Detailed Syllabus for the Post of Assistant Surgeon/ Casualty Medical Officer

(Cat.Nos:401/2024)

TOTAL MARKS: 100

MODULE -I - GENERAL MEDICINE (20 Marks)

MEDICINE AND ALLIED SPECIALITIES

1. INFECTIONS

- a. PUO definitions common causes investigations and management guidelines
- b. Tuberculosis Diagnosis Pulmonary & Extra pulmonary investigations and treatment - MDR TB - XDR TB , NTEP guidelines
- c. Meningitis Viral / bacterial / TBM/ fungal.
- d. Acute diarrhoeal disease (ADD) / Bacillary dysentery
- e. Viral hepatitis Types / clinical features / Management National control programme
- f. Malaria / Filaria
- g. Exanthematous fever / Eg.\chickenpox
- h. Diphtheria / Tetanus / Herpes Zoster / Brucella / Dengue / Leptospirosis/ Scrub typhus / Typhoid fever. Evaluation and Management
- i. Kala Azar / Nipha / Zika / West nile/ Japan B encephalitis / H1N1/ Covid 19. Clinical features and management
- j. STDS HIV. Control programme . Clinical features and management.
- k. Fungal infection . Candidiasis / mucormycosis.

2. IMMUNOLOGY

a. Angioedema / Anaphylaxis

3. GENETIC DISORDERS

a. Hemophilia / Spinal muscular atrophy (SNA)

4. POISONING

a. Organ phosphorous / Drug over dosage/ Odollum / Kerosene/ Copper sulphate / Acid / Other common poisoning .

5. BITE

- a. Snake / Insect/ Scorpion/ Honey bee / Wasp
- 6. Hanging / Near drowning / electric shock management

7. CVS

- a. Coronary artery disease Risk factors / Clinical features/ management
- b. Arrhythmia Tachy / Brady arrhythmias

- c. Heart failure Management
- d. Congenital heart disease Cyanotic/ acyanotic
- e. Rheumatic fever Clinical features Diagnosis Management and Prophylaxis
- f. Infective endocarditis Diagnosis and management
- g. Pericardial effusion
- h. DVT / Pulmonary embolism Diagnosis and management
- i. Anticoagulation
- j. Hypertension : Primary / secondary / evaluation and management / guidelines

8. GIT

- a. Acid peptic disease / inflammatory bowel disease Ulcerative colitis / Crohn's disease
 - b. Approach to jaundice
 - c. Approach to anaemia

9. LIVER

a. Chronic liver disease - Cirrhosis / Hepatocelular carcinoma

10.HAEMATOLOGY

- a. Acute leukemia / Chronic leukemia/ Myeloma / Lymphoma/ Aplastic anaemia/ Polycythemia/ ITP / TTP/ HUS/ DIC (Disseminated Intravascular coagulation)
- b. Haemolytic anaemia Sickle cell disease / Thalassemia / Hereditary Spherocytosis / G6PD deficiency - PNH (Paroxismal nocturnal hemoglobinuria)

11.RESPIRATORY SYSTEM

a. Bronchial asthma / COPD / ILD / Pleural disease / Occupational lung disease / Carcinoma lung/ Acute respiratory distress syndrome (ARDS)

12. RENAL SYSTEM

- a. Acute glomerulonephritis (AGN) / Nephrotic syndrome
- b. Acute renal failure / Chronic renal failure
- c. Dialysis / Renal transplantation

13.CNS

- a. Migraine / Cluster headache
- b. Seizure disorder
- c. Stroke Thrombotic haemorrhage
- d. Approach to vertigo
- e. Parkinsonism

- f. Demyelination Guillain Barre syndrome
- g. Spinal cord diseases Compressive and non-compressive myelopathy
- h. Peripheral neuropathy
- i. Dementia / Delirium
- j. Tumours Pituitary / Meningioma / Glioma/ Acoustic Schwannoma
- k. Cerebral venous thrombosis

