ALL INDIA INSTITUTE OF MEDICAL SCIENCES GUWAHATI

Department of General Medicine

Curriculum for MD Medicine

Goal:

The main goal of the training program is to produce physicians with the necessary knowledge, skill and attitude to diagnose and manage in a cost-effective manner, a wide range of clinical problems in General Medicine as seen in the community or in secondary/tertiary care setting. Possession of clinical skills required for making a diagnosis is given utmost importance. As a result of training in General Medicine, the physician should become competent in the use of the various diagnostic tests, and interpret their results intelligently, keeping in mind their cost effectiveness. Special emphasis is placed on the relatively common and treatable disorders. In order to be considered a competent internist, a resident in medicine must possess humanistic qualities, attitudes and behaviour necessary for the development of appropriate patient-doctor relationship. The resident should come out of the institute as a complete, knowledgeable, able, kind and caring Internal Medicine Specialist of highest order.

Program Outcomes

Specific Aims and Objectives of the Junior Resident Training Program in General Medicine

As a result of the training under this program, at the end of 3 years of postgraduate training, a resident must acquire the following knowledge, skills and competencies:

Cognitive:

- A thorough knowledge of epidemiology, natural history, pathological abnormalities, clinical manifestations, and principles of management of a large variety of systemic medical disorders of adults and elderly, affecting any organ system.
- Thorough knowledge, skill and competence to diagnose correctly and manage rationally a wide range of clinical problems of General Medicine, using traditional methods of recording an accurate and thorough history and performing a detailed physical examination.

- Knowledge to administer intensive care to seriously ill patients in collaboration with specialists from other areas.
- Knowledge to advice on the preventive, restorative and rehabilitative aspects of medicine, including those in the elderly.
- A thorough knowledge of the practical aspects and methods of prevention and protection against nosocomial infections from (i) patient-to-patient (ii) patient-to-health care worker HCW) (iii) HCW-to-patient; in any health care setting.
- Knowledge to understand research methodology in clinical medicine and to undertake
 a critical appraisal of the literature published in various medical journals and be able
 to apply the same in the setting in which the resident is working.

Psychomotor:

- Skill and competence to choose and interpret correctly the results of the various routine investigations necessary for proper management of the patient. While ordering these investigations, a resident must be able to understand the sensitivity, specificity and predictive value of the proposed investigation, as well as its costeffectiveness in the management of the patient.
- Skills and competence to perform commonly used diagnostic procedures namely lumbar puncture, Pleural/ Pericardial tapping, Ascitic tapping, Aspiration of synovial fluid from major joints, Bone marrow aspiration, Biopsy from liver and kidney and obtain an electrocardiogram tracing and interpreting the findings obtained.
- Should have acquired adequate skills in cardiopulmonary resuscitation, endotracheal
 intubation, setting up a central venous line, using a defibrillator, and providing basic
 ventilator support. The resident in medicine must become familiar with the basic
 monitoring equipments in the critical-care area of the medicine ward, and should be
 able to interpret the information provided by the correctly.
- Skill and competence to function effectively in varied clinical settings, namely, ambulatory care, out-patient clinic, in-patient wards, or emergency/critical care.
- Skill and competence to administer intensive care to seriously ill patients in collaboration with specialists from other areas.

- Skill and competence to take sound decisions regarding hospitalization, or timely referral to other consultants of various medical sub-specialties recognizing his limitations in knowledge and skills in these areas.
- Proficiency in selecting correct drug combinations for different clinical problems with thorough knowledge of their pharmacological effects, side-effects, interactions with the other drugs, alteration of their metabolism in different clinical situations, including that in the elderly.

Affective:

- Skills and competence to conduct himself/herself ethically during the process of
 collecting the relevant data base and be able to establish a healthy doctor-patient
 relationship by maintaining a sympathetic attitude and upholding the dignity of the
 patient. He/she must have learnt the skills of promoting verbal communication with
 the patient and winning his/her confidence.
- Skill and competence to provide consultation to other medical and surgical specialties and sub-specialties, whenever needed and to have good interpersonal relationships.
- Skill and competence to work cohesively in a team of medical and paramedical personnel and maintain discipline and healthy interaction with the colleagues.
- Skill and competence to communicate clearly and consciously, and teach other junior residents, medical students, nurses and other paramedical staff, the theory as well as the practical clinical skills required for the practice of medicine.

