

(B) MEDICINE

Distribution of subjects

Paper-I All except Paper-II

Paper-II will include:

- | | |
|--------------------------|-------------------------------------|
| 1. Infectious Diseases | 7. Endocrinology including Diabetes |
| 2. Metabolic Diseases | 8. Genitourinary System |
| 3. Immunology | 9. Genetics |
| 4. Oncology | 10. Water and Electrolyte Balance |
| 5. Acid and Base Balance | 11. Psychiatry |
| 6. Dermatology | |

1. CARDIOLOGY

The course outline is as follows :

- Rheumatic fever and infective endocarditis.
- Valvular heart diseases.
 - Mitral valve
 - Aortic valve
- Ischaemic heart disease.
 - Angina
 - Myocardial infarction
- Cardiac arrhythmias
 - Atrial fibrillation
 - Ventricular tachycardia
 - Premature atrial and ventricular beats.
- Heart failure.
 - Left ventricular failure.
 - Congestive cardiac failure.
 - Cor pulmonale.
- Congenital heart diseases (brief).
 - Cyanotic/acyanotic heart diseases.
 - Fallot's tetralogy
 - Atrial septal defect
 - Ventricular septal defect
 - Patent ductus arteriosus
- Cardiomyopathies
- Pericardial diseases.
- Constrictive pericarditis

- Pericardial diseases
- Pericardial effusion
- Atherosclerosis/arteriosclerosis.
- Hypertension.
- Peripheral vascular disease.
 - Symptoms and signs
 - Arteriosclerosis
 - Acute & chronic ischaemia of the leg
 - Aneurysms
 - Buerger's disease
 - Raynaud's disease
 - varicose veins
 - Venous thrombosis
- Investigations.
 - Electrocardiography, Xray chest, Echocardiography, Thallium Scan, Stress Testing, Holter And Angiography Etc.

CLINICAL TRAINING:

Important Topics To Be Discussed:

Case discussion for diagnosis and management of common cardiovascular diseases.

- Systemic hypertension
- Ischaemic heart diseases
- Congestive cardiac failure
- Valvular diseases and infective endocarditis

Understand the Symptomatology to reach the Differential Diagnosis:

Palpitation, breathlessness, chest pain, raised JVP, jaundice etc.

Skills To Be Learnt:

- History taking in CVS.
- GPE in CVS – clubbing, koilonychia, osler's nodes, splinter haemorrhages, cyanosis.
- Pulse, JVP, blood pressure.
- Inspection, palpation of precordium.
- Percussion, auscultation of precordium – mitral, tricuspid, aortic, pulmonary areas.
- Interpretation of related radiological and laboratory investigations
- General medication and prescription writing in CVS diseases.

Procedures (Observe/ Assist):

- ECG taking and basic reading i.e. Normal, Acute MI, Ischemia, complete heart block, APC, VPC, SVT, VT etc.

- X-ray chest interpretation – (Cardiology).
- Should observe, learn and even may assist electroversion therapy (DC shock) with indications, complications etc.
- Observe Echo and should recognize chambers and valves on echo print.
- Observe pericardial effusion aspiration.
- Should learn thrombolytic therapy, heparinisation/anticoagulation therapy and control, anti-platelet therapy, nitrates infusion, digitalization, treatment of acute pulmonary edema, O₂ therapy.
- Cardiac monitoring.
- Basics of ETT.

2. PULMONOLOGY

COURSE OUTLINES:

- Asthma.
- Environmental lung diseases/occupational.
 - Asbestosis
 - Silicosis
 - Bagassosis
 - Pneumoconiosis
 - Byssinosis
 - Farmer's lung
- Pneumonia
 - Community acquired
 - Nosocomial
 - Lobar and bronchopneumonia
- Adult respiratory distress syndrome
- Acute respiratory failure
- Mechanical ventilation.
- Bronchiectasis.
- Chronic obstructive airway diseases.
 - Chronic bronchitis
 - Emphysema
- Interstitial lung diseases.
- Pulmonary thromboembolism
- Acute cor pulmonale.
- Type-I and type-II respiratory failure
- Pleural effusion.
- Pneumothorax.
- Tuberculosis
- Tumors of the lung
- Disorders of chest wall and pleura
- Chest trauma
- Deformities of the rib cage

