

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

Subject Code: BP104TP**Date: 14/06/2024****Subject Name: Pharmaceutical Inorganic Chemistry****Time: 02.30 p.m. to 5.30 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 Pharmacopoeia. Write a brief note on Indian Pharmacopoeia and Monograph. **06**
- (b) Enlist sources of impurities in pharmaceuticals. Explain any four in brief. **05**
- (c) Explain Limit test of Chloride in detail. **05**
- Q.2** (a) Explain principle of Limit test of Arsenic. Draw a neat and labeled diagram of Gutzeit Test Apparatus. **06**
- (b) Explain various acid-base theories with examples. **05**
- (c) Define Buffer. Explain significance of physiological buffers and pharmaceutical buffers. **05**
- Q.3** (a) Explain major intra and extra cellular electrolytes. Describe the biological significance of Calcium and Iron. **06**
- (b) Write a short note on ORS. **05**
- (c) What are Dental Products? Write method of preparation, assay and uses of Calcium Carbonate. **05**
- Q.4** (a) Define and classify antacids with examples. Explain ideal properties of antacid. Give one example of combination antacid. **06**
- (b) Write a note on Cathartics. **05**
- (c) What are antimicrobial agents? Classify antimicrobial agents according to mechanism of action. **05**
- Q.5** (a) Explain assay and uses of following compounds: **06**
(1) Ammonium chloride (2) Copper sulphate (3) Ferrous sulphate.
- (b) Differentiate :(1) Emetic & Expectorant (2) Antiseptic & Disinfectant **05**
- (c) Explain in detail cyanide poisoning and its treatment. **05**
- Q.6** (a) What is radio activity? Explain it with Units. Discuss the working of Geiger Muller Counter in detail. **06**
- (b) Describe precautions to be taken during handling and storage of radio pharmaceuticals. **05**
- (c) Explain applications of various radiopharmaceuticals. **05**
- Q.7** (a) Define following terms: (1) Haematinics (2) Dentifrices (3) Limit Test (4) Adsorbent (5) Saline cathartics (6) Antidote **06**
- (b) Give the synonyms and uses of the following: **05**
(1) Chlorinated lime (2) Green Vitriol (3) Milk of Magnesia
- (c) Justify following statements with reactions of respective limit test. **05**
(1) Alcohol is used in Limit Test of Sulphate.
(2) Thioglycolic acid is used in Limit Test of Iron.