Syllabus

By the end of the course, the student should have acquired knowledge (cognitive domain), professionalism (affective domain) and skills (psychomotor domain) as specified in the syllabus.

Theory Course contents

Basic Sciences

- Basics of human anatomy as relevant to clinical practice
 - Surface anatomy of various viscera
 - Neuro-anatomy

- Important structures/organs location in different anatomical locations in the body
- Common congenital anomalies
- Basic functioning of various organ-system, control of vital functions, pathophysiological alteration in diseased states, interpretation of symptoms and signs in relation to patho-physiology.
- Common pathological changes in various organs associated with diseases and their correlation with clinical signs; understanding various pathogenic processes and possible therapeutic interventions possible at various levels to reverse or arrest the progress of disease
- Knowledge about various microorganisms, their special characteristics important for their pathogenetic potential or of diagnostic help; important organisms associated with tropical diseases, their growth pattern/life-cycles, levels of therapeutic interventions possible in preventing and/or eradicating the organisms.
- Knowledge about pharmacokinetics and pharmaco-dynamics of the drugs used for the management of common problems in a normal person and in patients with diseases kidneys/liver etc. which may need alteration in metabolism/excretion of the drugs; rational use of available drugs.
- Knowledge about various poisons with specific reference to different geographical and clinical settings, diagnosis and management.
- Research Methodology and Studies, epidemiology and basic Biostatistics.
- National Health Programmes
- Biochemical basis of various diseases including fluid and electrolyte disorders; Acid base disorders etc.
- Recent advances in relevant basic science subjects.

Systemic Medicine

Preventive and environmental issues, including principles of preventive health care, immunization and occupational, environmental medicine and bio-terrorism.

Aging and Geriatric Medicine:

Biology

- Epidemiology
- Neuro-psychiatric aspects of aging

Clinical Pharmacology:

- Principles of drug therapy
- Biology of addiction
- Complementary and alternative medicine

Genetics:

- Overview of the paradigm of genetic contribution to health and disease
- Principles of Human Genetics
- Single gene and chromosomal disorders
- Gene therapy

Immunology:

- Introduction to Immune system
- Innate and adaptive immune systems
- Mechanisms of immune mediated cell injury
- Transplantation immunology

Cardio-vascular diseases:

- Approach to the patient with possible cardio-vascular diseases
- Heart failure
- Arrhythmias
- Hypertension
- Coronary artery disease
- Valvular heart disease
- Infective endocarditis
- Diseases of the myocardium and pericardium
- Diseases of the aorta and peripheral vascular system

Respiratory system:

- Approach to the patient with respiratory disease
- Disorders of ventilation
- Bronchial asthma
- Chronic Obstructive Pulmonary Disease (COPD)
- Pneumonia
- Pulmonary embolism
- Bronchiectasis
- Cystic fibrosis
- Occupational and environmental lung disease
- Obstructive sleep apnoea syndrome and diseases of the chest wall, pleura and mediastinum

Nephrology:

- Approach to the patient with renal diseases
- Acid-base disorders
- Acute kidney injury
- Chronic kidney disease
- Glomerular disease
- Tubulo-interstitial diseases
- Nephrolithiasis
- Diabetes and the kidney
- Obstructive uropathy and treatment of irreversible renal failure

Gastro-intestinal diseases:

- Approach to the patient with gastrointestinal diseases
- Gastrointestinal endoscopy
- Motility disorders
- Diseases of the oesophagus
- Acid peptic disease
- Functional gastrointestinal disorders

- Irritable bowel syndrome
- Pancreatitis and diseases of the rectum and anus
- Diseases of the liver and gall bladder:
- Approach to the patient with liver disease
- Acute viral hepatitis
- Chronic hepatitis
- Alcoholic and non-alcoholic steatohepatitis
- Cirrhosis and its sequelae
- Hepatic failure and liver transplantation
- Diseases of the gall bladder and bile ducts

Haematologic diseases:

