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Paper II: Technical Subject

Section (A) Internal Medicine - 45 Marks

1. Anatomy

1.1 Pulmonology

- 1.1.1 Gross anatomy of upper and lower respiratory tracts, lungs with lobes and fissureswith surface marking
- 1.1.2 Concept of bronchopulmonary segments and lobule or acinus aerated by aterminal bronchiole
- 1.1.3 Histology of alveolar lining cells
- 1.1.4 Pulmonary vascular bed
- 1.1.5 Pleura and pleural space, functions and histology
- 1.1.6 Media stinum and their structures
- 1.1.7 Thoracic cage and primary and secondary muscles of respiration
- 1.1.8 Thediaphragm its attachments, nerve supply and function
- 1.1.9 Lymphatic drainage of lungs and pleura
- 1.1.10 Innervation of the lungs
- 1.1.11 Thoracic receptors

1.2 Cardiovascular system

- 1.2.1 Gross anatomy of the heart and circulatory system
- 1.2.2 Histology of the cardiac muscles
- 1.2.3 Embryology of the heart and circulation
- 1.2.4 Coronary and pulmonary circulation

1.3 Gastrointestinal tract

- 1.3.1 Gross anatomy of the gastrointestinal tract at different levels
- 1.3.2 Gross anatomy of the hepatobiliary system and pancreas
- 1.3.3 Histological aspects of GI tract at different levels
- 1.3.4 Blood supply and development aspects of GI tract and hepatobiliary system

1.4 Kidney and urinary tract

- 1.4.1 Gross anatomy of the kidney and urinary tract
- 1.4.2 Structure of nephron and function at different level
- 1.4.3 Development of kidney and urinary tract
- 1.4.4 Renal circulation

1.5 Endocrinal organs

- 1.5.1 Gross anatomy of different endocrinal organs and their development
- 1.5.2 Histology of different endocrinal organs

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2. Physiology

- 2.1 Homeostatic behaviors of different fluid compartment in the body and implications during common clinical situations of burn, blood loss, diarrhea, vomiting, etc.
- 2.2 Role of pH in normal and in abnormal conditions e.g., diarrhea, vomiting, airway obstruction, medication, etc
- 2.3 Functions of micro/macro molecular, organelles and other structures of the cell
- 2.4 Nutritional requirements of normal people (different ages, male, female) and ill patients of all categories with their modality of supplement
- 2.5 Mechanisms of metabolic response to trauma and infection
- 2.6 Function of hemopoietic /R.E.system
- 2.7 Blood groups, methods of transfusion of blood & blood products & their hazards
- 2.8 Mechanism of haemostais, fibrinolysis & methods to control haemorrhage
- 2.9 Types of excitable tissues and methods of recording their activity e.g., EMG, EEG, ECG, etc
- 2.10 Cellular communication, chemical/neuronal/ electrical/synaptic transmission
- 2.11 Autonomic nervous system
- 2.12 Neuro transmitters, their synthesis and metabolism
- 2.13 Drugs affecting neurotransmitter activity
- 2.14 Cardiac and smooth muscles
- 2.15 Calcium metabolism
- 2.16 Pain and the mechanism of pain
- 2.17 Physiology of consciousness and sleep mechanism
- 2.18 Effect of injury to neurons
- 2.19 Different methods of monitoring of the heart functions
- 2.20 Drugs used for inotropic & chronotropic effects
- 2.21 Mechanism of blood pressure regulation
- 2.22 Physiology of circulation of different organ in the body
- 2.23 Pathophysiology of shock and principle of their management
- 2.24 Capillary exchange
- 2.25 Assess vascular functions
- 2.26 Respiration & cause of breathlessness
- 2.27 Measure blood flow