- Dry pleurisy, pleural effusion, empyema, pneumothorax.
- Basics of pulmonary function tests.
- Imaging in pulmonary diseases/investigations

CLINICAL TRAINING:

Important Topics To Be Discussed:

Case discussion for diagnosis and management of common pulmonary diseases.

- Bronchial asthma
- Pleural effusion
- Pneumonia
- Hemoptysis
- Pulmonary tuberculosis
- Chronic obstructive airway disease
- Type-I and type-II respiratory failure
- Bronchogenic carcinoma

Understand the Symptomatology to reach the Differential Diagnosis:

- Breathlessness
- Wheezing
- Haemoptysis
- Orthopnoea
- Paroxysmal nocturnal dyspnoea (PND)
- Pain in calf on walking
- Undue coldness, redness or blueness of extremities
- Chest pain
- Cough/expectoration/sputum

Skills To Be Learnt:

- History taking in respiratory system – dyspnoea, cough, expectoration, haemoptysis.
- Chest pain, wheezing.
- Inspection, palpation, percussion, auscultation front of chest.
- Inspection, palpation, percussion, auscultation back of chest.
- Interpretation of related radiological and laboratory investigations.
- Interpretation of pulmonary function tests.
- General medication and prescription writing in pulmonology
- Any deficient program.

Procedures (Observe/ Assist):

- How to start O₂ therapy, indications, complications.
- Learn pleural aspiration and assist
- Endotracheal suction, assist

- Pleural biopsy, observe
- FNA biopsy, observe
- Under water seas aspiration, observe/assist
- Management of respiratory failure
- Observe bronchoscopy

3. DERMATOLOGY

COURSE OUTLINES:

- Anatomy, physiology of skin related to clinical dermatology
- Infestations: scabies, pediculosis.
- Bacterial and mycobacterial infections
- Fungal and viral diseases.
- Acne vulgaris
- Eczemas.
- Psoriasis
- Lichen planus
- Bullous disorders.
- Pigmentary disorders
- Disorders of nails.
- Disorders of hairs.
- Sexually transmitted diseases.

CLINICAL TRAINING:

Important Topics To Be Discussed:

Case discussion for diagnosis and management of common dermatological diseases.

Should recognize lesions of:

- Leprosy
- Syphilitic lesions (chancre, secondary syphilis, gumma)
- Tinea (corporis, capitis, inguinale, unguam)
- Candida (oral, skin)
- Scabies
- Lice
- Mosquito bite
- Acute & chronic eczema
- Lesions of small pox, chicken pox, herpes simplex, herpes zoster
- SLE.
- Psoriasis
- Lichen planus
- Impetigo contagiosum
- Moluscum contagiosum
- Acne vulgaris

- Seborrhoea
- Exfoliative dermatitis
- Skin neoplasm like squamous cell carcinoma, basal cell carcinoma and melanoma
- Leukoderma
- Pityriasis versicolor
- Alopecia and hirsutism
- Sexually transmitted diseases
- Furunculosis, cellulitis
- Drug eruption

Understand the Symptomatology to reach the Differential Diagnosis:

- Alopecia
- Eruption and rashes
- Itching
- Pigmentation and depigmentation

Skills To Be Learnt:

- History taking in Dermatology
- Clinical examination of various skin lesions
- Interpretation of related radiological and laboratory investigations
- General medication and prescription writing in Dermatology

Procedures (Observe/ Assist):

- Scraping for fungus
- Use of magnifying glass
- Observe skin biopsy
- Use of Wood's lamp

4. Neurology and Central Nervous System

COURSE OUTLINES:

- Infections and inflammatory lesions
 - Meningitis
 - Bacterial.
 - Tuberculous.
 - Viral etc.
 - Brain abscess
 - Encephalitis
 - Hydrocephalus
- Epilepsy and other convulsive disorders
- Cerebrovascular diseases (stroke).
 - Ischemic
 - Embolism
 - Infarction

- Haemorrhage
 - Intra-cerebral
 - Subarachnoid
- Dementia and Alzheimer's disease.
- Parkinson's disease and other movement disorders.
- Motor neuron disease.
- Multiple sclerosis.
- Cranial nerve disorders.
 - Transient mono-ocular blindness (amaurosis fugax).
 - Trigeminal neuralgia.
 - Facial palsy (Bell's).
 - Vertigo, nystagmus
- Spinal cord disorders.
 - Spinal cord compression
 - Hemiplegia, paraplegia, quadriplegia
 - Myelitis.
 - Spondylosis.
 - Syringomyelia and syringobulbia.
- Peripheral nerve disorders.
 - Peripheral polyneuropathy
 - Gullian Barry syndrome
 - Mononeuritis multiplex.
- Space occupying lesions of brain and spinal cord.
- Muscular dystrophies
- Myopathies, myasthenia gravis

CLINICAL TRAINING:

Important Topics To Be Discussed:

Case discussion for diagnosis and management of common CNS disorders:

- Cerebrovascular accident
- Paraplegia
- Polyneuropathy
- Muscular dystrophies and Motor neuron disease
- Parkinsonism
- Meningitis
- Tetanus
- Hemiplegia
- Facial Palsy

Understand the Symptomatology to reach the Differential Diagnosis:

- Behaviour
- I.Q
- Speech disturbances

- Memory
- Confusional states
- Dementia
- Tremor
- Fasciculations
- Athetosis
- Chorea
- Gait abnormalities
- Convulsions/fits
- Coma
- Syncope/dizziness
- Vertigo
- Deafness
- Blindness
- Numbness, tingling, sensory loss
- Rigidity / paralysis.
- Movement disorders

Skills To Be Learnt:

- History taking in CNS.
- Higher mental functions – level of consciousness, behaviour, speech, memory.
- Examination of cranial nerves.
- Examination of motor system.
- Examination of sensory system – crude touch, pain, temperature.
- Fine touch, pressure, vibration, joint position.
 - Cortical sensations
 - Two point localization, two point discrimination.
 - Reflexes
 - Examination of cerebellar system
- Examination of nystagmus
- Examination of rigidity
- Assessment of movement disorders
 - Interpretation of related radiological and laboratory investigations
- General medication and prescription writing in Neurology

Procedures (Observe/ Assist):

- Observe and learn lumbar puncture

5. ALIMENTARY SYSTEM

COURSE OUTLINES:

- Oral cavity
 - Infections and inflammatory disorders
 - Benign and malignant diseases
- Esophagus.
 - Dysphagia with special reference to
 - Ca oesophagus
 - GERD
 - Achalasia
 - Candidiasis of oral cavity and oesophagus
- Stomach
 - Gastritis.
 - Peptic ulcer
- Intestines
 - Malabsorption syndromes.
 - Tropical sprue
 - Coeliac disease
 - Inflammatory bowel diseases.
 - Ulcerative colitis
 - Crohn's disease
 - Irritable bowel syndrome (IBS).
- Liver
 - Ascites.
 - Jaundice.
 - Congenital hyperbilirubinaemia
 - Gilbert syndrome
 - Dubin Johnson syndrome
 - Rotor syndromes
 - Haemolytic
 - Obstructive
 - Hepatitis
 - Viral, acute and chronic
 - Toxic
 - Drugs
 - Auto immune hepatitis.
 - Cirrhosis of liver.
 - Hepatic encephalopathy.
 - Carcinoma liver and transplant.
 - Acute and chronic pancreatitis.
 - Upper GI bleeding, lower GI bleeding
 - Drugs contraindicated in liver diseases

CLINICAL TRAINING:

Important Topics To Be Discussed:

Case discussion for diagnosis and management of common gastrointestinal and hepatobiliary diseases.