- Haematopoiesis
- Anaemias
- Vitamin B12 deficiency anemia
- Aplastic anemia/Pancytopenia
- Myelo-proliferative disorders
- Disorders of haemostasis and haemopoietic stem cell transplantation
- Coagulation disorders

Oncology:

- Epidemiology
- Biology and genetics of cancer
- Paraneoplastic syndromes and endocrine manifestations of tumours
- Cancers of various organ systems and cancer chemotherapy

Metabolic diseases

- Inborn errors of metabolism and disorders of metabolism.
- Sarcoidosis
- Amyloidosis
- Hemochromatosis
- Porphyria

- Wilson disease
- Hyperuricemia and related disorder

Nutritional diseases

- Nutritional assessment
- Enteral and parenteral nutrition
- Obesity and eating disorders.

Endocrine

- Approach to a patient with Endocrine disorders
- Diseases of various endocrine organs including diabetes mellitus.
- Disorders of the Thyroid gland
- Disorders of Adrenal Cortex
- Disorders of Pituitary Gland
- Menopause and postmenopausal hormone therapy

Rheumatic diseases:

- Approach to the patient with rheumatic diseases
- Rheumatoid arthritis
- Spondyloarthropathies
- Systemic lupus erythematosus (SLE)
- Systemic sclerosis
- Osteoporosis
- Osteoarthritis
- Vasculitis: Classification, approach and management
- Fibromyalgia
- Polymyalgia rheumatica/Giant cell arteritis

Infectious diseases:

- Basic consideration in Infectious Diseases
- Clinical syndromes
- Community acquired clinical syndromes

- Nosocomial infections
- Bacterial diseases –
- General consideration
- diseases caused by gram + positive Bacteria
- diseases caused by gram negative bacteria
- Miscellaneous bacterial infections
- Mycobacterial diseases
- Spirochaetal diseases
- Rickettsia
- Mycoplasma and Chlamydia
- Viral diseases -DNA viruses, DNA and RNA respiratory viruses , RNA viruses
- Fungal infections, protozoal and helminthic infections.
- HIV and AIDS
- Prion Diseases

Neurology

- Approach to the patient with neurologic disease,
- Headache
- Seizure and epilepsy
- Disorders of sleep
- Cerebrovascular diseases
- Parkinson's disease and other movement disorders
- Alzheimer's disease and other Dementias
- Amyotrophic lateral sclerosis and other Motor neuron diseases
- Meningitis and encephalitis
- Multiple sclerosis and other demyelinating diseases
- Peripheral neuropathy
- Muscle disease and diseases of neuromuscular transmission
- Diseases of the Spinal Cord
- Autonomic disorders and their management.

Psychiatry

- Approach to Psychiatric Diagnosis and Classification
- Etiology and Clinical Profile of Dementias
- Organic Delusional, Mood and Personality Disorders
- Schizophrenia
- Brief and Reactive Psychosis
- Depressive Disorders and their Clinical Relevance
- Anxiety Disorders
- Mood Disorders
- Personality Disorders
- Substance Abuse

Dermatology:

- Structure and functions of skin
- Infections of skin
- Papulo-squamous and inflammatory skin rashes
- Photo-dermatology
- Erythroderma
- Cutaneous manifestations of systematic diseases
- Bullous diseases
- Drug induced rashes
- Disorders of hair and nails
- Principles of topical therapy

Practical

Case work up in ward

 History: Detailed history taking in proper format including relevant positive and negative history, past history and treatment, personal and psychosocial history.
 Student should be able to analyze the history, list the differential diagnosis and arrive at logical conclusions.

