

**Pravara Institute of Medical Sciences
(Deemed University)**

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**Syllabus
M.D. (General Medicine)**

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Medicine

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Syllabus / Curriculum for MD (General Medicine)

GOAL:

A postgraduate in a general medicine is expected to diagnose and treat common medical illnesses and have a sufficient knowledge of rare diseases, advances and technologies in medicine. He should be able to manage medical emergencies and carry out research and undergraduate medical teaching.

OBJECTIVES:

To achieve the goal following objectives must be fulfilled:

A) COGNITIVE DOMAIN (Knowledge) :

1. Proper history, examination and diagnosis.
2. Relevant investigations, their interpretation with reason
6. Teach and guide undergraduate able accuracy.
3. Appropriate treatment and early disposal.
4. Prompt diagnosis and management of emergencies.
5. Update knowledge (MBBS) students.
7. Carry out research and publication.

B) PSYCHOMOTOR DOMAIN (Skills):

1. To perform diagnostic/ therapeutic procedures like central venous line insertion, lumbar puncture, pleural/ pericardial/ ascites tapping, bone marrow aspiration, liver/ kidney/ pleural biopsy, and interventions such as mechanical ventilation, tube thoracostomy, cardiopulmonary resuscitation, temporary pacing etc.
2. To be familiar with complication of procedures and be equipped in their management.

C) AFFECTIVE DOMAIN (Human values , Ethical Practice & Communication abilities):

1. Ethical principles during work
2. Seek and give consultation when required.

3. Sympathetic behavior with patients and their relatives.
4. Respects patient's rights and privileges.
5. Supplement information about their illness.
6. Consider seeking second opinion when requested by patients.
7. Develop communication skills to interact with colleagues, senior and paramedical staff.
8. To realize that patient management is a team work.

COURSE DESCRIPTION

Duration: 3 years Residency program

SCOPE OF TRAINING

Diseases related to general medicine, relevant radiology techniques, emergency and intensive care management, maintaining records, use of computers and basic research. Patient care in the settings of outdoor, day care, indoor, emergency and intensive/ critical care.

STRUCTURED TRAINING PROGRAMME :

1) First Year Residency:

- a) Outpatients/inpatients care
- b) Managing medical emergencies under supervision.
- c) Learning diagnostic/ therapeutic procedures and interventions
- d) Interpreting Reports
- e) Starting Dissertation
- f) Use of computers in medicine
- g) Learning communication skills, Interviewing the patients, Taking informed consent & record keeping

2) Second Year Residency:

- a) Outpatients/inpatients care
- b) Rotation (six months) in existing allied specialities such as Dialysis unit and MICU & CCU.
- c) Managing medical emergencies
- d) Conducting medical procedures independently.
- e) Continuation of dissertation work.

3) Third Year Residency:-

- a) Out-patients and in-patients care
- b) Independent management of emergencies
- c) Teaching junior Residents / under-graduate students enrolled in the subject
- d) Finalisation and submission of dissertation.

COURSE CONTENTS

1) Knowledge

- a) Applied basic science knowledge
- b) Diseases with reference to General Medicine (Appendix-1)
- c) Recent advances
- d) Biostatistics and clinical epidemiology

2) Skills

- a) Decision making
- b) Diagnostic investigation and procedures
- c) Monitoring seriously ill patients
- d) Counseling patients and relatives
- e) Ability to teach undergraduate students
- f) Ability to carry out research

TEACHING & LEARNING ACTIVITIES :

- a) PG Induction Program- To be organized in the beginning of the residency. Basic and clinical departments to orient all new post graduate house staff to various departmental services and introduce basic concept of acute care management of medical emergencies. Orientation to medical records and library facility. Special orientation to bio statistics, research methodology, legal medicine and computer skills.
- b) Ward/OPD patient management daily
- c) Long and short topic presentations- once a week
- d) Ward rounds, case presentations and discussions daily
- e) Clinico-radiological and clinico-pathological conferences once a month
- f) Journal conferences once a week
- g) PG Case presentation clinics- Long and Short cases once a week

- h) Dissertation review once a term
- i) In-house and guest lectures once a month
- j) Conferences, symposia, seminars and CMEs
- k) Participations in workshops, updates, conferences
- l) Teaching undergraduates
- m) Use and maintenance of biomedical equipments
- n) Quiz once a month
- o) Group discussion

DISSERTATION:

1. Every candidate pursuing degree course is required to carry out work on a selected research project under the guidance of a recognised post graduate teacher. The results of such a work shall be submitted in the form of a dissertation.
2. The dissertation is aimed to train a postgraduate student in research methods and techniques. It includes identification of problem, formulation of a hypothesis, search and review of literature, getting acquainted with recent advances, designing of a research study, collection of data. Critical analysis, comparison of results and drawing conclusions.
3. Every candidate shall submit to a synopsis containing particulars of proposed dissertation work six months from the date of commencement of the course on or before the dates notified by the University.
4. Such synopsis will be reviewed and the dissertation topic will be registered by the University. No change in the dissertation topic or guide shall be made without prior approval of the University.
5. The dissertation should be written under the following headings:
 - a) Introduction
 - b) Aims and Objectives of study
 - c) Review of Literature
 - d) Material and Methods
 - e) Observations
 - f) Discussion

- g) Conclusions
- h) Summary
- i) References (Vancouver style)
- j) Master chart
- k) Annexures

6. Four copies of dissertation thus prepared shall be submitted six months before final examination on or before the dates notified by the University.

7. The dissertation shall be valued by 3 examiners appointed by the University. Approval of dissertation work is an essential precondition for a candidate to appear in the University examination.

MONITORING LEARNING PROGRESS:

It is essential to monitor the learning progress of each candidate through continuous appraisal and regular assessment. It not only also helps teachers to evaluate students, but also students to evaluate themselves. The monitoring be done by the staff of the department based on participation of students in various teaching / learning activities. It may be structured and assessment be done using checklists that assess various aspects. Model checklists are given in this chapter, which may be copied and used.

The learning out comes to be assessed should include: (I) Personal Attitudes, (II) Acquisition of Knowledge, (III) Clinical and operative skills, and (IV) Teaching skills.

i) Personal Attitudes.

The essential items are:

- Caring attitudes
- Initiative
- Organizational ability
- Potential to cope with stressful situations and undertake responsibility
- Trust worthiness and reliability.
- To understand and communicate intelligibly with patients and other.
- To behave in a manner which establishes professional relationships with patients and colleagues
- Ability to work in a team
- A critical enquiring approach to the acquisition of knowledge

The methods used mainly consist of observation. It is appreciated that these items require a degree of subjective assessment by the guide, supervisors and peers.

ii) Acquisition of Knowledge:

The methods used comprise of "Log Book" which records participation in various teaching / learning activities by the students. The number of activities attended and the number in which presentations are made are to be recorded. The Log Book should periodically be validated by the supervisors.

Journal Review Meeting (Journal Club): The ability to do literature search, in depth study, presentation skills, and use of audio visual aids are to be assessed. The assessment is made by faculty members and peers attending the meeting using a checklist.

Seminars: The topics should be assigned to the student well in advance to facilitate in depth study. The ability to do literature search, in depth study, presentation skills and use of audio visual aids are to be assessed using a checklist.

Clinico-pathological conferences: This should be a multidisciplinary case study of an interesting case to train the candidate to solve diagnostic and therapeutic problems by using an analytical approach. The presenter (s) are to be assessed using a check list similar to that used for seminar.

Death Audit: Once a month. Attendance and participation in these must be insisted upon. This may not be included in assessment.

iii) Clinical skills

Day-to-Day work: Skills in outpatient and ward work should be assessed periodically. The assessment should include the candidates' sincerity and punctuality, analytical ability and communication skills.

Clinical meetings: Candidates should periodically present cases to his peers and faculty members. This should be assessed using a check list .

Clinical and Procedural skills: The candidate should be given graded responsibility to enable learning by apprenticeship. The performance is assessed by the guide by direct observation. Particulars are recorded by the student in the logbook.

iv) Teaching skills:

Candidates should be encouraged to teach undergraduate medical students and paramedical students, if any. This performance should be based on assessment by

the faculty members of the department and from feedback form the undergraduate students .

Log Book:

The logbook is a record of the important activities of the candidates during his training: The evaluation of the log book to be done during viva voce in practical examination. Collectively, logbooks are a tool for the evaluation of the training programme of the institution by external agencies. The record includes academic activities as well as the presentations and procedures carried out by the candidate.

EVALUATIONS

Regular evaluation of the postgraduate will be carried out by assessment of postgraduate activity like case presentation, seminars etc. (Appendix-3). The overall performance has to be as per the guidelines of the University and MCI for recommendation of candidature for MD examinations.