- Acid peptic disease
- Tender hepatomegaly
- Hepatosplenomegaly
- Jaundice
- Chronic liver disease
- Acute and chronic diarrhoea
- Variceal bleeding and peptic ulcer bleeding.
- Abdominal Koch's infection

Understand the Symptomatology to reach the Differential Diagnosis:

- Oral ulceration
- Dysphagia
- Heart burn
- Nausea/vomiting
- Indigestion/flatulence
- Diarrhoea and constipation
- Melena, haematemesis, bleeding per rectum
- Jaundice
- Hepatomegaly
- Abdominal distension/ascites

Skills To Be Learnt:

- History taking in GIT – vomiting, diarrhoea, pain abdomen, constipation, haematemesis, melena, dyspepsia, distension.
- Examination of GIT –
- Inspection, palpation.
- Percussion, auscultation.
- Interpretation of related radiological and laboratory investigations
- General medication and prescription writing in GIT diseases.
- Any deficient programme.

Procedures (Observe/ Assist):

- Learn N/G tube passing and feeding
- Learn and observe aspiration of peritoneal fluids
- Learn and observe endoscopies, upper and lower GIT
- Preparing a patient for GI endoscopies

6. KIDNEYS AND URINARY SYSTEM

COURSE OUTLINES:

- Acute renal failure.
- Chronic renal failure
- Nephrotic syndrome.
- Nephritic syndrome.
- Urinary tract infections
 - Infections of the kidneys
 - Infections of the lower urinary tract
- Inflammatory lesions of the kidneys
- Introduction to dialysis & renal transplant
- Drugs causing renal disease (brief).
 - Analgesic nephropathy.
 - Lead, uric acid, hypercalcemia, radiation & hypersensitivity
 - Nephropathy.
 - Drugs contra indicated in renal insufficiency
 - Drugs to be used with caution in renal disease.
- Polycystic kidneys.
- Renal vascular disorders
 - Renal artery stenosis
 - Renal vein thrombosis
 - Tumours
- Hemolytic uremic syndrome.
- Prostatic diseases

CLINICAL TRAINING:

Important Topics To Be Discussed:

Case discussion for diagnosis and management of common Renal & Urinary system diseases

- Nephrotic syndrome
- Nephritic syndrome
- Acute renal failure
- Chronic renal failure

Understand the Symptomatology to reach the Differential Diagnosis:

- Lumbar /pelvic pain
- Anuria, oliguria
- Hematuria
- Dysuria, pyuria
- Urgency / frequency of micturation

- Urinary retention
- Urinary incontinence
- Nocturia

Skills To Be Learnt:

- History taking – lumbar pain, anuria, oliguria, hematuria, dysuria, urgency/frequency of micturition, pyuria, urinary retention, nocturia, urinary incontinence, pelvic pain.
- Examination of abdominopelvic and lumbar area
- Inspection, palpation, percussion, auscultation.
- Interpretation of related radiological and laboratory investigations
- General medication and prescription writing in upper & lower urinary tract diseases.

Procedures (Observe/ Assist):

- Observe and assist insertion of Foley's catheter/Red rubber catheter
- Learn and observe peritoneal and hemodialysis
- Indications and outcomes of renal transplant
- Observe I/V urograms

7. ENDOCRINOLOGY

COURSE OUTLINES:

- Anterior pituitary.
 - Growth hormone disorders
 - Acromegaly
 - Gigantism.
 - Short stature
 - Infertility
- Diseases of hypothalamus and posterior pituitary.
 - Empty sella syndrome
 - Diabetes insipidus
 - Syndrome of inappropriate ADH secretion (SIADH).
- Thyroid gland.
 - Hyperthyroidism (thyrotoxicosis)
 - Hypothyroidism (myxedema, cretinism)
 - Inflammatory lesions
 - Benign and malignant tumors
- Adrenal Gland.
 - Cushing Syndrome
 - Aldosteronism Primary/Secondary.
 - Hirsutism.
 - Addison's disease
 - Acute Addisonian crisis

