
12. पाठ्यक्रम और परीक्षा ब्लूप्रिंट/ Syllabus and Exam Blueprint

12.1. The Syllabus for the test shall comprise of subjects /knowledge areas as per the Graduate Medical Education Regulations issued by Medical Council of India with prior approval of Government of India. An extract of the same is as follows:

ANATOMY

- General Anatomy : Basic tissues to body, Terminology & Nomenclature
Elements of Anatomy : Osteology, Arthrology, Myology, Angiology, Neurology
Regional Anatomy : Upper limb, Lower limb Thorax-including diaphragm
Abdomen and Pelvis, Head, Neck Brain and Spinal cord
Embryology : Development of individual organs and systems, Postnatal
growth & development
Histology : General Histology Microanatomy of individual organs and
systems
Human Genetics : Principles of Human genetics and Molecular biology
Radiological Anatomy : Skiagrams, Special X-rays, Principles of imaging
techniques.
Surface Anatomy : In cadavers, in the living
Sectional Anatomy : Thorax, Abdomen, Head, Neck and Brain

PHYSIOLOGY

- General Physiology
Body fluids - Blood
Nerve and Muscle
Gastrointestinal Tract
Kidney
Skin and Body temperature
Endocrine Glands
Reproduction
Cardiovascular System
Respiratory System
Central Nervous Systems
Special Senses

BIOCHEMISTRY

Cell and Sub-cellular structures
Hydrogen Ion concentration Acid, Bases, Buffers, Handerson-Haselbach equation
Isotopes and their Application
Carbohydrates
Amino Acids, Peptides and Proteins
Lipids
Nuclear Acids
Enzymes
Vitamins
Biological Oxidation
Digestion and Absorption from GI Tract
Intermediary Metabolism
Carbohydrate Metabolism
Lipid Metabolism
Protein and Amino Acid Metabolism
Purine and Primidine Metabolism
Minerals
Biochemical Genetics and Protein Biosynthesis
Tissue Biochemistry
Liver Functions
Nutrition and Energy Metabolism

PATHOLOGY

Cell injury
Inflammation and Repair
Immunopathology
Infectious diseases
Circulatory disturbances
Growth disturbances and Neoplasia
Nutritional and other disorders
Genetic disorder
Haematology
Cardiovascular Pathology
Respiratory Pathology
Pathology of Kidney and urinary Tract
Hepato-Biliary Pathology
Lymphoreticular System / Spleen
Reproductive System (male & female)
Diseases of the Breast
Musculoskeletal System
Endocrine pathology
Neuropathology

Dermato-Pathology

Ocular Pathology

MICROBIOLOGY

General Microbiology

Immunology

Bacteriology

General Virology

Systemic Virology

Mycology

Parasitology

Clinical / Applied Microbiology

PHARMACOLOGY

General Pharmacology

Autonomic Nervous System

Cardio-vascular System

Diuretics

Drugs affecting blood and blood formation

Autocoids and related drugs

Respiratory System

Gastro-intestinal System

Endocrine pharmacology

Central Nervous System

Psychopharmacology

Drugs in Anaesthetic practice

Chemotherapy

Toxicology

Clinical Pharmacology and Rational drug use

FORENSIC MEDICINE

Definitions

Courts of India

Court procedures

Medical Certifications & medico-legal reports including dying declaration

Death

Changes after death

Inquest by police, magistrate and coroner

Identification

Examination of mutilated human remains

Medico-legal autopsies
Mechanical injuries and wounds
Examination of an injury case
Injuries due to physical agents & their medico legal importance
Asphyxial death
Death due to malnutrition, neglect battered babies
Dowry death
Virginity, sexual offences, sexual perversions
Legitimacy
Pregnancy and delivery
Infanticide
Biological fluids
Seminal stains
Forensic Psychiatry
Medical Jurisprudence
Toxicology

GENERAL SURGERY

Hemorrhage and shock
Fluid, electrolyte and Acid balance, nutrition
Skin tumours, burns, skin grafting
Arterial diseases
Venous diseases
Lymphatic and Lymph nodes
Wounds
Specific and non-specific injections
Tumors, Cysts, Ulcers and Sinuses and Fistulae
Infections of Hand and Foot
Diseases of muscle, tendons, bursae and fascia
Hernia
Umbilical granuloma, fistula, adenoma
Abdominal Wall
Face, Teeth, Gums, Mouth, Tongue, Salivary glands, Neck
Thyroid Glands, Thyroglossal Tract and Endocrines
Breast
Sympathetic System
Cranio-Cerebral injuries
Brain, Nerves
Genito-Urinary System
Kidneys and Ureters

Urinary Bladder
Prostate
Urethra
Penis, Testis and Scrotum
Vasectomy and Recanalisation
Cardiothoracic System
Oesophagus, Stomach and Duodenum
Spleen, Liver, Gall Bladder and bile ducts
Pancreas
Peritoneum
Intestines, intestinal obstruction
Appendix
Rectum and Anal Canal

ANESTHESIA

Anatomy of upper airway
Physiology of Respiration O₂/CO₂ transport. Methods of oxygen therapy.
Pre-operative evaluation/pre-medication
Anaesthetic agents, stages of Anaesthesia
Principles and mechanism of administration of general anaesthetics, balanced Anaesthesia
IPPV, Endotracheal Intubations
Muscle Relaxants
Spinal/Epidural Anesthesia
Local Anesthesia
Cardiopulmonary resuscitation basic, use of simple ventilators
Monitoring
ICU, role of anaesthesiologist in ICU
Shock
Blood Transfusion and Fluid Electrolyte Balance
Sites of respiratory obstruction and management of airway in an unconscious patient
Poisoning
Role of anaesthesiologist in acute and chronic relief.