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- 2.28 Measure/ assess blood gas
- 2.29 Mechanism of respiratory control
- 2.30 Mechanism of transport
- 2.31 Use of oxygen as therapy
- 2.32 Mechanism of absorption from gut and physiology of gastrointestinal motility
- 2.33 Composition of GI and hepatobiliary secretions and methods for their assessment
- 2.34 Normal functions of the liver
- 2.35 Formation of urine
- 2.36 Mechanism of osmoregulation
- 2.37 Normal thermoregulation
- 2.38 Mechanism of hormone synthesis, secretion, metabolism

3. Pathology

- 3.1 Concept of cell injury, different types of degeneration & trauma
- 3.2 Principles of inflammation and the results of various types of inflammation
- 3.3 Acute and chronic inflammation
- 3.4 Tissue regeneration, wound healing and healing process
- 3.5 Various types of disorder of growth
- 3.6 Principles of neoplasia
- 3.7 Benign and malignant tumor
- 3.8 Mechanism of thrombosis, and embolism and their effects
- 3.9 Ischemia & infarction
- 3.10 Mechanism of blood clotting and different types of bleeding disorders
- 3.11 Principle of blood grouping system & complications of blood transfusion
- 3.12 Principle of shock
- 3.13 Principle of genetics and apply its concept in hereditary diseases
- 3.14 Principle of immune response
- 3.15 Humoral and cell mediated immunity
- 3.16 Principle of organ transplantation and causes of its rejection
- 3.17 Principle of Host Parasite relationship
- 3.18 Different types of micro-organism (Bacteria, Fungus, Parasite, and Virus)
- 3.19 Pathogenic and non-pathogenicmicro-organisms
- 3.20 Principle of asepsis & antisepsis, sterilization and disinfection
- 3.21 Principle of antibiotic and chemotherapy

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- 3.22 Microbes that cause wound infection
- 3.23 Principle of Hospital infection (Nosocomial infection)

4. Clinical Pharmacology

4.1 General clinical pharmacology

- 4.1.1 Pharmacokinetics, pharmacodynamics, adverse drug reactions, drug interactions, drug use in childhood, pregnancy, lactation, and old age
- 4.1.2 Clinical trials
- 4.1.3 Rational drug use

4.2 Neurosensory and musculoskeletal systems

- 4.2.1 Parasympathomimetics and parasympatholytics, adrenergic and antiadrenergic drugs, narcotic and non-narcoticanalgesics, non-steroidalanti-inflammatory drugs, alcohol, sedative/hypnotics, anti-parkinsonism drugs, anesthetics (general and local), appetite suppressants
- 4.2.2 Drugs for psychiatric disorder, gout and rheumatoid arthritis, vertigo, and eye, ENT, and skin diseases

4.3 Cardiovascular system

- 4.3.1 Drugs for the treatment of heart failure, cardiac arrhythmias, angina pectoris, hypertension, shock, thromboembolic disorders, myocardial infarction, anemia
- 4.3.2 Hemostatics, anti-coagulants, and lipid-lowering drugs

4.4 Gastrointestinal system

- 4.4.1 Drugs for peptic ulcer, diarrhoea, constipation
- 4.4.2 Antispasmodics, antiemetics

4.5 Respiratory system

- 4.5.1 Drugs for bronchial asthma
- 4.5.2 Antihistamines and other antiallergic agents
- 4.5.3 Cough preparation, nasal decongestants, and respiratory stimulants

4.6 Reproductive/Endocrine systems

- 4.6.1 Anti-diabetics, thyroid and anti-thyroid drugs, corticosteroids, sex hormones and antagonists, hypothalamic and pituitary hormones
- 4.6.2 Drugs used in labor and puerperium

4.7 Renal/Electrolyte system

4.7.1 Drugs for edema, and fluid/electrolyte and acid/base disturbances

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4.8 Infections

- 4.8.1 General principle of chemotherapy
- 4.8.2 Antibacterial, antiprotozoal, anthelminthic, antifungal, and antiviral drugs

4.9 Miscellaneous drugs

- 4.9.1 Drugs for malignant diseases and immunosuppression
- 4.9.2 Vaccines
- 4.9.3 Vitamins and minerals
- 4.9.4 Antidotes