- Inflammatory lesions
- Adrenocortical tumors including Pheochromocytoma
- Endocrine Pancreas
 - Diabetes mellitus and hypoglycaemic states
 - Other associated endocrine disorders
- Testes
 - Sexual precocity
 - Heterosexual precocity
 - Gynaecomastia
 - Inflammations
 - Tumours
- Multiple endocrine neoplasia
 - Type I
 - Type II

CLINICAL TRAINING:

Important Topics To Be Discussed:

Case discussion for diagnosis and management of common endocrine disorders

- Diabetes mellitus
- Thyroid diseases
- Cushing's disease
- Infertility and common reproductive disorders

Skills To Be Learnt:

- History taking and correlate with a specific diagnosis.
- Examination of thyroid gland, male and female genital organs etc.
- Interpretation of related radiological and laboratory investigations
- General medication and prescription writing in endocrinology

8. RHEUMATOLOGY

COURSE OUTLINES:

- Osteoarthritis
- Osteoporosis
- Rheumatoid arthritis and related arthropathies
- Paget's disease of the bone.
- Osteopetrosis (marble bone disease).
- Multiple myeloma
- **Multi-System Immunological Diseases**
- Systemic lupus erythematosus (SLE)
- Serum sickness

- Systemic sclerosis (scleroderma).
- Mixed connective tissue diseases (brief).
- Sjogren's syndrome (brief).
- Ankylosing spondylitis.
- Bechet's syndrome (brief).
- Vasculitis syndromes (brief).
- Anaphylactoid purpura
- Polyarteritis nodosa
- Hypersensitivity vasculitis
- Wegner's granulomatosis
- Temporal arteritis
- Takayasu's arteritis
- Thromboangitis obliterans (Burger's disease)
- Sarcoidosis (brief).

CLINICAL TRAINING:

Important Topics To Be Discussed:

Case discussion for diagnosis and management of common rheumatological diseases.

- Rheumatoid arthritis
- Osteoarthritis
- Multiple Myeloma
- SLE etc.

Understand the Symptomatology to reach the Differential Diagnosis:

- Joint pain and joint swelling
- Joint deformities
- Muscle cramps
- Muscle weakness
- Muscular wasting
- Other related systemic signs and symptoms

Skills To Be Learnt:

- History taking and correlate with a specific diagnosis.
- Examination and assessment of the pattern of involvement of bones, joints, skin and other organs
- Interpretation of related radiological and laboratory investigations
- General medication and prescription writing in rheumatology.

Procedures (Observe/ Assist):

- Observe aspiration of fluids from joints (knee)
- Observe bone marrow aspiration/terphine

9. METABOLIC DISORDERS

COURSE OUTLINES:

- Hyperlipidemia
- Hemochromatosis
- Porphyrrias
- Wilson's disease
- Gout and hypercalcemia
- Storage diseases.
- Lipid.
 - Leukodystrophies
 - Niemann pick disease.
 - Gaucher's disease.
- Glycogen.
 - Fabry's disease.
- Hereditary connective tissue disorders
- Osteogenesis imperfecta.
- Ehler's danlos syndrome.
- Chondrodysplasias.
- Marfan syndrome.
- Alport syndrome.
- Disorders of amino acid metabolism and storage
 - Homocystinuria.
 - Alkaptonuria.
 - Hartnup disease.
- Renal glycosuria

10. INFECTIOUS DISEASES

COURSE OUTLINES:

- Clinical syndromes.
 - Sepsis and septic shock, meningococcaemia
 - Acute infectious diarrhoeal diseases and bacterial food poisoning.
 - Hospital acquired infections.
- Common disease syndromes caused by the following bacteria and their drug therapy.
 - Pneumococci
 - Staphylococci.
 - Streptococci.
 - Hemophilis influenzae.
 - Shigella.
 - Gonococci.