- Examination: Examination should include a systematic general examination with correct methodology and systemic examination in details in proper sequence. Should be able to demonstrate and interpret all the clinical signs. Should be able to correlate the history and findings on clinical examination and arrive at the provisional diagnosis.
- Investigations: Should be able to plan investigations to confirm the diagnosis, decide
 disease severity and appropriate investigations for comorbidities. Should know the
 method of sampling and all the prerequisites for better results.
- Bedside procedures: Should be able to do bedside procedures like venous blood sampling, preparing peripheral smear, collection of urine for culture, blood sugar by glucostrips, insertion of Central lines relevant for management of the case.
- Investigative skills: Lumbar puncture, bone marrow aspiration and biopsy, pleural, peritoneal, pericardial tap, ascitic fluid therapeutic and diagnostic tapping, biopsy of liver and kidney, urethral catheterization, suprapubic aspiration.
- Monitoring skills: Temperature recording, capillary blood sampling, arterial blood sampling, basic life support skills, advanced life support skills and ventilator settings and monitoring.
- Therapeutic skills: Nasogastric feeding, endotracheal intubation, cardiopulmonary resuscitation, administration of oxygen, venepuncture and establishment of vascular access, administration of fluids, blood, blood components, parenteral nutrition, common dressings, abscess drainage and basic principles of rehabilitation. Discharging the patients at appropriate times with highest satisfaction levels and writing discharge notes and filling up discharge cards.
- Cardiopulmonary resuscitation and End of life decisions: Should be able to give CPR
 and take decisions about withdrawing life support. Should also learn to motivate
 relatives for organ donation whenever possible.
- Communication skills: Should be able to counsel and communicate with the patient and relatives. Should be able to take Informed consent for procedures and interventions. Should be able to explain high risk and poor prognosis to the patient.
- Handling Death and post death procedures: Student should be able to declare death
 of the patient to the relatives. Should be able to certify death giving proper diagnosis.
 Should be able to write a proper death summary. Should understand the medicolegal

implications and procedures. Should be able to refer for post mortem examination and autopsy, as and when indicated. Should be able to make notifications related to death to appropriate authorities.

On similar guidelines a postgraduate student will gain practical experience and knowledge related to & perform

- Case work up in OPD
- Case work up of rare medical disorders
- Case work up and management of critically ill patient in MICU
- Handling patients as a first point of contact in Casualty
- Emergency management of patients in Casualty
- Management and monitoring of patients in speciality clinics
- Basic work up of cases in subspecialities like Cardiology, Neurology, Gastroenterology,
 Nephrology

Interpretation of Investigations

- Haematological CBC, Peripheral Smear, Blood investigations for systemic diseases
- Biochemical Blood sugar, HbA1c, KFT, LFT, Lipid Profile, Thyroid Profile, Special tests for endocrinological functions
- Serological Sr Antigens and Antibodies for infections like Malaria, Dengue, Scrub
 Typhus, Hepatitis, Covid 19, Rheumatological investigations like RA factor, Sr ANA,
 Special serological assays
- Microbiological Culture and susceptibility, CBNAAT
- Radiological
 - Routine X-rays: X-ray chest, Xray KUB, Xray Abdomen, Xray bones and joints, X ray – skull, Xray – spine (Cervical, Thoracic and Lumbar)
 - Ultrasonography Abdomen, Thorax
 - Barium studies
 - o CT scan Brain, Thorax, Abdomen, Spine
 - o MRI Brain, Spine
 - Venography
 - o PET scan

Special Investigations

- Invasive Arterial Blood Gas analysis, Gastroscopy, Colonoscopy, ERCP,
 Electrophysiology, Coronary Angiography, IVP, IVU
- Non-Invasive ECG, Treadmill stress test, 2 D Echocardiography, Doppler studies, EEG,
 EMG and nerve conduction studies, Autonomic function tests, spirometry,
 Somnography

Therapeutic Modalities & Management Skills

- Drug treatment of all common disorders including dosage, route of administration,
 monitoring for adverse reactions, Reporting ADR and treatment
- Specific syndromic management
- Treatment of all Medical Emergencies including ACLS
- Haemodialysis
- Management according to recent guidelines

PG Activity Programme Department of Medicine

Clinical

SI No	Place	Activity	Frequency
1	OPD	Teaching and discussion of short cases	Three times a week
		Guidance on OPD work up and follow up of cases	(Monday,
			Wednesday, Friday)
2	IPD	Clinical rounds and Bedside Teaching	Three times a week
		Clinical Grand rounds presentation by student	Once a week
		Emergency Case discussions	Once a week
		ECG/Radiology/Special Investigations short	Once a week
		discussions	
3	Lecture	Clinical meeting: Interdepartmental	Once a week (8:20
	Hall		AM)
4	Lecture	Mortality meeting	Once a month
	Hall		