5. Recent Advances in Internal Medicine and Emergencies

- 5.1 Recent advances in all disciplines of Internal Medicine
- 5.2 Cardiovascular emergencies: Cardiac arrest, Acute MI, Cariogenic shock, Cardiacarrhythmias, Pulmonary edema, Hypertensive crisis, Acute cardiac tamponade, DVT & pulmonary embolism
- 5.3 Respiratory emergencies: Hemoptysis, Acute respiratory failure, Pneumothorax, Statusasthmaticus, ARDS
- 5.4 Gastrointestinal emergencies: G.I. bleeding, Acute gastroenteritis and food poisoning, Acute pancreatitis, Hepatic failure, Acute abdomen
- 5.5 Endocrine and metabolic emergencies: DKA and coma, Hypoglycemia, Hyperosmolar non ketotic diabetic coma, Thyroid crisis, Myxoedema coma, Pheochromocytoma, Acuteadrenocorticalcrisis, Hypopituitarism
- 5.6 Hematological emergencies: Aplastic anaemia, Agranulocytosis, Acutethromocythpenicpurpur, Leukemia, Hemophiliaandallieddisorders
- 5.7 Renal emergencies: Renalcolic, Renalfailure, Hematuria
- 5.8 Miscellaneous emergencies:
 - 5.8.1 Emergencies in fluid and electrolyte balance
 - 5.8.2 Acute emergencies in infectious and tropicaldisease
 - 5.8.3 Malaria
 - 5.8.4 Septicemia
 - 5.8.5 Tetanus
 - 5.8.6 Snakebite
 - 5.8.7 Dog bite & rabies
 - 5.8.8 Poisonings
 - 5.8.9 Drowning
 - 5.8.10Electrocution
 - 5.8.11High altitude sickness

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6. Principles and Practice of Internal Medicine

- 6.1 Gastroenterology
 - 6.1.1 Acid peptic diseases
 - 6.1.2 Gastrointestinal bleeding: upper (nonvariceal/variceal) and lower
 - 6.1.3 Gastroesophageal reflux disease (GERD)
 - 6.1.4 Dysphagia in relation to malignancy and achalasia
 - 6.1.5 Malabsorption syndrome
 - 6.1.6 IBD: ulcerative colitis and Crohn's disease
 - 6.1.7 Diverticular diseases
 - 6.1.8 Irritable bowel syndrome
 - 6.1.9 Acute abdomen
 - 6.1.10Ascites
 - 6.1.11Liver disorders
 - 6.1.12Hepatitis: acute and chronic
 - 6.1.13Cirrhosis with special reference
 - 6.1.14Hepatic cellular cancer
 - 6.1.15 Jaundice: obstructive and non-obstructive
 - 6.1.16Liver failure: acute and chronic
 - 6.1.17Pancreas
 - 6.1.18Acute, recurrent & chronic pancreatitis
 - 6.1.19Pancreatic tumor (exocrine & endocrine)
 - 6.1.20Cystic fibrosis & other childhood disorder of the pancreas
 - 6.1.21Hereditary pancreatitis
 - 6.1.22Pancreatic transplantation

6.2 Respiratory Medicine

- 6.2.1 Anatomy and applied physiology of the respiratory system
- 6.2.2 Understanding of basic pathophysiology and be able to manage the disease processes mentioned below considering the relevant differential diagnosis:
 - 6.2.2.1 Pneumonias
 - 6.2.2.2 Lung abscess
 - 6.2.2.3 Tuberculosis
 - 6.2.2.4 Fungal infections
 - 6.2.2.5 Bronchial asthma
 - 6.2.2.6 Chronic bronchitis, emphysema and cor-pulmonale
 - 6.2.2.7 Cystic fibrosis
 - 6.2.2.8 Pulmonary eosinophilia