- Pseudomonas.
- Following diseases in detail.
 - Tetanus.
 - Enteric fever/salmonellosis.
 - Cholera.
 - Tuberculosis.
 - Leprosy.
 - Amoebiasis/giardiasis/trichomoniasis.
 - Malaria.
 - AIDS.
 - Rabies.
 - Infectious mononucleosis.
- Helminthic infestations
 - Ascariasis
 - Hookworm
 - Whipworm (trichuriasis)
 - Threadworm (enterobiasis)
 - Taenia (tapeworm)
 - Hydatid diseases

CLINICAL TRAINING:

Important Topics To Be Discussed:

Case discussion for diagnosis and management of common infectious diseases in Pakistan

- Malaria
- Typhoid fever
- Acute diarrhoeal diseases
- Acute / chronic respiratory tract infections
- Generalized septicemia etc.

Understand the Symptomatology to reach the Differential Diagnosis:

- Fever
- Headache, pain
- Anorexia/ weight loss
- Haemoptysis/ chest pain/ epigastric
- Cough/expectoration/sputum
- Dysuria, pyuria
- Diarrhoea / vomiting
- Melena, hematemesis
- Jaundice/hepatomegaly
- Eruption and rashes
- Itching
- Joint pain and joint swelling etc.

Skills to Be Learnt:

- History taking and correlate with a specific diagnosis.
- Examination and assessment of the pattern of fever, involvement of organ systems and any positive findings.
- Interpretation of related radiological and laboratory investigations
- Symptomatic treatment and prescription writing in infectious diseases.

Procedures:**Perform:**

- Injection I/V, I/M, S/C, intradermal
- Oxygen therapy
- Urinary catheterisation – collection of samples
- Collection of blood samples/ blood film preparation

Observe:

- Observe I/V lines/Fluids/Blood/Blood products, direct, branula, cutdown, CVP
- N/G tube passing and feeding
- Foley's catheter/Red rubber catheter
- IOP record maintenance
- Aspiration of fluids (Pleural, Pericardial, Peritoneal, Knee)
- Lumbar Puncture
- O₂ therapy
- Nebulisation etc.

11. HAEMATOLOGY

COURSE OUTLINES:**Anaemias.**

- Classification
- Iron deficiency
- Megaloblastic
 - B-12 deficiency
 - Folic acid deficiency
- Anaemia of chronic disorder
- Haemolytic anaemia
 - Hereditary
 - Acquired
 - Intra-corpuscular
 - Extra-corpuscular
- Aplastic anemia

Haemoglobinopathies.

- Sickle cell syndromes

- Thalassaemias

Myeloproliferative diseases.

- Chronic myeloid leukemia (CML)
- Polycythemia vera
- Myelofibrosis
- Essential thrombocytosis
- Leukemias.
 - Acute
 - Chronic
- Lymphomas
 - Non-Hodgkin's
 - Hodgkin's

Blood groups and blood transfusion.

Bone marrow transplantation.

Disorders of haemostasis.

- Thrombocytopenia
- Idiopathic thrombocytopenic purpura (ITP)
- Von Willebrand's disease.
- Vessel wall disorders.
- Disorders of coagulation.
- Haemophilia
- Vitamin K deficiency.
- Disseminated intravascular coagulation (DIC).

Anticoagulants Therapy

- Heparin
- Oral (warfarin etc.)
- Vit. K infusion
- Antiplatelet drugs

CLINICAL TRAINING:

Important Topics To Be Discussed:

Case discussion for diagnosis and management of common haematological disorders

- Anaemias
- Bleeding disorders
- Myeloproliferative or lymphoproliferative diseases

Understand the Symptomatology to reach the Differential Diagnosis:

- Lassitude
- Dyspnoea
- Infections
- Edema
- Gum hypertrophy

- Bleeding tendency
- Bruising purpura
- Lymph node enlargement
- Weight loss
- Facial swelling
- Bone pain
- Jaundice
- Hepatosplenomegaly
- Hypersensitivity/ allergic reactions etc.