5	Lecture	Clinico-pathological meeting	Once a month
	Hall		

Schedule of Academic activities

SI No	Activity	Day/Time	Frequency
1	Seminar	Monday (8-9 AM)	Once a week
2	Journal Club	Thursday (8-9 AM)	Once a week
3	Case Presentation	Friday (3-4 PM)	Once a week
4	Thesis review	Saturday (1-2 PM)	Once in fortnightly
5	Departmental research presentation		Once a month
6	Continuing Medical Education		Once in six months
7	Research Methodology workshop Good Clinical Practice Guidelines		Once in six months

Rotational Posting Training Program:

Schedule The Junior Residents in General Medicine will undergo the following rotation-training during their 3 years' course towards M D (General Medicine):

Plan for posting of students year wise

Academic Year	Posting	Duration
1 st Year	Medicine Unit I	5 months
	Medicine Unit II	5 months
	Medicine Intensive Care Unit	1 month
	(MICU)	

	Casualty	1 month
2 nd Year	Cardiology	2 months
	Neurology	2 months
	Nephrology	1 month
	Haematology	1 month
	Chest and TB/Respiratory	1 month
	Medicine	
	Psychiatry	15 days
	Dermatology	15 days
	Medical Intensive Care Unit	2 months
	Endocrinology	1 month
	Gastroenterology	1 month
3 rd Year	Medicine Unit I	6 months
	Medicine Unit II	6 months
Total		36 months

Posting in Specialty clinics

SI No	Speciality Clinic
1	Rheumatology Clinic
2	Geriatric Clinic
3	Infectious Disease Clinic
4	Diabetes Clinic

Dissertation:

Requirement of Dissertation: Postgraduate students at the All India Institute of Medical Sciences are required to submit a dissertation based on a research protocol developed by them with the help of one or more members of the faculty of the Department of Medicine or allied subspecialties. Introduction to research methodology is considered desirable for the residents so that they can understand the concepts of validity and generalizability of the observed findings. All competent internists must keep themselves in touch with current

medical literature. Moreover, they should be able to judge whether the observations reported in the literature would be applicable to their setting or not. Junior Residents who join the department are given the name of faculty member by the office of the department who will guide him/her in the research work leading to the thesis. The allotment of the Junior Residents to different faculty members for guiding the thesis work is done by the department on the basis of a well-designed rotation format. Dissertation reviews will be conducted on regular basis to monitor the progress of project and give valuable suggestions to the student. The progress of the student for his dissertation is evaluated on a regular basis. Although these grades are not added to the theory or clinical assessment, acceptance of dissertation as being satisfactory is a pre-requisite for a resident to be able to take the M.D. Examination.

Timeline for Dissertation

Synopsis submission and approval: Process to be completed within six months of admission to MS / MD program:

Activity	July admission	January admission
Selection of topic in consultation with PG	September/October	March/April
Guide		
Approval by Department PG Committee		
Institute Scientific Committee approval	November/December	May/June
Final approval letter by Academics Section	31 st December	30 th June

ASSESSMENT PLAN

Evaluation of residents for their knowledge and acquisition of attitudes, skills and competencies is a continuous process throughout their 3-year period of training. Evaluation of certain attributes such as interpersonal relationships, professional responsibility, sensitivity to patient's need for comfort, ethical behaviour etc. is closely observed by the teaching faculty during the day-to-day clinical work of the resident. At the end of each clinical posting in each of the medicine units and the subspecialties mentioned above, the residents are assessed in a formal format given in the logbook by the faculty staff of the concerned unit/department.

This formative assessment of the candidates is taken into account at the time of the final M.D. examination held at the end of the three year term.

Continuous Assessment

The performance of the Postgraduate student during the training period would be monitored throughout the course and duly recorded in the log books as evidence of the ability and daily work of the student. After every Clinical Posting Assessment would be done by the faculty of the unit and endorsed by the head of the unit. It would include following points

- Regularity of attendance
- Punctuality
- Interaction with colleagues and supportive staff
- Maintenance of case records
- Presentation of cases during rounds
- Investigations work up
- Bedside manners
- Rapport with patients
- Counselling patient's relatives for blood donation or Post-mortem or organ donation and Case follow up

Overall quality of ward work Students would be graded on a Likert scale for the same.

