## PHARMACEUTICAL ORGANIC CHEMISTRY -I (Practical)

- 1. Systematic qualitative analysis of unknown organic compounds like
- 1. Preliminary test: Color, odour, aliphatic/aromatic compounds, saturation and unsaturation, etc.
- 2. Detection of elements like Nitrogen, Sulphur and Halogen by Lassaigne's test
- 3. Solubility test
- 4. Functional group test like Phenols, Amides/ Urea, Carbohydrates, Amines, Carboxylic acids, Aldehydes and Ketones, Alcohols, Esters, Aromatic and Halogenated Hydrocarbons, Nitro compounds and Anilides.
- 5. Melting point/Boiling point of organic compounds
- 6. Identification of the unknown compound from the literature using melting point/ boiling point.
- 7. Preparation of the derivatives and confirmation of the unknown compound by melting point/ boiling point.
- 8. Minimum 5 unknown organic compounds to be analysed systematically.
- 2. Preparation of suitable solid derivatives from organic compounds
- 3. Construction of molecular models

## **Recommended Books (Latest Editions)**

- 1. Organic Chemistry by Morrison and Boyd
- 2. Organic Chemistry by I.L. Finar, Volume-I
- 3. Textbook of Organic Chemistry by B.S. Bahl & Arun Bahl.
- 4. Organic Chemistry by P.L.Soni
- 5. Practical Organic Chemistry by Mann and Saunders.
- 6. Vogel's text book of Practical Organic Chemistry
- 7. Advanced Practical organic chemistry by N.K. Vishnoi.
- 8. Introduction to Organic Laboratory techniques by Pavia, Lampman and Kriz.
- 9. Reaction and reaction mechanism by Ahluwaliah/Chatwal.