Seat No.: _____ Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

B.Ph. - SEMESTER– I• EXAMINATION – SUMMER-2023

Subject Code:BP102TP Date: 10/08/2023

Subject Name : Pharmaceutical Analysis I

Time: 02:30PM TO 05:30PM Total Marks: 80

Instructions:

1. **Attempt any five questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1	**(a)**	What is buffer solution? Explain types of buffer solution, preparation of buffer solution, buffer action.	**06**
	(b)	Enumerate acid base theories and Explain Lowry Bronsted Acid- Base theory.	**05**
	(c)	Define Hydrolysis and derive equation for finding pH of aqueous solution of week acid and strong base.	**05**
Q.2	**(a)**	Describe a note on theory of redox titrations.	**06**
	(b)	Difference between Iodimetry titration and Iodometry titration.	**05**
	(c)	Write a note on conductometric titrations	**05**
Q.3	**(a)**	Explain a note on Mohr's method	**06**
	(b)	Write a note on Diazotization titration.	**05**
	(c)	Write a note on Vollhard method	**05**
Q.4	**(a)**	Monograph of Indian Pharmacopoeia	**06**
	(b)	Give detail note on non aqueous titration	**05**
	(c)	Define, ideal characteristic and give suitable example of primary standard	**05**
Q.5	**(a)**	Describe Dropping Mercury Electrode.	**06**
	(b)	Enlist different reference electrode used in potentiometry. Explain Saturated Calomel Electrode	**05**
	(c)	Explain principle and applications of polarimetry	**05**
Q. 6	**(a)**	Define validation. Explain validation parameters.	**06**
	(b)	Write a note on sampling techniques.	**05**
	(c)	Define error, classify error and how will you minimize error	**05**
Q.7	**(a)**	Give note on masking and demasking agent in complexometric titration	**06**
	(b)	Write a note on different types on complexometric titrations.	**05**
	(c)	Discuss differentiating solvents and leveling solvents.	**05**

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