Six monthly Progress report

Every six months, the performance of the students will be assessed and they would be required to submit a six monthly report. It would also be entered in the Logbook.

Timing for six monthly evaluation Report

Report	July Se	ession	January Session	
	Period	To be submitted	Period	To be submitted
First	July to	7 th January	January to June	7 th July
	December			
Second	January to June	7 th July	July to	7 th January
			December	

Third	July to	7 th January	January to June	7 th July
	December			
Fourth	January to June	7 th July	July to	7 th January
			December	
Fifth	July to	7 th January	January to June	7 th July
	December			
Sixth	January to June	10 th June	July to	10 th December
			December	

Note: The first five reports will be taken into consideration to decide the eligibility of the student to appear for the Professional Examination.

LIST OF CERTIFIABLE SKILLS

First Year

- Cognitive skills knowledge about common medical diseases and those prevalent in region.
- Outpatient Assisting seniors and recognition and management of common disorders
- Inpatient Recording histories, Maintaining case records, sampling, bedside procedures and administration of advised treatment. Monitoring of patients, supervised procedures, interpretation and reporting of basic laboratory and radiological investigations, BCLS, ACLS and CPR. Death certification and writing Death summary.
- Communication skills With patients, relatives, nursing and ward staff

Second Year

- Cognitive skills Intermediate Degree, Analysis of history, examination and investigations to achieve final diagnosis and plan treatment
- Outpatient Independent patient examination and management
- Inpatient Independent duties, all procedures, specialized procedural skills like Bone marrow aspiration, lumbar puncture, ICU procedures and novel therapies. Ventilatory management.

- Communication skills Case presentations, communication with patient and relatives, death declaration and motivation for organ donation.
- Additional -Writing review of literature, observations for dissertation and UG teaching.

Third Year

Advanced procedural skills, Complete intensive care, Independent duties, Calls, Interdepartmental calls, Dissertation completion, publications, presentations at conferences.

Formative Assessment of the Junior Residents in The Department of Medicine

This assessment is held at regular intervals during the posting and at the end of posting of the Junior Resident in the medicine units as well as the subspecialties mentioned earlier.

Theory:

Schedule	Marks
At the end of first year	100
At the end of Second year	100
Pre-professional	400 (4 papers of 100 mark each)
Total	600

Practical:

Schedule	Marks
At the end of first year	100
At the end of Second year	100
Pre-professional	400 (Practical 300 + Viva 100)
Total	600

Eligibility for professional assessment:

- Candidate should secure a minimum of 40% marks in Theory and Practical separately
 in formative assessments, in order to be eligible to appear for professional
 Examination.
- At least four out of Six-monthly progress report should be satisfactory

• Acceptance of Dissertation is mandatory

• Successful completion of Research Methodology programme at induction.

 The post graduate students would be require to present one poster presentation, to read one paper at a national/ state conference and to submit one research paper for publication/ during period of their postgraduate studies.

Pre-Professional Exam

Theory – 400 marks

Paper I – Basic sciences in relation to General Medicine

Paper II -General medicine including neurology, Genetics, Clinical Pharmacology, Haematology, Oncology, Poisonings and Environmental diseases, Infectious diseases and tropical medicine

Paper III- General Medicine including Cardicovascular, Respiratory, Gastoenterology, Hepatology, Critical Care, Geriatrics, Autoimmune disorders, Rheumatology

Paper IV- Recent advances in Medicine and Preventive Medicine

Pattern for Paper I, II and III

Total Marks - 100 marks

Section A

- 1 LAQ---- 20 marks
- 4 SAQ (out of 6) 20 marks

Section B

- 2 LAQ 15 marks each
- 4 SAQ (out of 5) 20 marks
- 2 SAQ Diagnostic/Therapeutic Dilemmas 10 marks

Pattern for Paper IV

Total – 100 marks:

10 Semi-long questions of 10 marks each.

(Minimum 40% marks in each paper and aggregate of 50% in order to be declared pass).

