

PHARMACEUTICAL CHEMISTRY

Practicals Syllabus:

1. Limit test for:

- Chlorides;
- Sulphate;
- Iron;
- Heavy metals

2. Identification tests for Anions and Cations as per Indian Pharmacopoeia.

3. Fundamentals of Volumetric analysis Preparation of standard solution and standardization of:

- Sodium Hydroxide
- Potassium Permanganate

4. Assay of the following compounds:

- Ferrous sulphate- by redox titration
- Calcium gluconate-by complexometric
- Sodium chloride-by Modified Volhard's method
- Ascorbic acid by iodometry
- Ibuprofen by alkalimetry

5. Fundamentals of preparative organic chemistry Determination of Melting point and boiling point of organic compounds.

6. Preparation of organic compounds:

- Benzoic acid from Benzamide
- Picric acid from Phenol

7. Identification and test for purity of pharmaceuticals:

- Aspirin,
- Caffeine,
- Paracetamol,
- Sulfanilamide

8. Systematic Qualitative analysis experiments (4 substances)

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2.	To observe limit test for Sulphate impurities in the given sample as per Indian Pharmacopoeia.	
3.	To observe limits for iron impurities in the given sample as per Indian Pharmacopoeia.	
4.	To perform the limit test for heavy metals in the given sample as per I.P.	
5.	Identification tests for cations as per Indian Pharmacopoeia.	
6.	Identification tests for anions as per Indian Pharmacopoeia.	
7.	To Prepare and standardize 0.1M Sodium hydroxide Standard solution.	
8.	To prepare and standardize 0.02 M potassium permanganate standard solution.	
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11.	To determine the % w/w of NaCl in a given sample of ammonium chloride.	
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17.	To synthesize Picric acid from phenol and to find out its percentage yield and melting point.	
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19.	To perform identification and purity test on the given sample of Caffeine as per Indian Pharmacopoeia (I.P.)	
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