PROCEDURE FOR DEFAULTERS:

Department should have a committee to review such situations. The defaulting candidate is counselled by the guide and head of the department. In extreme Cases of default the departmental committee may recommend that defaulting candidate be withheld from appearing in the examination, if she/he fails to fulfil the requirements in spite of being given adequate chances to set himself or herself right.

SCHEME OF EXAMINATION
MD GENERAL MEDICINE EXAMINATION

M.D Branch I (General Medicine)

Theory Examination

Total- Four papers of 100 marks each
Time : 3 Hours for each paper

Syllabus:

Paper 1 : Basic Sciences as related to Medicine

Paper 2 : Cardiovascular System, Respiratory system, Rheumatology, Bone & mineral metabolism, Immunology, Nutritional disorders, Emergency Medicine & recent advances.

Paper 3 : Gastro-intestinal system, Hepatobiliary & Pancreatic disorders , Nephrology, Endocrinology , Genetics, Radiology, Dermatology, Pregnancy Medicine & recent advances.

Paper 4 : Nervous system, Hematology, Infectious diseases, HIV/AIDS , Oncology , Psychiatry, Fluid and electrolytes, Poisoning, Environmental & occupational Medicine & recent advances.

Pattern and marks distribution in each paper

Question 1 : Long Answer Question	:	20 Marks
Question 2 : Long Answer Question	:	20 Marks
Question 3 : Long Answer Question	:	20 Marks
Question 4 : Short Answer Questions (10 marks each x 4)	:	40 Marks
Total	:	100 Marks

Scheme for Practical Examination

The Distribution of Practical Marks shall be as follows:

1. One Long Case

: 100 marks

- 2. Three Short Cases (60 marks each) : 180 marks
- 3. Oral / Viva Voce : 120 marks
 - a. Radiology & Instruments : 30
 - b. ECG & Lab reports : 30
 - c. Therapeutics & Emergencies : 30
 - d. Dissertation, log-book & Grand Viva : 30

Total : 400 marks

Theory + Practical (Grand Total) : 800 marks

Appendix -1

Diseases in General Medicine

HAEMATOLOGY

I. Red cell disorders

Approach to a patient with anemia, nutritional, iron deficiency, aplastic, megaloblastic, haemolytic anemia, (special emphasis on thalassemia & sickle cell anemia), hereditary spherocytosis, anemia of chronic disease, autoimmune hemolytic anemia, paroxysmal nocturnal hemoglobinuria, myelodysplastic syndromes, iron overload, and sideroblastic anaemias.

II. White cell disorders

Eosinophilia, febrile neutropenia, approach to a patient with splenomegaly & lymphadenopathy, lymphomas, multiple myeloma & related plasma cell disorders, leukemias, hairy cell leukemia.

III. Bleeding & coagulation disorders

Approach and investigations in patients with bleeding disorders, hemophilia, von willebrand's disease, immune thrombocytopenic purpura, vascular purpuras, henochschonlein purpura, thrombotic thrombocytopenic purpura, disseminated intravascular coagulation, anticoagulant and anti-platelet therapy.

IV. Miscellaneous

Approach to a patient with thrombosis, blood groups, transfusion related diseases, blood transfusion reactions, blood component therapy, hematological manifestations of systemic diseases, drug induced hematological disorders, hypersplenism, chemotherapy, bone marrow transplantation, thrombophilias, platelet function disorders, estimation of hemoglobin/ total and differential white cell count/ erythrocyte sedimentation rate, preparation and staining of blood smears.

ENDOCRINE

I. Disorders of glucose metabolism

Glucose metabolism, physiology of insulin & glucagon secretion, glucose tolerance test, diabetes mellitus, insulin preparations, hypoglycemia, glycosuria of causes other than diabetes mellitus, glucagon secreting tumors.

II. Thyroid gland & its disorders

Iodine metabolism, anatomy & physiology of thyroid gland, thyroid function tests, goiter, hypothyroidism and hyperthyroidism, myxedema, cretinism, thyroid carcinoma, other rare syndromes of thyroid dysfunction.

III. Disorders of anterior pituitary

Anatomy & physiology of various hormones & their regulation, acromegaly, gigantism, Sheehan's syndrome.

IV. Disorders of posterior pituitary

Anatomy and physiology, diabetes insipidus, syndrome of inappropriate anti-diuretic hormone (SIADH) secretion, obesity.

V. Disorders of adrenal cortex

Regulation of secretion of glucocorticoids, mineralocorticoids & adrenal sex hormones, adrenal insufficiency, Cushing's syndrome, pheochromocytoma.