ORTHOPEDICS

Traumatology
Injuries of bones and joints
Injuries of Lower Extremity
Injuries of the Spine Vascular Injuries
Cold Orthopedics

Regional Conditions
Neuro-Muscular Disorder
Bone and Joint Tuberculosis
Physical Medicine and Rehabilitation

RADIO- DIAGNOSIS

Respiratory System
Cardiovascular System
Gastrointestinal System
Obstetrics & Gynaecology
Skeletal System
Central Nervous System
Excretory System

RADIOTHERAPY

Principles of Radiotherapy
Principles of Chemotherapy
Prevention and Early diagnosis of Cancer
Principles of Nuclear medicine
Common radiation reactions and management
Radiotherapy and chemotherapy in commonly seen cancers
Radio-isotopes in diagnosis and therapy

PAEDIATRICS

Vital statistics
Neonatology
Growth & Development
Nutrition
Infections
Genetics
Pediatric Emergencies
Central Nervous System
Gastroenterology
Nephrology
Endocrinology
Respiratory System

MEDICINE

Clinical Methods in the practice of Medicine
Common symptoms of disease

Nutrition/Exposure to Physical & Chemical Agents
Infections
Haematology
Respiratory System
Cardio-Vascular System
Gastro-Intestinal Tract
Emergency Medicine
Neurological System
Nephrology & Urinary system connected to Tissue Disorders
Endocrine System
Geriatrics

TUBERCULOSIS AND RESPIRATORY DISEASES

Diagnosis and management of common ailments affecting the chest with special emphasis on management and prevention of Tuberculosis and National Tuberculosis Control Programme.

PSYCHIATRY

History aspects and diagnosis & treatment of mental illness
Conduction of Mental Status Examination
Behavioral Sciences
Different psychoses Clinical features, diagnosis and management of :
Schizophrenia
Mania and depression
Anxiety disorders and hysteria
Dementia
Alcoholism
Drug Abuse
Psychiatric emergencies
Clinical features, diagnosis and management of psychiatric disorders of childhood and adolescence
Personality disorder

DERMATOLOGY AND SEXUALLY TRANSMITTED DISEASES

Dermatological therapy
Lichen Planus
Diseases caused by Nutritional and Environmental Factors
Infective Disorders
Melanocytes, pigment metabolism and other disorders of Pigmentation
Allergic Disorders

Dermatitis and Eczema
Vesiculobullous Diseases
Alopecia and Hirsutism
Structure and functions of Sebaceous glands and Disease
Leprosy
Psoriasis
STD

OPHTHALMOLOGY

Basic sciences – Anatomy, Physiology, Pharmacology, Pathology, Elementary
Optics, Diseases of the Eye
Conjunctiva
Cornea
Sclera
Uveal Tract
Lens
Vitreous
Glaucoma
Retina
Optic Nerve
Intra-Ocular Tumors
Squint
Orbit
Lacrimal System
Lids
Refractive Errors
Injuries
Ophthalmic Surgery
Community Ophthalmology
Miscellaneous

OTORHINOLARYNGOLOGY

Diseases of the Ear
Diseases of Nose and Para Nasal sinuses
Diseases of Nasopharynx
Diseases of Trachea
Oesophagus

OBSTETRICS AND GYNECOLOGY

Anatomy of the Female reproductive Tract

Physiology of conception
Development of foetus and placenta
Diagnosis of pregnancy
Maternal changes in pregnancy
Antenatal care
Abnormal obstetrics
Normal labour
Normal puerparium
Breast Feeding
Care of new born
Medical termination of pregnancy
Family planning
Operative obstetrics
Post caesarian pregnancy
Pharmaco therapeutics in obstetrics
Safe motherhood
Maternal morbidity and morality
Medico legal aspects
RCH
Current topics
Vaginal discharge
Menstrual disorder
Fertility, infertility
Endometriosis and allied states
Genital injuries and fistulae
Genital infections
Genital prolapse
Tumours
Carcinoma
Radiotherapy in gynaecology
Chemotherapy in gynaecology
Endoscopy
Diseases of breast
Operative gynaecology

COMMUNITY MEDICINE

Evaluation of Public Health and Concepts of Health
Environment and Health
Health Education

Nutrition and Dietetics
Occupational Health
Medical Sociology and Community Mental Health
Fundamentals of Biostatistics
Basic Epidemiology
Epidemiology of Specific Diseases
Communicable and Non-Communicable Diseases
Demography
Reproductive and Child Health
School Health
Urban Health
Health System in India
Health Planning and Management including Disaster Management
International Health