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- 6.2.2.9 Bronchiectasis (including its postural drainage management)
- 6.2.2.10 Pulmonary oedema (cardiogenic and non-cardiogenic including ARDS)
- 6.2.2.11 Interstitial lung disease (including fibrosingalveolitis, extrinsicalveolitis, lung fibrosis, sarcoidosis and pneumoconiosis)
- 6.2.2.12 Carcinoma lung and other neoplasms
- 6.2.2.13 Mediastinal masses
- 6.2.2.14 Pleural diseases(e.g.,drypleurisy, pleural effusion,empyema)
- 6.2.2.15 Pneumothorax
- 6.2.2.16 Sleepapnoea syndrome
- 6.2.2.17 Acute and chronic respiratory failure

6.3 **Hematology**

- 6.3.1 Physiology and pathophysiology of bloodcell formation and haemostasis
- 6.3.2 Pathophysiology, causes and management of:
 - 6.3.2.1 Anaemia: iron deficiency (with iron metabolism), megaloblastic, haemolyticanaemia and aplastic anaemia
 - 6.3.2.2 Haemoglobinopathy and Polycythemia
 - 6.3.2.3 Leukaemia: myeloid (acute and chronic) and lymphoid (acute and chronic)
 - 6.3.2.4 Myeloproliferative diseases
 - 6.3.2.5 PV(Polycythemia Vera)
 - 6.3.2.6 Myelofibrosis
 - 6.3.2.7 Essential thrombocytosis
 - 6.3.2.8 Bleeding Disorders
 - 6.3.2.9 Plateletes Disorders
 - 6.3.2.10 Lymphomas: Hodgkin's and NonHodgkin's
- 6.3.3 Explain the underlying principles and complications of:
 - 6.3.3.1 Blood Transfusion, Blood group and Rh factor, Principles of cross match, Hazards of transfusion, Blood–platelets component, Bone MarrowTransplantation
 - 6.3.3.2 Infectious and Tropicaldiseases
- 6.3.4 Understanding of the following procedures:
 - 6.3.4.1 Peripheral blood smear
 - 6.3.4.2 Splenicaspiration
 - 6.3.4.3 Z- N staining
 - 6.3.4.4 Gram's staining

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- 6.3.4.5 Bone marrow examination
- 6.3.4.6 Stool examination
- 6.3.4.7 Aldehyde test
- 6.3.4.8 Liver biopsy
- 6.3.5 Microbiological aspects of various infectious disease
- 6.3.6 Underlying pathogenesis of various infectious/tropical disorders
- 6.3.7 Basic pharmacokinetics of drugs used for treatment of tropical and infectious diseases
- 6.3.8 Diagnose and manage following emergencies:
 - 6.3.8.1 Septicemia, septic shock
 - 6.3.8.2 Cerebral malaria/black waterfever
 - 6.3.8.3 Tetanus/gasgangrene
 - 6.3.8.4 Acute viral encephalitis
 - 6.3.8.5 Hepatic Encephalopathy
 - 6.3.8.6 Enteric Encephalopathy
 - 6.3.8.7 HIV&AIDS

6.4 **Rheumatology**

- 6.4.1 Common clinical presentations of rheumatic disease
- 6.4.2 Systemic perspective of rheumatic diseases in different systems
- 6.4.3 Genetics and rheumatic diseases
- 6.4.4 Inflammatory arthritides (RA, SpA, crystal arthritis and others)
- 6.4.5 Infection and joints (Septic arthritis and others)
- 6.4.6 Connective tissue diseases (SLE, systemic sclerosis and others)
- 6.4.7 Vasculitides
- 6.4.8 Diseases of bones and cartilages (osteoarthritis, osteoporosis and others)
- 6.4.9 Regional musculoskeletal pain syndromes
- 6.4.10Miscellaneous conditions (autoinflammatory diseases, sarcoidosis & others)
- 6.4.11Bone marrow aspiration
- 6.4.12Bone marrow biopsy
- 6.4.13Z-N staining
- 6.4.14Muscle biopsy
- 6.4.15Skin biopsy
- 6.4.16Arthrocentesis
- 6.4.17Intra-articularinjections
- 6.4.18Anatomical and physiological aspects of joints muscle and blood vess elsin relation to rheumatologic conditions
- 6.4.19Basisofcellularandhumoralimmuneresponse, autoimmunity and g