VI. Miscellaneous

Dwarfism, Frohlich's syndrome, Lawrence Moon Biedel syndrome, anorexia nervosa & bulimia, hypothalamus in health & disease, Conn's disease, gynaecomastia, non-puerperal galactorrhoea, multiple endocrine neoplasia syndromes, hirsutism, adreno-genital syndromes, disorders of sexual differentiation.

CARDIO-VASCULAR SYSTEM

ECG & its interpretation, diagnosis of arrhythmias & their management, ischaemic heart disease, hypertension, rheumatic fever & rheumatic heart disease, congenital heart diseases, heart failure, pericardial diseases, peripheral vascular diseases, deep vein thrombosis, cardiomyopathies, principles of echocardiography & abnormalities in common disorders, pacemakers, nuclear medicine in cardiovascular disorders, tumors of the heart, aneurysm & dissection of the aorta, thoracic outlet syndrome, cardiac catheterisation, cardiac interventions.

RESPIRATORY SYSTEM

Approach to a patient of respiratory system involvement, pulmonary function tests, arterial blood gases, bronchoscopy, imaging studies, pulmonary angiography, therapeutic interventions: pulmonary artery embolisation/ video assisted thoracic surgery/ thoracotomy/ mediastinoscopy, diseases of the upper airway including avian influenza, bronchial asthma, occupational lung diseases, pneumoconioses, organic dusts & environmental carcinogens, pneumonia, bronchiectasis, obstructive airways diseases, interstitial lung diseases, diseases of the pleura: effusion/ pneumothorax/ empyema/ haemothorax, air pollution, respiratory failure, adult respiratory distress syndrome, severe acute respiratory syndrome (SARS), mechanical ventilation, mediastinal diseases, infections including tuberculosis, tumors, primary and metastatic carcinomas, hypersensitivity pneumonitis, eosinophilic pneumonias, pulmonary hypertension, sleep apnea, pulmonary thromboembolism, lung transplant.

NERVOUS SYSTEM

Investigations: lumbar puncture/ cerebrospinal fluid examination/ electroencephalography/ evoked potentials/ nerve conduction studies/ electromyography/imaging studies/ angiography, migraine, seizures/ epilepsy, cerebrovascular diseases, sub-arachnoid haemorrhage, dementia, extra pyramidal disorders, Parkinson's disease, motor neurone disease, disorders of cranial nerves, meniers syndrome, benign positional vertigo, diseases of the spinal cord, cranio-vertebral anomalies, tumors of the nervous system, demyelinating diseases, meningitis, infections of nervous system, nutritional and metabolic disorders, central pontine myelinolysis, Wernicke's encephalopathy, alcoholic cerebral degeneration, pellagra, subacute combined degeneration, polyneuropathies, acute and chronic inflammatory demyelinating polyneuropathies, diabetic neuropathies, mononeuritis multiplex, mononeuropathy, leprosy, neuromuscular junction disorders including myasthenia gravis, myopathies (hereditary/ endocrine/ metabolic/ thyroid diseases/ parathyroid diseases/ diabetes mellitis), periodic paralysis, approach to a patient paralysis, dizziness & vertigo, diplopia, syncope and transient loss of consciousness, involuntary movements, delirium, ataxia, parasthesias & sensory loss, unconsciousness, bowel & bladder abnormalities, progressive supranuclear palsy, dystonia, spinocerebellar ataxia, drug induced movement disorders, inherited ataxia, traumatic injuries, subdural & epidural hematoma, radiation & chemotherapy in treatment of nervous system tumours, subdural empyema, progressive multifocal leucoencephalopathy, subacute sclerosing pan encephalitis, progressive rubella, panencephalitis, kuru, molecular treatment of neurological disorders, disorders of the autonomic nervous system, details of traumatic injuries to skull & spine, hereditary & metabolic disorders of late onset, mitochondrial myopathies, lipid storage disorders.

