



Sessional I (ODD) Semester Examination September 2025

Name of the Course and semester: B.Pharm

Roll no.....

Semester: 1st

Name of the Paper: Pharmaceutical Analysis

Paper Code: BP- 102 T

Time: 1.5 hours

MM: 30

Note: This question paper contains three sections.

All sections are compulsory.

Section- A

Multiple choice questions (attempt all questions)

(10 x 1=10 Marks)

S.No.	QUESTIONS	COs
1.	The SI unit for molarity is: a. g/L b. mol/L c. mole % d. Normality	CO-1
2.	Which of the following is a primary standard? a. Sodium hydroxide b. Potassium permanganate c. Oxalic acid d. Sodium thiosulphate	
3.	HCl solution is standardized against: a. Oxalic acid b. Sodium hydroxide c. Sodium carbonate d. Potassium dichromate	
4.	Limit tests are performed to: a. Measure the potency of drugs b. Detect the presence and quantity of impurities c. Assess the effectiveness of formulations d. None of the above	
5.	Which statement best describes accuracy? a. Closeness of measurements to each other b. Freedom from random errors c. Closeness of a measured value to the true value d. The number of correct significant figures	
6.	Non-aqueous titrations are typically used for the analysis of: a. Strong acids and bases b. Weak acids and bases c. Amphiprotic substances d. Insoluble substances	CO-2



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7.	Which of the following indicators is commonly used in non-aqueous titrations? a. Phenolphthalein b. Methyl orange c. Crystal violet d. Bromothymol blue	
8.	Which of the following titrants is commonly used for the estimation of sodium benzoate by titration? a. Hydrochloric acid b. Sodium hydroxide c. Perchloric acid d. Sulphuric acid	
9.	According to the Bronsted-Lowry theory, what is the definition of an acid? a. A substance that donates a proton b. A substance that accepts a proton c. A substance that neutralizes a base d. A substance that ionizes in water	
10.	What is acidimetry? a. Determination of the concentration of a base b. Determination of the concentration of an acid c. Determination of the pH of a solution d. Determination of the conductivity of a solution	

Section- B

Short Answer type questions (attempt any two questions)

(2 x 5=10 Marks)

S.No.	QUESTIONS	COs
1.	Explain in brief - (i) Accuracy (ii) Precision	CO-1
2.	Write in detail about the estimation of Sodium benzoate.	CO-2
3.	What are the primary and secondary standards? Write their examples and importance?	CO-1

Section- C

Long Answer type questions (attempt any one question)

(1 x 10=10 Marks)

S.No.	QUESTIONS	COs
1.	Discuss different types of errors and methods of minimizing the errors. Also, discuss methods of expressing concentration.	CO-1
2.	What is neutralization curve? Write down the classification of acid base titrations and theories of acid base indicators.	CO-2