Roll No.: _____ **Enrolment No._____**

PARUL UNIVERSITY

FACULTY OF PHARMACY

B.PHARM FIRST SEMESTER

FIRST INTERNAL THEORY EXAMINATION: 2022-23

Subject Name: Pharmaceutical Analysis I
Subject Code: BP102T **Date: 10/01/2023**
Time: 1 hr 15 min **Total Marks: 30**

Instructions:

1. **Make suitable assumptions wherever necessary.**
2. **Figures to the right indicate maximum marks.**

				CO	BL
Q.1	**Multiple Choice Questions.**		**10 Marks (10 X 1=10)**		
1	In a measurement, what is the term Used to specify the closeness of two or more measurements		**(1)**	1	1
	a) Precision	**b)** Accuracy			
	c) Fidelity	**d)** Threshold			
2	The secondary standard solution is		**(1)**	1	1
	a) HCl	**b)** Oxalic Acid			
	c) Na_2C0_3	**d)** $KMnO_4$			
3	No. of gm equivalent weight of substance dissolved in 1 lit. of solution is		**(1)**	1	1
	a) Molarity	**b)** Normality			
	c) Molality	**d)** Formality			
4	Instrumental error is which type of error?		**(1)**	1	1
	a) Systematic	**b)** Random			
	c) All the above	**d)** None of these			
5	How many significant figures are there in 2.4580?		**(1)**	1	2
	a) 6	**b)** 4			
	c) 5	**d)** None			
6	According to which of the acid base theory, acid is a molecule or ion that accepts an e^- pair to form a covalent bond		**(1)**	2	1
	a) Bronsted & lowry	**b)** Lewis			
	c) Arrhenius	**d)** None			
7	What is the concentration of the sulphuric Acid solution, if 100 ml of the solution is neutralised by 50? ml of 0.5 M Ba(OH)2 solution		**(1)**	2	3
	a) 0.25 M	**b)** 0.5 M			
	c) 50 M	**d)** 100 M			
8	_____ is not an amphiprotic solvent.		**(1)**	2	1
	a) Water	**b)** Alcohol			
	c) Acetic acid	**d)** None			

9	pH of $[H^+] = 10^{-6}$ g ion/lit is		**(1)**	2	3
	a) 6	**b)** 10			
	c) 7	**d)** 5			
10	Diazepam is Assay by which method		**(1)**	2	1
	a) Acid-base titration	**b)** Karl Fischer titration			
	c) Non-aqueous titration	**d)** NMR			
Q.2	**Long Answer: (Answer Any one)**		**10 Marks (1 X 10 =10)**		
	1) Give the various theories of indicators used in acid base titrations.			2	1
	2) Write a detailed note on Neutralization Curve between weak acid and strong base and Strong acid and strong base.			2	2
Q.3	**Short Answer: (Answer Any Two)**		**10 Marks (2 X 5=10)**		
	1) What is error? Differentiate between Determinate and Indeterminate error.			1	2
	2) Write in brief on primary standards.			1	1
	3) Write in detail on limit test for heavy metals.			1	2