INFECTIOUS DISEASES

Sepsis syndromes, pyrexia of unknown origin, infective endocarditis, acute infectious diarrhoeal diseases & food poisoning, infections of the urinary tract, infections of skin/ muscle/ soft tissues, infections in intravenous drug abusers, hospital acquired infections, infection control in hospital, bacterial infections, specific infections: pneumococcal/ staphylococcal/ tetanus/ streptococcal/ diphtheria/ botulism/ gas gangrene/ meningococcal/ gonococcal/ salmonella/ shigella/ vibrio cholera/ brucella/ plague/ syphilis/ mycobacteria/ leptospira/ mycoplasma/ pseudomonas/ helicobacter pylori, viruses: herpes/ varicella/ ebstein barr virus/ cytomegalo virus/ rabies/ respiratory viruses/ influenza/ measles/ mumps/ rubella/ arboviruses, fungal: candidiasis/ aspergillosis/ mucormycosis, parasites: ameobiasis/ giardiasis/ pneumocystis carinii/ malaria/ leishmaniasis/ cryptosporidium/ microsporidium/ isospora/ filariasis/ neurocysticercosis/ worm infestations, tropical diseases, pancreatitis, osteomyelitis, infections due to bites/

scratches/ burns, tularemia, pertussis, bartonellosis, arenaviruses, moraxella, legionella, nocardia, actinomycetes, borellia, chlamydiae, rickettsia, newer emerging infections: avian influenza, chikungunya, others.

HIV/AIDS: Aetiology & pathogenesis, clinical presentations, modes of transmission, universal precautions, opportunistic infections, management and treatment of the disease, opportunistic infections, complications, anti-retroviral therapy, prophylaxis: post exposure and of opportunistic infections, recent advances, historical record.

HEPATO-BILIARY SYSTEM

Liver function tests, jaundice, hepatitis, cirrhosis of liver, portal hypertension, hepatic encephalopathy, hematemesis, amoebic hepatitis, granulomatous hepatitis, hydatid cyst, primary and metastatic carcinomas, liver transplant, gall bladder diseases: cholelithiasis/ cholecystitis/ diseases of bile-duct/ cholangiocarcinoma.

GASTROINTESTENAL TRACT

Peptic ulcer disease, gastrointestinal bleeding, gastritis, endoscopy, radiological procedures, infections, inflammatory bowel disease, functional gut disorders, motility disorders, malabsorption syndromes, pancreatitis, cystic fibrosis, malignancy.

KIDNEY

Renal failure, renal replacement therapies, hematuria, proteinuria, polyuria, oliguria, anuria, contrast nephropathy, urinary tract infections, glomerulonephritis, nephritic syndromes, tubulo-interstitial diseases, kidney in systemic diseases, tumours of the urinary tract, renal calculous disease, barter's syndrome, fabry's disease, malignancy.

GERIATRIC MEDICINE

Theories of ageing, demographic patterns (world / Asia / India) and their significance to health care system, physiological changes in the elderly, diseases in elderly, pharmacotherapy in the elderly, rehabilitation, physiotherapy, occupational therapy, psychotherapy, legal aspects (elderly abuse), psychiatric illnesses in elderly population, geriatric assessment, geriatric emergencies.

GRANULOMATOUS DISEASES

Tuberculosis, leprosy, syphilis, sarcoidosis, Wegener's granulomatosis, histoplasmosis, coccidioidomycosis, mucocutaneous leishmeniasis, midline granuloma, lymphomatous granuloma, pseudotumor of the orbit.

ETHICAL & LEGAL ISSUES IN MEDICINE

Importance and procedures of informed consent, emergency & life saving intervention & treatment, information to be given to patient & relatives, rights of patients including confidentiality, withdrawing life support systems, organ transplant from cadaver, euthanasia, consumers protection act, clinical decisions for a patient who lacks decision of signing of will, ethics committee & its role in medical research, procedures (medico legal) followed in cases of poisoning, suspected rape, adverse reaction to drugs and interventions, absconded patients, in-hospital injuries and suicide, treatment of pregnant patients with drug and interventions likely to cause fetal harm, cloning, stem cells usage and preservation, crimes performed by addicts.

POISONINGS

Diagnosis and management of specific and unknown poisonings, universal & specific antidotes, acids and alkalis, kerosene, petroleum products, organophosphates and carbamates, household disinfectants, mosquito repellants, aluminium phosphide, zinc phosphide, yellow phosphorus, heavy metals, paracetamol, barbiturates, snake and scorpion bites, botulism, drug over-dosages, international classification of poisonous chemicals, environmental hazards and poisonings, industrial toxicology, toxidromes, nuclear, biological, chemical warfare.

PREGNANCY MEDICINE

Maternal & foetal physiology, principles of maternal morbidity & fetal outcome, medical disorders during pregnancy, infections in pregnancy, metabolic disorders, hyponatremia, thyroid disorder, hypertension and eclampsia, renal failure, disseminated intravascular coagulation, diabetes, valvular heart disease, bronchial asthma, cardiomyopathies, jaundice, HIV/AIDS, hypercoagulable state and its sequelae and complications, cortical venous sinus thrombosis in pregnancy, post partum sepsis, amniotic fluid embolisation, Epilepsy, drugs in pregnancy, poisonings in pregnancy, smoking, alcoholism, surgery and pregnancy, psychiatric diseases in pregnancy, medical disorders and infertility, genetic disorders & genetic counseling, ethical issues in pregnancy (brain death).

