Seat No.: _____ Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

Pharm D – 1st Year • EXAMINATION – SUMMER - 2017

Subject Code: 818805 Date: 05/06/			
•	e: 10	Name: Pharmaceutical Inorganic Chemistry .30 AM to 01.30 PM Total Marks: 70 s:)
2.	Mal	empt any five questions. ke suitable assumptions wherever necessary. ures to the right indicate full marks.	
Q.1	(a) (b) (c)	Explain theory of acid-base Indicator 20 ml of 0.2N NaOH added to 50ml 0.12N HCl. Calculate pH of solution? Discuss principle involved in the assay of Calcium Lactate IP '96	06 04 04
Q.2	(a)	Give the reasons 1. Nitrobenzene is used in Volhard's method of halogen estimation. 2. Acetic acid is a leveling solvent as well as differentiating solvent 3. Equivalent weight of KMnO ₄ changes with the media	06
	(b) (c)	Discuss types and nature of analytical errors? How are they minimized? Write a note on Iodometric titration.	04 04
Q.3	(a)	Explain importance of von-Weimar ratio, co-precipitation and post precipitation in gravimetric method of estimation.	06
	(b)	Calculate pH and degree of hydrolysis in 0.1M ammonium chloride solution. Kb is 1.8 X 10 ⁻⁵ Explain ligand and sequestoring agent. Write note on replacement titration.	04
	(c)	Explain ligand and sequestering agent. Write note on replacement titration.	
Q.4	(a)	What is buffer solution? Derive Henderson Hasselbatch equation for finding pH of buffer solution?	06
	(b) (c)	Discuss briefly solvents, titrants and indicators used in Non aqueous titrations. Differentiate assay and limit test. Describe limit test of Arsenic with diagram.	04 04
Q.5	(a)	Define Impurities. Write note on sources of impurities in Pharmaceutical Preparations	06
	(b)	Write note on storage condition for following 1. Oxygen 2. Phosphoric acid 3. Silver Nitrate 4. Iodine	04
	(c)	Comment on following 1. Glycerin is added in assay of boric acid 2. Aqueous Ammonia is added in limit test of Lead	04
Q. 6	(a)	Explain working of GM Counter. Give application of radiopharmaceuticals in medicine.	06
	(b)	Write a note on Dental product.	04
	(c)	Classify various gastrointestinal agents with examples. Write note on Saline Cathartic.	04
Q.7	(a)	Define antacid. Give its ideal requirement and classify them with examples. Write note on combination antacid preparation.	06
	(b)	Give synonyms and uses of the following(any four) 1. Common Salt 2. Rochelle salt 3. Green vitriol 4. Chlorinated lime 5. Precipitated chalk	04
	(c)	Classify antimicrobial agents with example and discuss its mechanism of	04

action.