

PHARMACEUTICAL ANALYSIS - I (GUESS PAPER 2025-26)

Subject Code: BP102T

Max Marks: 75 Time: 3 Hours

SECTION A (10 x 2 = 20 marks)

Attempt all questions in brief:

1. Define Normality and Molarity.
2. What is the difference between Accuracy and Precision?
3. Write the principle of Mohr's method.
4. Define Acid and Base as per Bronsted-Lowry theory.
5. What are Masking and Demasking agents?
6. Explain the Ilkovic equation.
7. Define Limit Test.
8. Write the principle of Polarography.
9. What is a Primary Standard? Give an example.
10. Define Reducing and Oxidizing agents with one example each.

SECTION B (2 x 10 = 20 marks)

Attempt any two:

1. Explain the preparation and standardization of 0.1 N NaOH and 0.1 N KMnO₄.
2. Describe Mohr's and Volhard's methods of precipitation titration.
3. Explain Acid-Base Indicators and their theories with examples.
4. Write a detailed note on Non-Aqueous Titrations and their significance.

SECTION C (5 x 7 = 35 marks)

Attempt any five:

1. Discuss the sources of impurities and methods of minimizing errors.
2. Explain the construction and working of Standard Hydrogen and Calomel Electrodes.
3. Describe the principle, instrumentation, and applications of Conductometry.
4. Discuss the principle and procedure of Diazotization titration.
5. Differentiate between Iodimetry and Iodometry.

6. Write short notes on Gravimetric Analysis.
7. Explain various neutralization curves in Acid-Base titrations.
8. Classify Redox titrations with examples.

High-Repetition Topics (Most Likely to Come)

Topic	Times Repeated (2019-25)
Mohr's & Volhard's method	6/6
Acid-Base Indicators & Theories	6/6
Conductometry (Principle + Application)	5/6
Standardization of NaOH/KMnO ₄	5/6
Non-Aqueous Titrations	5/6
Gravimetric Analysis	4/6
Iodimetry/Iodometry	4/6
Types of Errors & Minimization	4/6
Electrodes (SHE, Calomel)	4/6
Redox & Diazotization Titrations	4/6