Skills To Be Learnt:

- History taking in general
- General physical examination, pallor, cyanosis, jaundice, clubbing, koilonychia, lymph nodes, edema, pulse, cyanosis, fever, headache, anorexia, weight loss, pain, facial swelling etc.
- Examination and assessment of the extent of the disease
- Interpretation of related radiological and laboratory investigations
- General medication and prescription writing in Haematology.

Procedures (Observe/ Assist):

- Injection I/V, I/M, S/C, intradermal
- Collection of samples of blood/blood film preparation
- Perform I/V lines/fluids/blood/blood products, direct branula, cutdown, CVP etc.
- Observe bone marrow aspiration/ trephine

12. PSYCHIATRY

COURSE OUTLINES:

- Mood disorders.
- Major depressive episodes
 - Unipolar
 - Bipolar
 - Dysthymic
 - Atypical
- Maniac episodes
- Anxiety disorders.
- Acute anxiety states
- Panic disorders
- Generalized anxiety disorders
- Psychic Traumatic disorders
- Obsessive-compulsive disorders
- Phobic disorders

- Schizophrenia.
- Alcoholism.
- Addiction.
- Psychosexual disorders in men and women.

CLINICAL TRAINING:

Important Topics To Be Discussed:

Case discussion for diagnosis and management of common Psychiatric disorders like-

- Anxiety
- Depression
- Schizophrenia
- Manic depressive psychosis
- Phobias
- Eating disorders

Understand the Symptomatology to reach the Differential Diagnosis:

Skills To Be Learnt:

- History taking in psychiatry
- Clinical examination of patients
- Counseling and psychoanalysis especially in patients with suicidal and homicidal attitude.
- Interpretation of related radiological and laboratory investigations
- General medication and prescription writing in psychiatry

Procedures:

- Psychotherapy
- Electroconvulsive Therapy (ECT)
- Electroencephalogram (EEG)

13. MISCELLANEOUS AND EMERGENCIES

- Heat stroke
- Snake bite
- Electric shock
- Poisoning etc.

Procedures To Be Performed/Observed/Assisted:

Perform:

- Injection I/V, I/M, S/C, intradermal
- Oxygen therapy
- Urinary catheterisation – collection and samples of blood

Observe:

- Observe I/V lines/fluids/blood/blood products, direct, branula, cutdown, CVP
- N/G tube passing and feeding
- Foley's catheter/Red rubber catheter, IOP record maintenance
- Endotracheal tube placement
- Endotracheal suction/maintenance of airway/nursing on side etc.
- Aspiration of fluids (Pleural, Pericardial, Peritoneal, Knee)
- Lumbar puncture
- O₂ therapy
- Nebulisation
- ECG taking/reading
- X-ray chest reading
- Barium series
- I/V urograms
- Bone and joint X-ray reading for medical problems (Rheumatoid arthritis, osteoarthritis, collapse vertebra, caries spine, multiple myeloma, cervical rib etc.)
- Preparing a patient for endoscopies, upper and lower GIT

THE LOG BOOK/CLINICAL CARD RECORD

The student is expected to make a record of his/her achievements in the log book. The log book is a collection of evidence that learning has taken place, it is a reflective record of achievements. The log book shall also contain a record of the procedures which student would have performed in 3rd, 4th & 5th year.

RECOMMENDED BOOKS:

1. **Practice of Medicine** by Davidson.
2. **Clinical Medicine** by Parveen J Kumar & Michael Clark
3. **Hutchison's Clinical Methods** by Michael Swash. 21st edition
4. **Basic psychiatry** by Myre Sim, e. B. Gordon
5. **Oxford Text Book of Psychiatry**
6. **ABC of Dermatology**. Latest Edition.
7. **Smith's General Urology** by Emil A. Tanagho and Jack W. McAninch
15th edition. 2007
8. **Online Journals and Reading Materials** through HEC Digital Library Facility