RADIOLOGY

Roengenograms of chest/ abdomen/ spine/ skull/ paranasal sinuses/ bones and joints, computerized tomography (CT) and magnetic resonance (MR) imagings, angiography, digital subtraction angiography, imaging techniques for hepatobiliary system, barium studies, intravenous urography, scintigraphy, radionuclide imaging of kidney/ bone/ heart/ liver/ lung/ gall bladder/ thyroid/ parathyroid/ whole body, echocardiography, ventriculography, positron emission tomography (PET) scan,

lymphangiography, cardiac catheterization, ultrasound, color doppler, developing and newer imaging techniques.

DISORDERS BONE & MINERAL METABOLISM

Calcium and phosphorous homeostasis, parathroid gland disorders, vitamin-D in health & disease, metabolic bone disease, osteoporosis, osteomalacia, endocrine hormonal influences on bone metabolism, phosphorus metabolism, hypophosphatemia, hyperphosphatemia, disorders of magnesium metabolism, Păget's disease of bone, osteomyelitis, bone dysplasias, osteoarthritis, spondylosis, bone in systemic diseases.

IMMUNOLOGY

Normal immune system and its functions, hypersensitivity reactions, T-cell mediated diseases, mechanism of tissue damage, cytokine mediated injury, cytokine inhibitors, interaction of T and B cells, complement system, apoptosis, immunotherapy, immunomodulators, immunosuppressive agents, monoclonal antibodies, stem cell transplant in immune disorders, HLA system, primary immune deficiency diseases, amyloidosis, disorders of immediate type hypersensitivity, biological response modifiers, immunologically mediated skin disorders.

RHEUMATOLOGY

Pathophysiology of inflammation, autoantibody relevance in disease processes, rheumatoid arthritis including extra-articular manifestations, glucocorticoid therapy in connective tissue diseases, systemic lupus erythematosus (SLE), organ targeted therapy, vasculitides, ankylosing spondylitis, reactive arthritis, undifferentiated spondyloarthropathy, polyarteritis nodosa, Wegener's granulomatosis, Churg Strauss disease, Takayasu's arteritis, cutaneous vasculitis, imaging techniques in systemic vasculitis, approach to acute and chronic monoarthritis & polyarthritis, diagnostic imaging in joint disease, crystal arthropathies, gout, infectious arthritis, infections in patients with connective tissue diseases, anti-phospholipid antibody syndrome (APLA), drug induced rheumatic diseases, scleroderma, sarcoidosis, fibromyalgias, haemophilic arthropathy, dermatomyositis, polymyositis, overlap syndromes, sjogrens syndrome, calcium oxalate deposition disease, psoriatic arthritis, neuropathic joint disease, osteoarthritis.

FLUID & ELECTROLYTE

Choice of intravenous fluids, plasma expanders, potassium/ calcium/ sodium/

magnesium/ phosphate disorders, acid base balance and disorders.

CRITICAL CARE

Cardio-pulmonary resuscitation, non-invasive and invasive cardiovascular monitoring, circulatory failure, heart failure, acute myocardial infarction, pulmonary embolism, respiratory failure, pulmonary aspiration, nosocomial pneumonia, mechanical ventilation, toxicology, renal failure, status epilepticus, Guillian Barre syndrome, myaesthesia, use of blood products, intravenous immunoglobulins, plasmapheresis, hyperthermia, hypothermia, diabetic ketoacidosis, addisonian crisis, myxedema coma, endotracheal intubation, pacemakers, strokes, subarachnoid haemorrhage, near-drowning, circulatory and ventilatory support in adult respiratory distress syndrome (ARDS), asthma, obstructive airways disease, renal replacement therapy.

