



Pharmacology I
Title: Pharmacology- I
Subject Code: 331 PHL
Semester: Fifth Semester (Third Year).
Duration: 2 + 1 Units (4 contact hours) per week.
Aims: To provide knowledge regarding general principles of pharmacology, drugs acting on the autonomic nervous system, autacoids and respiratory system.
Objectives: Upon successful completion of the course student shall be able to know the pharmacokinetics and pharmacodynamics of drugs, autacoids and drugs acting on the autonomic nervous system and respiratory system.
Contents: Lectures: General Pharmacology a) Introduction, definitions and scope of pharmacology b) Routes of administration of drugs c) Pharmacokinetics (absorption, distribution, metabolism and excretion) d) Pharmacodynamics e) Factors modifying drug action Pharmacology of autacoids and their antagonists a) Histamines and Antihistaminics b) 5-Hydroxytryptamine and its antagonists c) Lipid derived autacoids and platelet activating factor Pharmacology of drugs acting on ANS a) Adrenergic and antiadrenergic drugs



- b) Cholinergic and anticholinergic drugs
- c) Neuromuscular blockers
- d) Mydriatics and miotics
- e) Drugs used in myasthenia gravis

Pharmacology of Drugs acting on Respiratory tract

- a) Bronchodilators
- b) Mucolytics
- c) Expectorants
- d) Antitussives
- e) Nasal Decongestants

Practical: Handling of animals, effect of agonists and antagonists on smooth and skeletal muscles. Dose-response curves; effects of drugs on the eye.

Minimum course requirements: 30 (2 x 15) Unit lectures and 30 practical hours (2 x 15) per level.

Evaluation methods:

-Quizzes	10%
- Mid term examination	25%
- Practical examinations	25%
- Final examination (written)	40%

Text Books (latest edition):

1- Goodman and Gilman's the Pharmacological Basis of Therapeutics, Joel G. Hardman, Lee E. Limbird, Alfred Goodman Gilman, New York: McGraw-Hill Health Division.



2- Text Book of Pharmacology, Donald Doglass.

Recommended books (latest edition):

- 1- Pharmacology, H.P. Rang & M. M. Dale.
- 2- Pharmacology, Evans.
- 3- Pharmacology: An Introductory Text, Asperthim.
- 4- Pharmacology, Loerad.
- 5- Essentials of Medical Pharmacology, K. D. Tripathi