



12. SYLLABUS

PRE AND PARA CLINICAL SUBJECTS

Marks 100

ANATOMY

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

PHYSIOLOGY

1. General Physiology
2. Body fluids - Blood
3. Nerve and Muscle
4. Gastrointestinal Tract
5. Kidney
6. Skin and Body temperature
7. Endocrine Glands
8. Reproduction
9. Cardiovascular System
10. Respiratory System
11. Central Nervous Systems
12. Special Senses

BIOCHEMISTRY

1. Cell and Sub-cellular structures
2. Hydrogen Ion concentration Acid, Bases, Buffers, Handerson-Haselbach equation
3. Isotopes and their Application
4. Carbohydrates
5. Amino Acids, Peptides and Proteins
6. Lipids
7. Nuclear Acids
8. Enzymes
9. Vitamins
10. Biological Oxidation
11. Digestion and Absorption from GI Tract
12. Intermediary Metabolism
13. Carbohydrate Metabolism
14. Lipid Metabolism
15. Protein and Amino Acid Metabolism
16. Purine and Primidine Metabolism
17. Minerals
18. Biochemical Genetics and Protein Biosynthesis
19. Tissue Biochemistry
20. Liver Functions
21. Nutrition and Energy Metabolism

**PATHOLOGY**

1. Cell injury
2. Inflammation and Repair
3. Immunopathology
4. Infectious diseases
5. Circulatory disturbances
6. Growth disturbances and Neoplasia
7. Nutritional and other disorders
8. Genetic disorder
9. Haematology
10. Cardiovascular Pathology
11. Respiratory Pathology
12. Pathology of Kidney and urinary Tract
13. Hepato-Biliary Pathology
14. Lymphoreticular System / Spleen
15. Reproductive System (male & female)
16. Diseases of the Breast
17. Musculoskeletal System
18. Endocrine pathology
19. Neuropathology
20. Dermato-Pathology
21. Ocular Pathology

MICROBIOLOGY

1. General Microbiology
2. Immunology
3. Bacteriology
4. General Virology
5. Systemic Virology
6. Mycology
7. Parasitology
8. Clinical / Applied Microbiology

PHARMACOLOGY

1. General Pharmacology
2. Autonomic Nervous System
3. Cardio-vascular System
4. Diuretics
5. Drugs affecting blood and blood formation
6. Autocoids and related drugs
7. Respiratory System
8. Gastro-intestinal System
9. Endocrine pharmacology
10. Central Nervous System
11. Psychopharmacology
12. Drugs in Anaesthetic practice
13. Chemotherapy
14. Toxicology
15. Clinical Pharmacology and Rational drug use

FORENSIC MEDICINE

1. Definitions
2. Courts of India
3. Court procedures
4. Medical Certifications & medico-legal reports including dying declaration
5. Death
6. Changes after death
7. Inquest by police, magistrate and coroner
8. Identification
9. Examination of mutilated human remains
10. Medico-legal autopsies
11. Mechanical injuries and wounds
12. Examination of an injury case
13. Injuries due to physical agents & their medico legal importance
14. Asphyxial death
15. Death due to malnutrition, neglect battered babies



16. Dowry death
17. Virginity, sexual offences, sexual perversions
18. Legitimacy
19. Pregnancy and delivery
20. Infanticide
21. Biological fluids
22. Seminal stains
23. Forensic Psychiatry
24. Medical Jurisprudence
25. Toxicology

CLINICAL SUBJECTS

Marks 200

GENERAL SURGERY

1. Hemorrhage and shock
2. Fluid, electrolyte and Acid balance, nutrition
3. Skin tumours, burns, skin grafting
4. Arterial diseases
5. Venous diseases
6. Lymphatic and Lymph nodes
7. Wounds
8. Specific and non-specific injections
9. Tumors, Cysts, Ulcers and Sinuses and Fistulae
10. Infections of Hand and Foot
11. Diseases of muscle, tendons, bursae and fascia
12. Hernia
13. Umbilical granuloma, fistula, adenoma
14. Abdominal Wall
15. Face, Teeth, Gums, Mouth, Tongue, Salivary glands, Neck
16. Thyroid Glands, Thyroglossal Tract and Endocrines
17. Breast
18. Sympathetic System
19. Cranio-Cerebral injuries
20. Brain, Nerves
21. Genito-Urinary System
22. Kidneys and Ureters
23. Urinary Bladder
24. Prostrate
25. Urethra
26. Penis, Testis and Scrotum
27. Vasectomy and Recanalisation
28. Cardiothoracis System
29. Oesophagus, Stomach and Duodenum
30. Spleen, Liver, Gall Bladder and bile ducts
31. Pancreas
32. Peritoneum
33. Intestines, intestinal obstruction
34. Appendix
35. Rectum and Anal Canal

ANESTHESIA

1. Anatomy of upper airway
2. Physiology of Respiration O_2/CO_2 transport. Methods of oxygen therapy.
3. Pre-operative evaluation/pre-medication
4. Anaesthetic agents, stages of Anaesthesia
5. Principles and mechanism of administration of general anaesthetics, balanced Anaesthesia
6. IPPV, Endotracheal Intubations
7. Muscle Relaxants
8. Spinal/Epidural Anesthesia
9. Local Anesthesia
10. Cardiopulmonary resuscitation basic, use of simple ventilators
11. Monitoring
12. ICU, role of anaesthesiologist in ICU
13. Shock



14. Blood Transfusion and Fluid Electrol Balance
15. Sites of respiratory obstruction and management of airway in an unconscious patient
16. Poisoning
17. Role of anaesthesiologist in acute and chronic relief.