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enetherapyin rheumatological disorders

- 6.4.20Interpret the results of various tests such as LEcell, ANF, antids DNA, electrophoresis, complement system
- 6.4.21Analysis of synovial fluid
- 6.4.22Interpret the X-ray findings of bones and joints
- 6.4.23Interpretation of the results of:
 - 6.4.23.1 Muscle biopsy
 - 6.4.23.2 Skin biopsy
 - 6.4.23.3 Kidney biopsy
- 6.4.24To diagnose and manage rheumatologic emergencies

6.5 Endocrinology and metabolic diseases

- 6.5.1 Understanding of the following procedures:
 - 6.5.1.1 Arterial puncture for blood gas analysis
 - 6.5.1.2 Use of glucometer and stripes for blood sugar
 - 6.5.1.3 Urine examination for sugar, Ketones, Specific gravity
- 6.5.2 Interpret the findings of the following procedures/tests:
 - 6.5.2.1 Arterial blood gas analysis
 - 6.5.2.2 Pulse oximetry
 - 6.5.2.3 Thyroid function tests
 - 6.5.2.4 Pituitary function tests
 - 6.5.2.5 Parathyroid function tests
 - 6.5.2.6 Adrenal gland functiontests
 - 6.5.2.7 G.T.T
 - 6.5.2.8 Sex hormone analysis
 - 6.5.2.9 Plain X-ray of various parts concerned
- 6.5.3 Interpret the finding of:
 - 6.5.3.1 FNAC report of thyroid gland
 - 6.5.3.2 CT scan reports of various endocrine organs
- 6.5.4 Diagnose and manage following emergencies:
 - 6.5.4.1 D.K.A. and comaandhyperosmolarnonketoticcoma
 - 6.5.4.2 Hypoglycaemia
 - 6.5.4.3 Thyroidcrisis
 - 6.5.4.4 Myxoedemacoma
 - 6.5.4.5 Phaeochromocytoma
 - 6.5.4.6 Hypopituitarism
 - 6.5.4.7 Hypocalcaemia
 - 6.5.4.8 Acuteadrenocorticalcrisis
 - 6.5.4.9 Hypopituitarism
- 6.5.5 Explain the structural and functionalbasis:
 - 6.5.5.1 Various endocrine glands, homeostatic control

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mechanism of hormone regulation, and the genetic basis of various endocrine disorders

7. Cardiology

- 7.1 Diagnose order and interpret appropriate investigations and manage the following clinical conditions:
 - 7.1.1 Acute Rheumatic Fever
 - 7.1.2 Valvular heart disease: rheumatic and non-rheumatic
 - 7.1.3 Common congenital heart diseases
 - 7.1.4 Hypertension and hypertensive heart disease
 - 7.1.5 Ischaemic heart disease:
 - 7.1.5.1 Stable and unstable angina
 - 7.1.5.2 Acute myocardial infraction
 - 7.1.6 Cardiomyopathies: dilated cadiomyopathy, hypertrophic cardiomyopathy, restrictive cardiomyopathy
 - 7.1.7 Pericardial diseases: pericarditis, pericardial effusion and constrictive pericarditis
 - 7.1.8 Diseases of great arteries: coarctation of aorta, aortitis, aneurysm
 - 7.1.9 Deepveinthrombosis: thromboembolism &pulmonaryembolism
 - 7.1.10Arrhythmias
 - 7.1.10.1 Bradyarrhythmia (SA, AVblocks)
 - 7.1.10.2 Tachyarrhythmias (SVT, VT, VF, WPW, AF, AVF)
 - 7.1.10.3 Infective Endocarditis
- 7.2 Interpret the investigative of following procedures:
 - 7.2.1 ECG with various arrhythmias
 - 7.2.2 Stress electrocardiomyopathy
 - 7.2.3 Echocardiogram of common acquired and congenital heart disease
 - 7.2.4 Cardiac enzymes, pericardial fluid analysis
- 7.3 Diagnose and manage
 - 7.3.1 Pulmonary oedema and cardiogenic shock
 - 7.3.2 Dyslipidaemias
 - 7.3.3 Corpulmonale and pulmonaryarterioal hypertension
 - 7.3.4 Electrolyte imbalance
 - 7.3.5 Basic science applied to cardiology
 - 7.3.6 Fetal circulation
 - 7.3.7 Coronary circulation
 - 7.3.8 Pulmonary circulation
 - 7.3.9 Embryogenesis of congenital heart diseases
 - 7.3.10Valvularapparatus