Practical – 400 marks

Long cases 2	200 (100 × 2)
Short cases 2	50 (25 × 2)
Spots	50 (10 × 5)
Viva	100
Total	400

Teaching Learning Methods

- Clinical training in patient care and management
- · Clinical Grand rounds and Bedside teaching
- Clinical Case presentation and Discussion
- Interdepartmental Clinical Meetings
- Academic activities:
 - o Journal Club
 - Seminars
 - Mortality and Morbidity conference
 - o Clinicopathological Case discussions
 - o Dissertation Review
 - Clinical Quizzes/ Debates / Group Discussions
- Research Activities:
 - Dissertation
 - Research Methodology workshop
 - o Research assistants in departmental research projects
 - Publication of Case reports and Original Articles.
- Self-grooming activities:
 - o Participation in Health camps & community outreach programs
 - o Poster Presentation in conference
 - o Paper presentation in conference
- Undergraduate Teaching:

- Clinics
- Demonstrations and Tutorials
- Problem based learning

INTERNAL ASSESSMENT

Theory:

First year 100 + Second Year 100 + Pre prof 400 = 600

Practical:

First year 100 + Second Year 100 + Pre prof 400 =600

Candidate should secure a minimum of 40% marks in Theory and Practical separately, in order to be eligible to appear for Professional Examination.

Maintenance of Log book

- Every Post-graduate student shall maintain a record of skills he has acquired during the three years training period certified by the various Heads of Department in which he had undergone training.
- The students should also be required to participate in the teaching and training programme of undergraduate students and interns.
- The students should make entries of all their activities: Academic as well as extracurricular in the logbook.
- The Head of the Department shall scrutinize the Log Book once in every three months.
- At the end of the course, the student should summarize the contents and get the Log Book certified by the Head of the Department.
- The Log Book should be submitted at the time of practical examination for the scrutiny
 of the Board of Examiners. Students should also participate in extracurricular activities
 and community outreach programs and will be given points in logbook for their
 Participation.

RECOMMENDED BOOKS AND JOURNALS

TEXT BOOKS (LATEST EDITION)

- 1. Harrison's Principles & Practice of Medicine
- 2. Davidson's Principles and Practice of Medicine
- 3. API Text book of Medicine
- 4. Oxford Text book of Medicine
- 5. Kumar & Clark: Book of Clinical Medicine
- 6. Cecil: Text Book of Medicine

REFERENCE BOOKS (LATEST EDITION)

- 1. Hurst: The Heart
- 2. Braunwald Heart Disease: A Textbook of Cardiovascular Medicine
- 3. Marriot's Practical Electrocardiography
- 4. Crofton and Douglas: Respiratory Diseases
- 5. Brain's Diseases of the Nervous system
- 6. Adam's Principles of Neurology
- 7. William's Text Book of Endocrinology
- 8. De Gruchi's Clinical Hematology in Medical Practice
- 9. Kelly's Text Book of Rheumatology
- 10. Slesenger & Fordtran: Gastrointestinal and Liver disease
- 11. Manson's Tropical Diseases
- 12. Infectious diseases -
- 13. Christie 13. Critical care medicine Cretta
- 14. Diabetes Joslin Clinical Mannual
- 15. Wintrobe's Hematology.
- 16. Hepatology by Sheila Sherlock.
- 17. Electrocardiography by Shamroth

CLINICAL METHODS

- 1. Hutchinson's Clinical Methods
- 2. Macleod's Clinical examination
- 3. John Patten: Neurological Differential Diagnosis
- 4. Neurological examination in Clinical Practice by Bickerstaff
- 5. Localization in Neurology by De Jong

6. Chamberlain's Symptoms and Signs in Clinical Medicine

JOURNALS

- 1. The New England Journal of Medicine (NEJM)
- 2. Lancet
- 3. JAMA (The Journal of American Medical Association)
- 4. Annals of Internal Medicine
- 5. Nature
- 6. Journal of Association of Physician of India (JAPI)
- 7. British Medical Journal (BMJ)
- 8. Chest
- 9. ICMR Bulletin
- 10. WHO Bulletin
- 11. Journal of Postgraduate Medicine
- 12. Neurology India
- 13. Medical Clinics of North America
- 14. Journal of Applied Medicine.
- 15. American Journal of Tropical Medicine
- 16. Diabetes Care
- 17. American journal of tropical Medicine and hygiene
- 18. Transaction of the Royal society of Tropical Medicine and Hygiene
- 19. Circulation
- 20. Stroke