14.GERIATRICS

- a. Age related common problems in elderly
- b. Drug therapy in elderly

15.RHEUMATOLOGY

- a. Rheumatoid arthritis / SLE/ Spondyloarthropathy / Scleroderma / Polymyositis/ Dermatomyositis/ Sjogren's syndrome / Behcet's syndrome
- b. Gout

16.ENDOCRINE DISEASES

- a. Diabetes mellitus Type 1 / Type II
- b. Specific types Eg. MODY / Chronic calcific pancreatitis
- c. Metabolic syndrome
- d. Thyroid Hypothyroidism and Hyperthyroidism
- e. Parathyroid
- f. Metabolic bone diseases Osteoporosis / Rickets
- g. Cushing's Syndrome / Conn's syndrome / Pheochromocytoma
- h. Hypogonadism Infertility

17.FLUID AND ELECTROLYTE BALANCE

- a. Metabolic acidosis / Alkalosis
- b. Hyponatremia / Hypernatremia
- c. Hyokalemia / Hyperkalemia
- d. Hypomagnesemia

MODULE - 2 OBSTETRICS AND GYNAECOLOGY (14 Marks)

OBSTETRICS

- 1. Pregnancy Diagnosis
- 2. Antenatal care Objectives
- 3. Common problems in pregnancy
 - a. Anaemia / edema / Nutrition / drugs in pregnancy
 - b. USG

- c. Normal labour / Monitoring
- d. Induction of labour
- e. Delivery: Stages of labour
- f. Prevention of PPH (Post-partum haemorrhage) and management
- g. Aetiology and management of Ante partum haemorrhage (APH)
- h. Obstructed labour
- i. Breech Assisted delivery
- j. Vacuum extraction
- k. Caesarean section Indication
- I. Abortion types / Aetiopathology / management
- m. Bad obstetric history (BOH) assessment
- n. Ectopic pregnancy Diagnosis Clinical features management
- o. Trophoblastic disease Hydatidiform mole Diagnosis and management
- p. Hyperemesis gravidarum
- q. Multiple pregnancy
- r. Intra uterine death (IUD)
- s. Premature rupture of membrane
- t. IUGR (Intra uterine growth retardation
- u. Fetal distress
- v. Medical disorders in pregnancy
 - v.i. Pregnancy induced hypertension Pre-eclampsia and eclampsia
 - v.ii. Heart disease complicating pregnancy
 - v.iii. Diabetes in pregnancy ((Gestational diabetes (GDM)/ Type I and II Diabetes)
 - v.iv. Management of thyroid disorders
 - v.v. Management of SLE and other vasculitis disorders / APLA
 - v.vi. HIV and pregnancy
- w. Contraception various methods
- x. MTP act (Medical Termination of Pregnancy)

GYNAECOLOGY

- 1. Amenorrhea definition / Classification / Investigation and management
- 2. DUB / Post-menopausal bleeding evaluation
- 3. Infertility: Types / investigations / Assisted reproductive methods
- 4. STD (Sexual transmitted diseases)

- 5. Pelvic inflammatory diseases
- 6. D&C
- 7. Cancers screening: Cervical biopsy/ pap smear / tumour markers
- 8. Malignancy of genital organs uterus / cervix / ovary
- 9. Endoscopy Laparoscopy / Hysteroscopy

MODULE- 3 SURGERY

(14 Marks)

- 1. Triage
- 2. Acute pancreatitis
- 3. Flail chest
- 4. Extra dural haemorrhage (EDH)
- 5. SDH(Subdural haemorrhage)
- 6. Glasgow comma scale (GCS)
- 7. Compartment syndrome
- 8. Pseudo cyst of pancreas
- 9. Carcinoma breast Clinical features evaluation and management
- 10.varicose vein Clinical features Investigations Complications and management
- 11. Hydatid cyst
- 12.Gangrene Dry / Wet
- 13. Diabetic foot Grading and management
- 14. Non healing ulcer causes and evaluation
- 15.Lipoma
- 16. Carcinoma oral cavity Aetiology / clinical features and management
- 17. Stages of TB lymphadenitis
- 18. Branchial cyst
- 19. Acute abdomen- aetiology Clinical features, Investigations and management

