

PS609: MEDICINAL CHEMISTRY- III LAB

B.Pharm. III Year II Sem.

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1. Preparation of drugs and intermediates

- a. Sulphanilamide
- b. 7-Hydroxy, 4-methyl coumarin
- c. Chlorobutanol
- d. Triphenyl imidazole
- e. Tolbutamide
- f. Hexamine

2. Assay of drugs

- a. Isonicotinic acid hydrazide
- b. Chloroquine
- c. Metronidazole
- d. Dapsone
- e. Chlorpheniramine maleate
- f. Benzyl penicillin

3. Preparation of medicinally important compounds or intermediates by Microwave irradiation technique

4. Drawing structures and reactions using chem draw®

5. Determination of physicochemical properties such as logP, clogP, MR, Molecular weight, Hydrogen bond donors and acceptors for class of drugs course content using drug design software Drug likeliness screening (Lipinskies RO5)

Recommended Books (Latest Editions)

1. Wilson and Giswold's Organic medicinal and Pharmaceutical Chemistry.
2. Foye's Principles of Medicinal Chemistry.
3. Burger's Medicinal Chemistry, Vol I to IV.
4. Introduction to principles of drug design- Smith and Williams.
5. Remington's Pharmaceutical Sciences.
6. Martindale's extra pharmacopoeia.
7. Organic Chemistry by I.L. Finar, Vol. II.
8. The Organic Chemistry of Drug Synthesis by Lednicer, Vol. 1-5.
9. Indian Pharmacopoeia.
10. Text book of practical organic chemistry- A.I.Vogel.