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- 7.3.11Conduction system
- 7.3.12Pharmacology of cardiac drugs
- 7.3.13Exercisephysiology
- 7.3.14Etiopathogenesis and pathophysiology of various cardiac diseases in relation to clotting system, lipid abnormalities, infectious diseases
- 7.3.15Hemodynamics (exercise, high altitude, metabolic and hormonal disorders, fetal circulation)

8. Nephrology

- 8.1 Diagnose, investigate and treatment of following renal emergencies:
 - 8.1.1 Acute renal failure
 - 8.1.2 Renal colic
 - 8.1.3 Haematuria
 - 8.1.4 Fluid, electrolyte and acid-basic imbalance
- 8.2 Diagnose, investigate and treatment of following common renal diseases:
 - 8.2.1 Acute glomerulonephritis
 - 8.2.2 Nephrotic syndrome
 - 8.2.3 Urinary tract infection
 - 8.2.4 Chronicrenal failure
 - 8.2.5 Adult polycystic kidney disease, Alperts syndrome
 - 8.2.6 Diabetic Nephropathy
 - 8.2.7 Renal tubular acidosis (RTA)
 - 8.2.8 Interstitial Nephropathy
 - 8.2.9 Toxic Nephropathy
 - 8.2.10Lupus Nephritis
 - 8.2.11Nephrocalcinosis and Nephrolithiasis
 - 8.2.12Renal arterystenosis (RAS)
- 8.3 Interpret investigations of:
 - 8.3.1 Renal function test(RFT)
 - 8.3.2 Blood gas analysis
 - 8.3.3 Renal biopsy report
- 8.4 Basic principles of haemodialysis and peritoneal dialysis and their specific indications

9. Oncology

- 9.1 Etiopathogenesis of cancer
- 9.2 Epidemiology of cancer

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- 9.3 Cancer prevention & screening
- 9.4 Diagnosis & diagnostic tools in cancer
- 9.5 Principles of cancer management
- 9.6 Common cancers: Oesophagus, stomach, colorectum, hepatocellular cancer, cancers of the biliary tree, pancreas, breast, lung, renal cell carcinoma, prostate, testicular, GIST, ovarian, endometrial, hematological & lymphoid malignancies, cancers of the endocrine system, HIV-associated cancers, tumors of the mediastinum etc.
- 9.7 Oncological emergencies & paraneoplastic syndromes
- 9.8 Anticancer therapeutics

10. Dermatology

- 10.1 Scabies
- 10.2 Superficial mycoses
- 10.3 Superficial bacterial infections
- 10.4 Diagnosis and management of drug induced cutaneous eruptions

11. Psychiatry

- 11.1 Diagnose anxiety neurosis, depression and schizophrenia
- 11.2 Differentiate between functional and organic psychoses (simple and uncomplicated)
- 11.3 Treat cases of anxiety neurosis and depression
- 11.4 Diagnose and manage substance abuse