EMERGENCY MEDICINE

Basic and advanced life support, disaster management, use and maintenance of equipment used in life support, acute severe asthma, status epilepticus, poisonings, heart failure, shock, acute myocardial infarction, angina, arrhythmias, hypertensive emergencies, medical emergencies in pregnancy, gastro-intestinal bleeding, hepatic encephalopathy, acute gastroenteritis, hemoptyses, obstructive airways disease, tension pneumothorax, adult respiratory distress syndrome (ARDS), respiratory failure, cor pulmonale, stroke, sub-arachnoid haemorrhage, oliguria/ anuria, coma, pneumonia, meningitis, infections, sepsis syndromes, multi-organ failure, bleeding manifestations, endocrine emergencies, electric shock, poisonings, snakebite, scorpion stings, anaphylaxis, nuclear/ biological/ chemical exposures, toxidromes, rabies, burns, strangulation, interventions and procedures: mechanical ventilation/ temporary cardiac pacing/ invasive monitoring/ needle and tube thoracostomy/ cricothyrotomy.

Appendix 2

RECOMMENDED READING

- Harrison's Principles of Medicine
- Oxford Textbook of Medicine
- Cecil Textbook of Medicine
- API Text Book of Medicine
- Davidson's principles & practice of Medicine

Reference Books:

- Wintrobe's Hematology
- Kelly's Textbook of Rheumatology
- Patten's Neurology
- Brain's Neurology
- Crofton and Douglas Respiratory Medicine
- Hepatology by Sheila Sherlock
- Electrocardiography by Schamroth
- Braunwald's Cardiology
- Congenital Heart in adults - Perloff's
- Williams Text Book Of Endocrinology
- Critical Care Medicine, by shoemaker
- Victor Adams - Principles of Neurology
- Textbook of Gastroenterology – Slasinger
- Textbook of Nephrology - Rutor & Brenner
- Textbook of Medical Physiology- Guyton
- Harper's Biochemistry
- Manson's Textbook of Tropical diseases
- Methods in Biostatistics - B. K. Mahajan
- Textbook of Pharmacology, Goodman Gillman
- Textbook of Pathology - Robbin's
- Washington Manual of Medical Therapeutics
- Clinical methods-Hutchinson's
- Bicker staff - Neurological Examination in Clinical Practice
- Textbook of Preventive & Social Medicine - Park
- Francis - Medical Ethics
- Medical Jurisprudence & Toxicology - Reddy
- MacLeod's Clinical Examination

REFERENCE JOURNALS:

International	
01	British Medical Bulletin (4)
02	The Lancet (51)
03	Medical Clinics of N. A (6)
04	New England Jr. Of Medicine (48)
05	Postgraduate Medical Journal (12)
06	Transaction of Royal Society of Tropical Medicine and Hygiene (14)
07	British Medical Journal (51)
Indian	
08	Indian Heart Journal (6)
09	Indian Jr. of Medical Research (12)
10	Indian Jr. of Tuberculosis (4)
11	Indian Medical Gazette (12)
12	JAPI (12)
13	National Medical Jr. of India (6)
14	Medical Jr. of Armed Forces of India (4)
15	Neurology India (6)
16	Current Medical Journal (12)
17	Indian Jr. of Medical Ethics

Appendix-3

PG - ACTIVITY ASSESSMENT SHEET

Format of Model Check Lists

Check List -I. MODEL CHECK-LIST FOR EVALUATION OF JOURNAL REVIEW PRESENTATIONS

Name of the Student:

Name of the Faculty/Observer:

Date:

Sl. No.	Items for observation during presentation	Poor 0	Below Average 1	Average 2	Good 3	Very Good 4
1.	Article chosen was					
2.	Extent of understanding of scope & objectives of the paper by the candidate					
3.	Whether cross references have been consulted					
4.	Whether other relevant publications consulted					
5.	Ability to respond to questions on the paper / subject					
6.	Audio-Visual aids used					

7.	Ability to discuss the paper					
8.	Clarity of presentation					
9.	Any other observation					
	Total Score					

Check List - II. MODEL CHECK-LIST FOR EVALUATION OF SEMINAR PRESENTATIONS

Name of the Student:

Name of the Faculty/Observer:

Date:

Sl. No.	Items for observation during presentation	Poor 0	Below Average 1	Average 2	Good 3	Very Good 4
1.	Whether other relevant publications consulted					
2.	Whether cross references have been consulted					
3.	Completeness of Preparation					
4.	Clarity of Presentation					
5.	Understanding of subject					

6.	Ability to answer questions					
7.	Time scheduling					
8.	Appropriate use of Audio-Visual aids					
9.	Overall Performance					
10.	Any other observation					
	Total Score					

Check List - III

**MODEL CHECK LIST FOR EVALUATION OF CLINICAL WORK IN
WARD / OPD**

(To be completed once a month by respective Unit Heads including posting in other departments)

Name of the Student:

Name of the Unit Head:

Date:

Sl. No.	Points to be considered:	Poor 0	Below Avera ge 1	Avera ge 2	Good 3	Very Good 4
1.	Regularity of attendance					
2.	Punctuality					
3.	Interaction with colleagues and supportive staff					
4.	Maintenance of case records					
5.	Presentation of cases during rounds					

6.	Investigations work up					
7.	Bedside manners					
8.	Rapport with patients					
9.	Counseling patient's relatives for blood donation or Postmortem and Case follow up.					
10.	Over all quality of Ward work					
	Total Score					

Check List - IV
EVALUATION FORM FOR CLINICAL PRESENTATION

Name of the Student:

Name of the Faculty:

Date:

Sl. No.	Points to be considered	Poor 0	Below Average 1	Average 2	Above Average 3	Very Good 4
1.	Completeness of history					
2.	Whether all relevant points elicited					
3.	Clarity of Presentation					
4.	Logical order					
5.	Mentioned all positive and negative points of importance					
6.	Accuracy of general physical examination					
7.	Whether all physical signs elicited correctly					
8.	Whether any major signs missed or misinterpreted					
9.	Diagnosis: Whether it follows logically from history and findings					
10.	Investigations required					
	▪ Complete list					
	▪ Relevant order					

	<ul style="list-style-type: none"> ▪ Interpretation of investigations 					
11.	Ability to react to questioning Whether it follows logically from history and findings					
12.	Ability to defend diagnosis					
13.	Ability to justify differential diagnosis					
14.	Others					
	Grand Total					

Check List - V

**MODEL CHECK LIST FOR EVALUATION OF TEACHING SKILL
PRACTICE**

Sl. No.	Points to be considered	Strong Point	Weak Point
1.	Communication of the purpose of the talk		
2.	Evokes audience interest in the subject		
3.	The introduction		
4.	The sequence of ideas		
5.	The use of practical examples and/or illustrations		
6.	Speaking style (enjoyable, monotonous, etc.,		

	specify)		
7.	Attempts audience participation		
8.	Summary of the main points at the end		
9.	Asks questions		
10.	Answers questions asked by the audience		
11.	Rapport of speaker with his audience		
12.	Effectiveness of the talk		
13.	Uses AV aids appropriately		

Check list VI

MODEL CHECK LIST FOR DISSERTATION PRESENTATION

Name:

Faculty/Observer:

Date:

Sl. No.	Points to be considered	Poor 0	Below Average 1	Average 2	Good 3	Very Good 4
1.	Interest shown in selecting a topic					
2.	Appropriate review of literature					
3.	Discussion with guide & other faculty					
4.	Quality of protocol					
5.	Preparation of proforma					

Checklist-VII

CONTINUOUS EVALUATION OF DISSERTATION WORK BY GUIDE / CO-GUIDE

Name of the Student:

Name of the Faculty/Observer:

Date:

Sl. No.	Items for observation during presentation	Poor 0	Below Average 1	Average 2	Good 3	Very Good 4
1.	Periodic consultation with guide/co-guide					
2.	Regular collection of case material					
3.	Depth of analysis / discussion					
4.	Departmental presentation of findings					
5.	Quality of final output					
6.	Others					
	Total Score					

LOG BOOK

Table 1 : Academic activities attended

Name:

Admission Year:

Date	Type of Activity Specify Seminar, Journal Club, Presentation, UG teaching	Particulars

Table 2 : Academic presentations made by the student

Name:

Admission Year:

Date	Topic	Type of Presentation Specify Seminar, Journal Club, Presentation, UG teaching etc.

Table 3 : Diagnostic and Operative procedures performed

Name:

Admission Year:

Date	Name	ID No.	Procedure	Category O, A, PA, PI*

- * Key:**
- O - Washed up and observed
 - A - Assisted a more senior Surgeon
 - PA - Performed procedure under the direct supervision of a senior surgeon
 - PI - performed independently

Model Overall Assessment Sheet

Academic Year:

Sl. No	Particulars	Name of Student* and Mean Score				
		A*	B*	C*	D*	E*
1	Journal Review Presentations					
2	Seminars					
3	Clinical work in wards					
4	Clinical presentation					
5	Teaching skill practice					
Total Score						

Note: Use separate sheet for each year.

Signature of HOD

Signature of Principal

The above overall assessment sheet used along with the logbook should form the basis for certifying satisfactory completion of course of study, in addition to the attendance requirement.

KEY:

Mean score : Is the sum of all the scores of checklists 1 to 7.

A, B,... : Name of the trainees.