ORTHOPEDICS

1. Traumatology
 - Injuries of bones and joints • Injuries of Lower Extremity
 - Injuries of the Spine • Vascular Injuries
2. Cold Orthopedics
3. Regional Conditions
4. Neuro-Muscular Disorder
5. Bone and Joint Tuberculosis
6. Physical Medicine and Rehabilitation

RADIO- DIAGNOSIS

1. Respiratory System
2. Cardiovascular System
3. Gastrointestinal System
4. Obstetrics & Gynaecology
5. Skeletal System
6. Central Nervous System
7. Excretory System

RADIOTHERAPY

1. Principles of Radiotherapy
2. Principles of Chemotherapy
3. Prevention and Early diagnosis of Cancer
4. Principles of Nuclear medicine
5. Common radiation reactions and management
6. Radiotherapy and chemotherapy in commonly seen cancers
7. Radio-isotopes in diagnosis and therapy

PAEDIATRICS

1. Vital statistics
2. Neonatology
3. Growth & Development
4. Nutrition
5. Infections
6. Genetics
7. Pediatric Emergencies
8. Central Nervous System
9. Gastroenterology
10. Nephrology
11. Endocrinology
12. Respiratory System

MEDICINE

1. Clinical Methods in the practice of Medicine
2. Common symptoms of disease
3. Nutrition/Exposure to Physical & Chemical Agents
4. Infections
5. Haematology
6. Respiratory System
7. Cardio-Vascular System
8. Gastro-Intestinal Tract
9. Emergency Medicine
10. Neurological System
11. Nephrology & Urinary system connected to Tissue Disorders
12. Endocrine System
13. 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

1. History aspects and diagnosis & treatment of mental illness
2. Conduction of Mental Status Examination
3. Behavioral Sciences
4. Different psychoses Clinical features, diagnosis and management of :
5. Schizophrenia
6. Mania and depression
7. Anxiety disorders and hysteria
8. Dementia
9. Alcoholism
10. Drug Abuse
11. Psychiatric emergencies
12. Clinical features, diagnosis and management of psychiatric disorders of childhood and adolescence
13. Personality disorder

DERMATOLOGY AND SEXUALLY TRANSMITTED DISEASES

1. Dermatological therapy
2. Lichen Planus
3. Diseases caused by Nutritional and Environmental Factors
4. Infective Disorders
5. Melanocytes, pigment metabolism and other disorders of Pigmentation
6. Allergic Disorders
7. Dermatitis and Eczema
8. Vesiculobullous Diseases
9. Alopecia and Hirsutism
10. Structure and functions of Sebaceous glands and Disease
11. Leprosy
12. Psoriasis
13. STD

OPHTHALMOLOGY

Basic sciences – Anatomy, Physiology, Pharmacology, Pathology, Elementary Optics, Diseases of the Eye

1. Conjunctiva
2. Cornea
3. Sclera
4. Uveal Tract
5. Lens
6. Vitreous
7. Glaucoma
8. Retina
9. Optic Nerve
10. Intra-Ocular Tumors
11. Squint
12. Orbit
13. Lacrimal System
14. Lids
15. Refractive Errors
16. Injuries
17. Ophthalmic Surgery
18. Community Ophthalmology
19. Miscellaneous

OTORHINOLARYNGOLOGY

1. Diseases of the Ear
2. Diseases of Nose and Para Nasal sinuses
3. Diseases of Nasopharynx
4. Diseases of Trachea
5. Oesophagus

**OBSTETRICS AND GYNECOLOGY**

1. Anatomy of the Female reproductive Tract
2. Physiology of conception
3. Development of foetus and placenta
4. Diagnosis of pregnancy
5. Maternal changes in pregnancy
6. Antenatal care
7. Abnormal obstetrics
8. Normal labour
9. Normal puerparium
10. Breast Feeding
11. Care of new born
12. Medical termination of pregnancy
13. Family planning
14. Operative obstetrics
15. Post caesarian pregnancy
16. Pharmaco therapeutics in obstetrics
17. Safe motherhood
18. Maternal morbidity, and morality
19. Medico legal aspects
20. RCH
21. Current topics
22. Vaginal discharge
23. Menstrual disorder
24. Fertility, infertility
25. Endometriosis and allied states
26. Genital injuries and fistulae
27. Genital infections
28. Genital prolapse
29. Tumours
30. Carcinomia
31. Radiotherapy in gynaecology
32. Chemotherapy in gynaecology
33. Endoscopy
34. Diseases of breast
35. Operative gynaecology

COMMUNITY MEDICINE

1. Evaluation of Public Health and Concepts of Health
2. Environment and Health
3. Health Education
4. Nutrition and Dietetics
5. Occupational Health
6. Medical Sociology and Community Mental Health
7. Fundamentals of Biostatistics
8. Basic Epidemiology
9. Epidemiology of Specific Diseases
10. Communicable and Non-Communicable Diseases
11. Demography
12. Reproductive and Child Health
13. School Health
14. Urban Health
15. Health System in India
16. Health Planning and Management including Disaster Management
17. International Health