavsar	Ophthalmology	0238 to 0243	9503445231
28	Dr. Akshata Charlotte	Ophthalmology	0244 to 0250	8310261415

## MENTORSHIP PROGRAMME

Mentors for Third Year MBBS (8<sup>th</sup>&9<sup>th</sup> Semester) 2019-20

Sr. No	Name of the Faculty	Department	Roll No	Mobile No.
1	Dr. V. S. Gokhale	(Gen. Medicine)	01 TO 03	9823036952
2	Dr. Anu N. Gaikwad	(Gen. Medicine)	04 to 06	9823162820
3	Dr. P. K. Satpathy	(Gen. Medicine)	07 to 09	9890307531
4	Dr. Govind S. Shiddapur	(Gen. Medicine)	010 to 012	9823019794
5	Dr. Vikram B. Vikhe	(Gen. Medicine)	013 to 015	9822148896
6	Dr. Arvind Bamanikar	(Gen. Medicine)	016 to 018	9823302052
7	Dr. Pradnya Diggikar	(Gen. Medicine)	019 to 021	9420169778
8	Dr. Varsha R. Bhatt	(Gen. Medicine)	022 to 024	9405580574
9	Dr. Madhulika Mahashabde	(Gen. Medicine)	025 to 027	9850015831
10	Dr. Bhumika Vaishnav	(Gen. Medicine)	028 to 030	8600039059
11	Dr. Abhijit A. Nikam	(Gen. Medicine)	031 to 033	9822418322
12	Dr. Amit A. Palange	(Gen. Medicine)	034 to 036	9850088135
13	Dr. J. S. Dhadwad	(Gen. Medicine)	037 to 039	9850444023
14	Dr. Prakash S. Shende	(Gen. Medicine)	040 to 042	9822246881
15	Dr. Sangram Mangudkar	(Gen. Medicine)	043 to 045	9822243464
16	Dr. Manasi Harale	(Gen. Medicine)	046 to 048	9850810235
17	Dr. D. S. Nirhale	(Gen. Surgery)	049 to 051	9822401608
18	Dr. S. V. Panchabhai	(Gen. Surgery)	052 to 054	9921517297
19	Dr. Bhushan Shah	(Gen. Surgery)	055 to 057	9822976716
20	Dr. Mahendra Bendre	(Gen. Surgery)	058 to 060	9967578182
21	Dr. Iqbal Mohammad Ali	(Gen. Surgery)	061 to 063	9823788868
22	Dr. Virendra S. Athavale	(Gen. Surgery) (Gen. Surgery)	064 to 066	9975425931
23	Dr. Prabhat B. Nichkaode	(Gen. Surgery)	067 to 069	9822465970
24	Dr. Pravin Shingade	(Gen. Surgery)	070 to 072	9029214109
25	Dr. Trupti Tonape	(Gen. Surgery)	073 to 075	9822533630
26	Dr. Anuradha Dnyanmote	(Gen. Surgery)	076 to 078	9822271643
27	Dr. Reina Khadilkar	(Gen. Surgery)	079 to 081	9822337867
28	Dr. Priti Shah	(Gen. Surgery)	082 to 084	9823051113
29	Dr. Shivmurti Khandalkar	(Gen. Surgery)	085 to 087	9822636996
30	Dr. Vinayak Kshirsagar	(Gen. Surgery)	088 to 090	9850930621
31	Dr. Sudhir R. Jayakar	(Gen. Surgery)	091 to 093	9422785667
32	Dr. Pankaj Kshirsagar	(Gen. Surgery)	094 to 096	9923639333
33	Dr. Amit Kale	(Orthopedics)	097 to 099	9765494684
34	Dr. Ajit Swamy	(Orthopedics)	0100 to 0102	9766511189
35	Dr. D.S. Bhamare	(Orthopedics)	0103 to 0105	7507899338
36	Dr. Rahul Salunkhe	(Orthopedics)	0106 to 0108	9422592435
37	Dr. Mukesh Phalak	(Orthopedics)	0109 to 0111	9960584442
38	Dr. Abhijeet Shroff	(Orthopedics)	0112 to 0114	9689881040
39	Dr. Vinod Nair	(Orthopedics)	0115 to 0117	8805460442
40	Dr. Vishal S. Patil	(Orthopedics)	0118 to 0120	9405431728
41	Dr. Ashwin Deshmukh	(Orthopedics)	0121 to 0123	9823598114

