

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B.Ph. - SEMESTER- I -- EXAMINATION – SUMMER -2022

Subject Code: BP102TP

Date: 05/09/2022

Subject Name: Pharmaceutical Analysis-I

Time:10:30 A.M To 1:30 P.M

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) Define following terms- 1) Accuracy 2) Significant figures 3) Normality 4) Stoichiometric point 5) Precision 6) Primary standards	06
	(b) Discuss the principle and reaction involved in limit test of Iron as per IP.	05
	(c) Define Error. Describe the methods of minimization of errors.	05
Q.2	(a) What is hydrolysis? Derive equation for finding pH of aqueous solution of salt of weak acid and strong base.	06
	(b) Explain Buffer in detail. Write equation to calculate pH of buffer solution.	05
	(c) Discuss in brief various solvents used in non aqueous titration.	05
Q.3	(a) Write a short note on volhard's method of precipitation titration?	06
	(b) Give comment on following 1. Starch indicator should be added toward the end point in iodometric titration. 2. Mohr's titration carried out in acidic media.	05
	(c) Explain ligand. Write detail note on masking and demasking phenomenon.	05
Q.4	(a) What is gravimetric analysis? Explain merits, demerits and application of gravimetric analysis.	06
	(b) Enlist redox titration and explain diazotization nitrite titration in detail.	05
	(c) pM Indicator.	05
Q.5	(a) What is reference electrode? Mention the type of reference electrodes. Describe in detail of SCE.	06
	(b) Discuss in detail different component of polarogram.	05
	(c) Differentiate between 1. Differentiating and leveling effect 2. Iodometry and Iodimetry	05
Q. 6	(a) Write a detail note on end point determination of potentiometric titration.	06
	(b) Discuss about co-precipitation and post precipitation.	05
	(c) Explain DME in detail.	05
Q.7	(a) What is complexometric titration? Give different types of complexometric titration.	06
	(b) Write a note on Fajan method.	05
	(c) Write preparation and standardization of ceric ammonium sulphate.	05