MODULE- 4 COMMUNITY MEDICINE (14 Marks)

- 1. National programme . NHM/ RBSK/ RCH Program/ School health / NPCDS (National programme Cardiovascular disease, stroke, Diabetes and cancer)
- 2. Biostatistics
 - a. Hypothesis tests 'Z' test / 'T' test / Anova
 - b. Correlation / Chi-square
 - c. Multivariate methods Regression / Factor analysis / Artificial intelligence

3. Concept of health and diseases

- a. Characteristics of agent, host and environmental factors in health and disease and the multifactorial etiology of disease
- b. Understanding the concept of prevention and control of disease
- c. Understanding the natural history of disease and application of interventions at various levels of preventions.
- d. Introduction to various health indicators
- e. Mortality and morbidity assessment Maternal mortality / Perinatal mortality and infant mortality

4. Social and behavioural sciences

- a. Doctor patient relationship
- b. Socio cultural factors related to health and disease
- c. Impact of urbanization on health and disease

5. Environment and Health

- a. Water: Concepts of safe and wholesome water, sanitary sources of waterborne diseases, water purification process, water quality standards.
- b. Physical, chemical, and bacteriological standards of drinking water quality and tests of assessing bacteriological quality of water
- c. Health hazards of air, water, noise, radiation pollution
- d. Concepts of water conservation, rain water harvesting and global warming
- e. Concepts of solid waste, human excreta and sewage disposal
- f. Awareness of standards of housing and its effect of housing on health
- g. Role of vectors in the causation of diseases
- h. Identifying the features of vectors and their control measures.
- i. Life cycles of vectors and advantages and limitations of various vector control measures.
- Mode of action, application cycle of commonly used insecticides and rodenticides
- k. Urban waste management
- I. Radiation prevention and control Health promotion and education / Comunication for behavioural change (Information , education, communication)
- m. Nutrition Vitamins and minerals deficiencies B12 deficiency Pellagra Vit A / Scurvy (Vit C) and other vitamin deficiencies
- n. Basic epidemiology
- o. Epidemiology of specific diseases : Communicable and non communicable

- p. Health care system in India
- q. Health planning, management and administration
- r. Disaster management
- s. Legislation and public health
- t. International health
- u. Health care waste management
- v. Health care of elderly
- w. Mental health and behavioural problems
- x. Development and health interface
- y. Genetics
- z. Disability
- aa. Immunisation National schedule
- ab. Adult immunisation
- 6. Rabies Dog bite Classification management
- 7. National programmes

MODULE- 5 PAEDIATRICS

(12 Marks)

- 1. INFECTION IN CHILDREN
 - a. Poliomyelitis / Acute bronchiolitis / Croup syndromes
 - b. Neonatal jaundice
 - c. Congenital hyperbilirubinemia
 - d. Helminthic infections
 - e. Respiratory distress in new born
 - f. Sepsis in new born
 - g. Neonatal resuscitation
- 2. CNS
 - a. Cerebral palsy / Febrile seizures
 - b. Microcephaly/ Hydrocephalus
 - c. Short stature / Inter sex / Ambiguous genitalia
 - d. Precautious puberty
- 3. Juvenile Rheumatoid Arthritis
- 4. Kawasaki disease
- 5. Congenital malformations
- 6. Low birth weight
- 7. Inborn errors of metabolism

- 8. Common chromosomal disorders Down's syndrome / Turner's syndrome
- 9. Kwashiorkor marasmus

MODULE- 6 ANAESTHESIA / CRITICAL CARE / FORENSIC / PMR - (6 Marks)

- 1. BCLS (Basic life support) / ACLS / Pre anaesthetic check-up / GA
- 2. Pain management
- 3. Bioterrorism Common causes and approach

