

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

End Semester Examination – Summer 2023

Date: 09/09/2023

Course	: B. Pharmacy	Sem:	I
Subject Name	: Pharmaceutical Analysis-I	Subject Code	: BP102T
Max Marks	: 75	Duration	: 3 Hr.

Instructions:

1. All questions are compulsory
2. Draw diagrams / figures wherever necessary
3. Figures to right indicate full marks

Q. 1. Objective Type Questions (Answer all the questions) (10 x 2) = 20

- i) Define primary & secondary standard substances with an example of each.
- ii) What do you mean by oxidizing and reducing agent?
- iii) Give the principle of limit test of chloride.
- iv) Write down the definition of acid and base as per Lowry-Bronsted theory?
- v) What is levelling and differentiating effect?
- vi) What is masking and demasking?
- vii) How will you standardize 0.1N KMnO<sub>4</sub> Solution?
- viii) Write down the principle of Volhard's method.
- ix) Define equivalent conductance.
- x) Give the principle of diazotization titration?

Q. 2. Long Answers (Answer 2 out of 3) (2 x 10) = 20

- i) Describe the principle of Potentiometric titration. Write down the construction and working of indicator electrode and reference electrode.
- ii) Explain different types of acid base titrations. Add a note on neutralization curve.
- iii) Define gravimetric analysis. Describe the various steps involved in it.

Q. 3. Short Answers (Answer 7 out of 9) (7 x 5) = 35

- i) What is Pharmaceutical Analysis? Give the classification of different techniques of analysis.
- ii) Define error. Enlist the sources and types of errors and explain methods of minimizing errors.
- iii) What do you mean by impurity? Describe the sources of impurities in pharmaceuticals.
- iv) Define indicator and explain Ostwald theory and resonance theory of acid base indicators.
- v) What is non aqueous titration? Explain different types of non-aqueous solvents with examples.
- vi) What is precipitation titration? Write in detail about Mohr's method.