

2.5 Pharmacology-I

Theory

1. Introduction: definition, scope & history.
2. General pharmacology: Routes of drug administration, absorption, distribution, metabolism and excretion, molecular action of drug action, theories of receptors, dose response relationships, affinity constants.
3. Factors affecting effect/dose of a drug, adverse drug reactions, drug interactions, drug evaluations.
4. Autonomic Nervous System: adrenergic drugs and adrenergic blockers, cholinergic and anti cholinergic drugs, drug acting on autonomic ganglion, skeletal muscle relaxants.
5. Central Nervous System : Alcohol, local and general anaesthetics, narcotic and non-narcotic analgesics, drugs used in gout and rheumatoid arthritis, antiseptic drugs, sedatives and hypnotics, C.N.S. stimulants, antiparkinsons drugs, psychopharmacological agents (anti-epileptics, anti anxiety, anti depressants, drugs and memory)

PRACTICALS

1. Introduction to experimental pharmacology:
 - Preparation of different solutions for experiments.
 - Drug dilution.
 - Choice of Animals & Anaesthetic.
 - Commonly used instruments in Experiments.
 - To study Analgesic, Anticonvulsant & Local Anaesthetic effects of drugs.
2. Effects of drugs on Rabbits Eye.
3. Effect of routes of drug administration.

Books Recommended :

1. Satoskar & Bhandarkar, "Pharmacology and pharmacotherapeutics".
2. F.S.K. Barar. "Essentials of Pharmacotherapeutics"
3. Alfred Goodman Gilman Theodore W. Roll, Alan S. Nies, Palmer Taylor, "Goodman Gilman's. The pharmacological basis of therapeutics".
4. Laurence and Bennett, "Clinical Pharmacology".
5. Crossland, "Lewis Pharmacology".
6. Bowman and Rand. "Textbook of pharmacology".
7. Kulkarni, "A Handbook of experimental Pharmacology".
8. M.N.Ghosh, "Fundamentals of experimental Pharmacology".
9. Perry W.L.M.E. & S.Livingstone Ltd. "Pharmacological experiments an isolated preparations"
10. Seth, Dadka and Kamat, "Selected topics in experimental pharmacology".
11. Burn. "Practical Pharmacology".

