

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM - SEMESTER- 1 EXAMINATION – WINTER -2024

Subject Code: BP104TP**Date: 17/02/2025****Subject Name: Pharmaceutical Inorganic Chemistry****Time: 10.30 AM TO 01.30 PM****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 acid & base using different theories.	06
	(B) Explain the limit test of Lead.	05
	(C) Define the following terms: (1) Impurity (2) Buffer (3) Astringent	05
	(4) Antidote (5) Emetics	
Q-2	(A) What is Radioactive compound? Give the properties of α , β , & γ radiations.	06
	(B) What is the role of haematinics? Write a note on Ferrous gluconate.	05
	(C) Define & classify gastro intestinal agents. Write preparation, properties and uses of Ammonium chloride.	05
Q-3	(A) Enlist functions of major physiological ions. Explain physiological acid-base balance.	06
	(B) Define: Half-life & Radio isotopes. Enlist the radioactive compounds used in the treatment. Enlist applications of radiopharmaceuticals.	05
	(C) Explain the assay of (1) Ferrous sulphate & (2) Sodium carbonate.	05
Q-4	(A) Write a detailed note on Cathartics, with special reference to MgSO_4 .	06
	(B) Write a brief note on Zinc sulphate & Potash alum.	05
	(C) Explain the assay of Calcium gluconate.	05
Q-5	(A) What is the history of Pharmacopoeia? Enlist types & Explain sources of impurities.	06
	(B) What is dentifrices & Desensitizing agents? What is the role of fluoride in the treatment of dental caries?	05
	(C) Write a detailed note on Replacement therapy.	05
Q-6	(A) Derive Handerson Hasselbalch equation & enlist importance of Buffer.	06
	(B) Explain the limit test of Iron.	05
	(C) Write preparation, properties and uses of Copper sulphate.	05
Q-7	(A) Classify Antacids. Why antacid combination is more useful? Write a detailed note on $\text{Al}(\text{OH})_3$ gel.	06
	(B) Explain modified limit test for Chloride and Sulphate.	05
	(C) Explain the role of Sodium nitrite & Sodium thiosulphate as an antidote with suitable example.	05
