The following Pharmacology contents will be taught briefly.

**COURSE CONTENTS**

A  INTRODUCTION
   A.1 Pharmacology
   A.2 Definition
   A.3 Branches / Classification
   A.4 Drug
   A.5 Definition
   A.6 Nomenclature
   A.7 Prodrug
   A.8 Placebo
   A.9 Toxicology

B  PHARMACOKINETICS
   B.1 Definition
   B.2 Drug Dosage
   B.3 Types
   B.4 Forms
   B.5 Factor modifying the dosage of drugs

   B5  Routes of administration
      B5.1 Definition
      B5.2 Types

   B6  Enteral routes (oral, rectal)
      B6.1 Advantages
      B6.2 Disadvantages

   B7  Parental routes (IV, IM, ID, SC) & OTHER ROUTES
      B7.1 Advantages
      B7.2 Disadvantages

   B8  Drug absorption
      B8.1 Drug permeation
      B8.2 Factors that modify drugs absorption
      B8.3 Bioavailability
      B8.4 Drug distribution & Volume of distribution
      B8.5 Biotransformation
      B8.6 Factor Effecting Biotransformation
      B8.7 Elimination of drugs
      B8.8 Bioavailability
B8.9 Factors Effecting Bioavailability

C PHARMACODYNAMICS

C.1. Definition
C.2. Drug receptor
C.3. Nature and sources of drugs
C.4. Mechanism of drugs action
C.5. Sites of drug action
C.6. Factors modifying drug effects
C.7. Drug antagonism

D. ADVERSE REACTIONS OF DRUGS

D.1 Over dosage.
D.2 Secondary effects
D.3 Idiosyncrasy
D.4 Hyper sensitivity
D.5 Drug induced diseases.
D.6 Drug tolerance
D.7 Drug dependence.
D.8 Habituation and addiction
D.9 Biological variations
D.10 Allergy
D.11 Tolerance
D.12 Efficacy of Drugs
D.13 Potency of drugs

E CLASSIFICATION OF DRUGS:

E.1 Analgesics and anti-inflammatory drugs.
E.2 Opioid analgesics & opioid antagonists
E.3 Non-opioid analgesics.
E.4 NSAIDs.
E.5 Steroidal anti-inflammatory drugs.
E.6 Antipyretic.
E.7 Antiemetics.
E.8 Antihistamines
E.9 Antitussive
E.10 Bronchodilators
E.11 Antidepressants (introduction)
E.12 Antipsychotics (Introduction)
E.13 Multivitamins

F ANTI MICROBIAL DRUGS

F.1 Anti bacterial agents.
F.2 Anti fungal agents
F.3 Anti amoebic agents
F.4 Anti malarial agents
F.5 Anti viral agents.
F.6 Anti tuberculosis agents
F.7 Antiseptics & Disinfectants.
F.8 Treatment of Scabies.

**Recommended book:**
- Textbooks of Pharmacology by Shamim
- Textbooks of Pharmacology by Ferdous
- Textbooks of Pharmacology By Inam Danish

**Reference: book**
- Lippincott’s pharmacology
- Basic and Clinical Pharmacology by G. katzung