



**GANDHI INSTITUTE OF ENGINEERING AND TECHNOLOGY, ODISHA, GUNUPUR  
(GIET UNIVERSITY)**

B. Pharm. (First Semester - Regular) Examinations, February - 2026

**BP102T – Pharmaceutical Analysis I**

Time: 3 hrs

Maximum: 75 Marks

**Answer ALL questions**

**(The figures in the right hand margin indicate marks)**

**PART – A**

**(10 x 2 = 20 Marks)**

Q.1. Answer **ALL** the questions

- a. Write two sources of impurities in medicinal agents.
- b. Differentiate precision and accuracy.
- c. Write about Pharmacopoeia.
- d. What is universal indicator?
- e. Define conductance and resistance. Mention their units.
- f. Give examples of two self-indicating titrants.
- g. What is co-precipitation?
- h. Define dichrometry.
- i. What is a masking agent?
- j. Write Nernst equation.

**PART – B**

**(2 x 10 = 20 Marks)**

Q.No. 2. Answer **ANY TWO** questions (Long Answer Question)

- a. What is precipitation titration? Explain in detail various methods of precipitation titrations with applications.
- b. What is Potentiometric Titration? Explain about various electrodes with neat labelled diagrams. Discuss the potentiometric titration curves.
- c. Explain the concept of Oxidation and Reduction. Write a detailed note on Redox Titration.

**PART – C**

**(7 x 5 = 35 Marks)**

Q. No.3. Answer **ANY SEVEN** questions (Short Answer Question)

- a. Write about different methods of expressing concentration of solutions.
- b. Define and classify Errors. Explain various methods to minimize the errors.
- c. Write about non-aqueous titrations, principle and their applications? Discuss about the types of solvents used in non- aqueous titrations.
- d. Explain theories of acid base indicators with suitable examples.
- e. Explain the Principle and Theory of Diazotization Titration.
- f. Write the construction and working of the conductivity cell.
- g. Write the construction and working of the dropping mercury electrode (DME).
- h. Define limit test and explain the limit test for chlorides.
- i. Classify and explain various EDTA titrations.

--- End of Paper ---