Section (B) Neurology - 55 Marks

1. Introduction to Neurology

- A. Anatomy (including Vascular Anatomy) of Central and Peripheral Nervous System
 - B. Physiology of Nervous System
 - C. Pathogenesis of Neurological Diseases
 - D. Approach to the Patient with Neurological Diseases
 - E. Investigating Neurological Diseases
 - 1. Neuroimaging: CT and MRI
 - 2. Neurovascular Imaging
 - 3. EEG and Evoked Potentials
 - 4. Nerve Conduction Studies and Electromyography
 - 5. Lumbar Puncture and CSF Examination
 - 6. Muscle and Nerve Biopsy

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- 7. Neurophysiological evaluation
- 8. DNA Diagnosis

2. Clinical Manifestations of Neurological Diseases

- A. Pain: Pathophysiology and Management
- B. Headache
- C. Back and Neck pain
- D. Aphasia, Memory Loss and Other Higher Cerebral Disorders
- E. Acute Confusional States and Coma
- F. Dizziness, Syncope, and Vertigo
- G. Imbalance and Disorders of Gait
- H. Visual Disturbances
- I. Hydrocephalus and Brain Oedema
- J. Disorders of Taste, Smell, and Hearing
- K. Sleep Disorders

3. Diseases of the Central nervous System

- A. Seizures and Epilepsy
- B. Critical Care Neurology
- C. Concussion and Other Head Injuries
- D. Cerebrovascular Disorders including Subarachnoid Haemorrhage and Vascular Diseases of the Cerebral Veins/Sinuses and Spinal Cord
- E. Alzheimer's Disease and Other Dementias
- F. Parkinson's Disease and Other Movement Disorders
- G. Ataxic Disorders
- H. Amyotrophic Lateral Sclerosis and Other Motor Neurone Disorders
- I. Disorders of the Autonomic Nervous System
- J. Trigeminal Neuralgia and Neuropathy
- K. Bell's Palsy and Other Cranial Nerve Disorders
- L. Diseases of the Spinal Cord
- M. Primary and Metastatic Tumours of the Nervous System
- N. Neurological Disorders of the Pituitary and Hypothalamus
- O. Paraneoplastic Neurological Syndromes
- P. Multiple Sclerosis and Other Demyelinating Disorders
- Q. Meningitis, Encephalitis/Encephalopathy, Brain Abscess, and Empyema
- R. Chronic and Recurrent Meningitis
- S. HIV Neurology
- T. Prion Diseases
- U. Head and Spinal Injuries
- V. Neurological Manifestations of Systemic Diseases

पाटन स्वास्थ्य विज्ञान प्रतिष्ठान, सेवा आयोग प्राज्ञिक सेवा, इन्टर्नल मेडिसिन समूह, Neurology उपसमूह, सहायकप्राध्यापक पद, (नौ ख) (९ख) तहको खुला र आन्तरिक प्रतियोगितात्मक परीक्षाको पाठ्यक्रम

4. Diseases of the Nerves and Muscles

- A. Approach to the Patient with Peripheral Neuropathy
- B. Charcot-Marie-Tooth Disease and Other Hereditary Neuropathies
- C. Guillain-Barre Syndromes and Other Immune-Mediated Neuropathies
- D. Myasthenia Gravis and Other Diseases of the Neuromuscular Junctions
- E. Approach to a Patient with Muscle Disease
- F. Muscular Dystrophies and Other Muscular Diseases
- G. Idiopathic Inflammatory Myositis
- H. Metabolic and Mitochondrial Myopathies

5. Chronic Fatigue Syndrome

- A. Fibromyalgia
- B. Chronic Fatigue Syndrome

6. Psychiatric Disorders

A. Mental Disorders

8. Neurological Rehabilitation

7. Alcoholism, Toxins and Drug Dependence

- A. Alcohol and Alcoholism
- B. Cocaine, Opioids, and Other Commonly Abused Drugs
- C. Neurological Complications of Cancer Chemotherapy

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