

COURSE TITLE: PHARMACOLOGY

STUDY HOURS: 60+20

PAPER: 02

TERM: 2nd

MARK:

THEORY: 80

PRACTICAL: 20

TIME: 2:30HRS

The following Pharmacology contents will be taught briefly.

COURSE CONTENTS

Study Hours

(Theory + Practical)

6+2

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

9+3

- 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	6+3
	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	6+2
	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:	18+5
	(Introduction, mode of action, Indications, Adverse effects briefly)	
	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	15+5
	(Introduction, mode of action, effects, Adverse effects Briefly)	
	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: Text books 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