FORENSIC MEDICINE

- 1. Inquest procedures
- 2. Court procedure: summons / Warrant
- 3. Types of fitness: Medical certificate and medicolegal aspect
- 4. Birth/ death/ Drunkenness/ potency / sexual assault / Pocso
- 5. Intimation
- 6. Consent: Types / informed consent
- 7. Injuries Simple/ grievous
- 8. Rigor mortis
- 9. Pugilistic attitude
- 10.Contrecoup injuries
- 11. Death: Sex identification / Superimposition / DNA
- 12. Biological fluids: Blood preservation / despatch
- 13. Principles of laboratory test
- 14. Seminal and salivary stains preservation
- 15. State Medical Council / National Medical Council / Function / Disciplinary control
- 16. Medical negligence
- 17. Consumer protection Act

PHYSICAL MEDICINE & REHABILITATION

- 1. Concept of impairment and disability
- 2. Principles of physical therapy various modalities
- 3. Principles of occupational therapy
- 4. Principles of prosthetics and rehabilitation
- 5. Disability evaluation principles people with Disability Act 1995

MODULE - 7 ORTHOPAEDICS

(4 Marks)

- 1. Complications of fracture: General principles and management
- 2. Colle's fracture / supracondylar fracture of humerus / Monteggia fracture/ Galeazzi's fracture

- 3. CTEV
- 4. TB spine
- 5. Bone tumours Osteochondroma / Osteosarcoma/ Ewing's sarcoma , Chondrosarcoma
- 6. Phantom limb
- 7. Arthroscopy
- 8. Gas gangrene
- 9. Bunion
- 10. Hallux valgus
- 11. Ray amputation
- 12.Osteogenesis imperfect
- 13. Scoliosis
- 14. Perthe's disease
- 15. Paget's disease
- 16. Hip replacement / knee replacement

MODULE- 8 ENT

(4 Marks)

- 1. Disease of external ear
 - a. Wax / Otomychosis /Foreign body / Malignant otitis externa
 - b. Acute suppurative otitis media (ASOM) / CSOM
 - c. Deafness Classification / causes / early detection in children/ treatment and rehabilitation / National control programme
 - d. Meniere's disease
 - e. Rhinitis allergic / atopic rhinitis
 - f. Sinusitis Acute / Chronic
 - g. Epistaxis Approach and general management
 - h. DNS / Nasal polyp
 - i. Tonsillitis / Quinsy / Ludwig's angina
 - j. Hoarseness of voice Approach and management
 - k. Stridor

MODULE -9 OPHTHALMOLOGY

(4 Marks)

- 1. Acute conjunctivitis / Chronic conjunctivitis
- 2. Pterygium
- 3. Trachoma
- 4. Glaucoma
- 5. Corneal ulcer

- 6. Scleritis / Episcleritis / Iridocyclitis / Uveitis / Coloboma iris
- 7. Cataract diagnosis and management
- 8. Fundus Papilledema / changes in Hypertension and diabetes
- 9. Photocoagulation / Lasers
- 10. Myopia / Amblyopia / Hypermetropia / Astigmatism / Presbyopia
- 11.Retinal diseases Detachment / Central retinal artery occlusion / Central vein occlusion
- 12. Optic atrophy / Optic neuritis / Enucleation
- 13. Squint / ptosis / Chalazion / Retinitis pigmentosa
- 14. Ocular toxicity of drugs
- 15. Ocular tumours Retinoblastoma
- 16. National programme for control of blindness / eye donation

MODULE-10 DERMATOLOGY

(4 Marks)

- 1. Infections of the skin
- 2. Chronic dermatitis
- 3. Vitiligo / Leucoplakia / Lichen planus / Psoriasis / Pemphigus
- 4. Leprosy Types Investigation and management / Control programme
- 5. Steven Johnson's syndrome / Erythema multiforme
- 6. Dermatological manifestations of internal malignancy

MODULE- 11 PSYCHIATRY

(4 Marks)

- 1. Classification of psychiatric disorder
- 2. Substance abuse / De-addiction treatment / Counselling
- 3. Bipolar disorder / Depression / Schizophrenia
- 4. Sleep disorders
- 5. Mental health and behavioural problems in children
- 6. Legal aspects

NOTE: - It may be noted that apart from the topics detailed above, questions from other topics prescribed for the educational qualification of the post may also appear in the question paper. There is no undertaking that all the topics above may be covered in the question paper