

INDIRA UNIVERSITY, PUNE

SCHOOL OF PHARMACY- B.PHARM

Term End Examination (2025 Pattern) December – 2025 - Semester – I

Subject Name: Pharmaceutical Analysis I
Subject Code: BP102T

Max. Marks: 75
Time: 3 Hours

Instructions

- All Questions are Compulsory. Write two sections on separate answersheets.
 - Neat diagram must be drawn wherever necessary.
 - Figures to the right indicate full marks.
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Section : I

Q.1 Solve any FIVE from the following

15 Marks

- Define the term acid and base along with suitable example?
- Differentiate Primary and Secondary standard solution?
- Write a note on Adsorption indicators?
- Discuss the refractive index.
- Define the term ligand. Give its classification.
- Explain significant figures.
- Explain Concepts of oxidation and reduction in the redox titration.

Q.2 Solve any TWO from the following

20 Marks

- What do you mean by non-aqueous titration? Enlighten different solvents used in non-aqueous titrations along with suitable examples? Write down advantages of non-aqueous titration?
- Explain Mohr's and Volhard's, method and application of Precipitation titration.
- Write principle of potentiometry. Discuss in detail different types of electrodes used in potentiometric titration.
- Define the term gravimetry. Explain the steps involved in gravimetry and its application.

Section : II

Q.3 Solve any EIGHT from the following

40 Marks

- a** Explain various Methods of expressing concentration?
- b** Explain theories of Acids and Bases.
- c** Give details of estimation of calcium gluconate I.P.
- d** Differentiate between iodimetry and iodometry.
- e** What is co-precipitation and how it is reduced?
- f** Write principle of polarography, what is half wave potential?
- g** Write a note on Conductivity cell.
- h** Give a note on Redox indicators?
- i** Write down the scope of pharmaceutical analysis.
- j** Discuss Cerimetry?