42	Dr. Vidya A. Gaikwad	(OBGY)	0124 to 0126	9422008826
43	Dr. Minal Patvekar	(OBGY)	0127 to 0129	9822335880
44	Dr. Shankar B. Burute	(OBGY)	0130 to 132	9822070971
45	Dr. Himadri Bal	(OBGY)	0133 to 0135	9923065788
46	Dr. Chandrakant S. Madkar	(OBGY)	0136 to 0138	9423160427
47	Dr. Sukesh K. Kathpalia	(OBGY)	0139 to 0141	9599600375
48	Dr. Samar Rudra	(OBGY)	0142 to 0144	9896927925
49	Dr. Yogesh Thawal	(OBGY)	0145 to 0147	9226243242
50	Dr. Pankaj Salvi	(OBGY)	0148 to 0150	9422305032
51	Dr. Madhukar J. Shinde	(OBGY)	0151 to 0153	9607760274
52	Dr. Shilpa P. Kshirsagar	(OBGY)	0154 to 0156	9689904101
53	Dr. Sanjay Chavan	(Paediatrics)	0157 to 0159	9890033252
54	Dr. Vineeta Pande	(Paediatrics)	0160 to 0162	9423582757
55	Dr. Shailaja V. Mane	(Paediatrics)	0163 to 0165	9822595553
56	Dr. Renuka S. Jadhav	(Paediatrics)	0166 to 0168	9890041082
57	Dr. Pramod Jog	(Paediatrics)	0169 to 0171	9422309677
58	Dr. Sudhir Malwade	(Paediatrics)	0172 to 0174	8446941438
59	Dr. Manoj Patil	(Paediatrics)	0175 to 0177	9922417017
60	Dr. Shradha Salunkhe	(Paediatrics)	0178 to 0180	9420633884
61	Dr. Shiji K. S.	(Paediatrics)	0181 to 0183	9823237138
62	Dr. Tushar Sahasrabudhe	(Res. Medicine)	0184 to 0186	9823081261
63	Dr. Nitin Gaikwad	(Res. Medicine)	0187 to 0189	9922501568
64	Dr. Vinay Dharmadhikari	(Res. Medicine)	0190 to 0192	9822037123
65	Dr. Sachinkumar Dole	(Res. Medicine)	0193 to 0195	9637104972
66	Dr. V. M. Kulkarni	(Radio-Diagnosis)	0196 to 0198	9422081956
67	Dr. Sanjay. M. Khaladkar	(Radio-Diagnosis)	0199 to 0201	9850154497
68	Dr. Amit Kharat	(Radio-Diagnosis)	0202 to 0204	9890046766
69	Dr. Pratiksha Yadav	(Radio-Diagnosis)	0205 to 0207	7709085551
70	Dr. Anuradha Kelkar	(Radio-Diagnosis)	0208 to 0210	9822025656
71	Dr. Varsha Rangankar	(Radio-Diagnosis)	0211 to 0213	9823057239
72	Dr. Tushar Kalekar	(Radio-Diagnosis)	0214 to 0216	9623422992
73	Dr. Parag V. Patil	(Radio-Diagnosis)	0217 to 0219	9967781189
74	Dr. (Col) V. R. R. Chari	(Anaesthesiology)	0220 to 0222	9665932588
75	Dr. Mary Samuel	(Anaesthesiology)	0223 to 0225	9850154439
76	Dr. Suryawanshi C. M.	(Anaesthesiology)	0226 to 0228	9922888201
77	Dr. Aparna Girwalkar(Bagale)	(Anaesthesiology)	0229 to 0231	9422710943
78	Dr. Vipul K. Sharma	(Anaesthesiology)	0232 to 0234	7251888789
79	Dr. Bhavini B Shah	(Anaesthesiology)	0235 to 0237	9850829994
80	Dr. Sandeep Baheti	(Anaesthesiology)	0238 to 0240	9822014401
81	Dr. Sheetal S. Jayakar	(Anaesthesiology)	0241 to 0243	9767414554
82	Dr. Harsha H. Narkhede	(Anaesthesiology)	0244 to 0246	9820120440
83	Dr. Milind Ashok Patveka	(Skin VD)	0247 to 0249	8888308986
84	Dr. Hemant V. Talanikar	(Skin VD)	0250 to 0255	9422087726

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## Undertaking for observing Code of Conduct

I have read, clarified and understood the regulations mentioned in the prospectus and information available on the website of [www.dpu.edu.in](http://www.dpu.edu.in) I fully subscribe to the concerns, vision & mission of, and the processes at the institute. I shall abide by the rules & regulations of the institute and the Vidyapeeth.

I know that I have to take part in all other non-academic activities irrespective of my religious faith and beliefs. Having understood the importance of these, I promise that I shall do it to the best of my ability.

In solemn assurance and acceptance after clarification and explanation of the above, I hereby affix my signature jointly along with my parent/guardian understanding that this is my own code of conduct to have a fruitful and memorable association with the institute and the Dr. D. Y. Patil Vidyapeeth, Pune. I am aware of the consequences if I violate any of the rules of the institute. I will accept the decision of the institute in case of any indiscipline on my part including termination from institute.

---

Parent's /Guardian's Signature: \_\_\_\_\_ Candidate's Signature: \_\_\_\_\_

Parent's/ Guardian's Name: \_\_\_\_\_ Candidate's Name: \_\_\_\_\_

Relation: \_\_\_\_\_

Date: \_\_\_\_\_

Place: \_\_\_\_\_



## Robotic Surgery



# DPU

## Dr. D. Y. Patil Vidyapeeth, Pune

(Deemed to be University)

(Re-accredited by NAAC with a CGPA of 3.62 on a four-point scale at A Grade)  
20<sup>th</sup> rank in Medical Category and 46<sup>th</sup> rank in University Category in India (NIRF-2019)  
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(An ISO 9001:2015 Certified University)

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