

## **BASIC PHARMACOLOGY**

- I. General Pharmacology
  - Introduction and route of administration of drugs.
  - Pharmacokinetics and pharmacodynamics.
  - Adverse effects
  - Factors modifying drug action.
- II. Autonomic and peripheral N.S.
- III. Autocoids
  - Histamine and Antihistamine
  - NSAIDs.
- IV. Drugs affecting renal system
  - Diuretics and antidiuretics
  - Uricosoric drugs.
- V. Drugs affecting CVS and blood function.
- VI. Drugs affecting GI functions
  - Diarrhoea, constipation, IBS, IBD
  - Emetics and Antiemetics
  - Drugs – Acid Peptic disorders
- VII. Drugs affecting Respiratory System
  - Cough
  - Bronchial Asthma
- VIII. Drugs affecting CNS
  - Sedatives, Hypnotics
  - Antiepileptics
  - Opioid Analgesics
  - CNS – stimulants
  - Psychopharmacology
  - Neurogenic disorders

## CHEMOTHERAPY

- IX. Sulphonamides, Fluoroquinolones & urinary antiseptic
- X. B. Lactum Antibiotics – Pen, Cephalosporius & other
- XI. Macrolide Antibiotics
- XII. Aminoglycosides
- XIII. Drugs in TB & Leprosy
- XIV. Antimalarial drugs
- XV. Amoebicidal & Antiprotozoal drugs
- XVI. Antifungal drugs
- XVII. Antiviral drugs – AIDS
- XVIII. Anticancer drugs
- XIX. HPA & Corticosteroid
- XX. Pancreatic Hormones – Diabetes
- XXI. Thyrotropin and Antithyroid drugs
- XXII. Vitamins and Antioxidants
- XXIII. Immunomodulators

# PATHOLOGY

## Theory

### General Pathology

1. History and Scope of Pathology
  - a. Definition and various branches in Pathology
  - b. Scientific study of disease and methodology
2. The cell and the reaction of cell, tissue and organ to injury.
  - a. Structure of cell and its function.
  - b. Cause and nature of cell injury.
3. Reaction of cell to injurious agents.
  - a. Lethal injury – Necrosis and gangrene.
  - b. Cloudy swelling.
    - i. Fatty changes in Liver, heart and kidney.
    - ii. Glycogen infiltration and hyaline degeneration.
    - iii. Lipoid degeneration.
    - iv. Muroid degeneration.
  - c. Pathological Calcification.
4. Inflammation and Repair : -
  - a. Definition, Classification and nomenclature.
  - b. Acute Inflammation.

Vascular and cellular phenomenon, cell of exudate chemical mediators and tissue changes in acute inflammation Cardinal signs of acute inflammation, Fat, types and systemic effects of acute inflammation.
5. Chronic Inflammation :
  - a. Difference between acute and chronic inflammation.
  - b. Definition of Granuloma
6. Wound healing :
  - a. Regeneration and Repair.
  - b. Repair of epithelial and mesenchymal tissue.
  - c. Primary union and secondary union.
  - d. Mechanism involve and factors modifying repair process.
7. Gengrene – Causes, Dry Gangrene, Moist gangrene, Gas gangrene.

8. Granulomas :
  - a. Classification of granulomas
  - b. Tuberculosis – Genesis and fate of tubercle, primary and secondary tuberculosis.
  - c. Definition, Classification and Pathology of Leprosy.
  - d. Acquired, Primary, Secondary and Tertiary stage of syphilis.
  - e. C.N.S. syphilis, D.V.S. syphilis and Gumma, congenital syphilis.
  - f. Actinomycosis, maduramycosis and rhinosporidiosis.
9. Fluid and Hemodynamic changes (circulatory disturbances) : -
  - a. Hyperemia, congestion and haemorrhage.
  - b. Thrombosis, embolism, DIC.
  - c. Ischemia, infarction and shock.
  - d. Edema.
10. Immunopathology : -
  - a. Basic Pathological mechanism in autoimmune disorders.
  - b. Concept of immunodeficiency disorders.
  - c. Pathology of AIDS.
11. Growth and its disorders :
  - a. Definition of agenesis, aplasia, atrophy, hyperplasia, hypertrophy, hypoplasia, metaplasia.
  - b. Concept of dysplasia, anaplasia and carcinoma-in-situ.
12. Neoplasia : -
  - a. Definition, Classification and Nomenclature.
  - b. Characteristic features of benign and malignant tumours.
  - c. Route of spread of malignant tumours.
  - d. Grading and staging of cancers and pre-cancerous conditions.
  - e. Carcinogenesis and carcinogens.
  - f. Laboratory diagnosis of cancer-Biopsy, exfoliative cytology and prognostic prediction in cancer.
  - g.