PHARMACEUTICAL INORGANIC CHEMISTRY (GUESS PAPER 2025-26)

Subject Code: BP104T

Max Marks: 75 Time: 3 Hours

SECTION A (10 x 2 = 20 marks)

Attempt all questions in brief:

1. State the principle involved in the limit test of Iron.
2. Define isotonic and iso-osmotic solutions.
3. What are Expectorants? Give two examples.
4. Define Astringents with suitable examples.
5. What is the composition of ORS solution?
6. Define Haematinics with examples.
7. Write the properties of an ideal antacid.
8. Give two uses of Hydrogen Peroxide.
9. What is radioactivity? Give its unit.
10. Define impurities and list their sources.

SECTION B (2 x 10 = 20 marks)

Attempt any two:

1. Explain the principle, reaction, and apparatus involved in the limit test for Arsenic.
2. Write the preparation, properties, assay, and uses of Ammonium Chloride.
3. Define Antacids. Describe the properties, preparation, and uses of Sodium Bicarbonate as an antacid.
4. Discuss the precautions and pharmaceutical applications of radioactive substances.

SECTION C (5 x 7 = 35 marks)

Attempt any five:

1. Explain the mechanism of action, properties, and uses of Hydrogen Peroxide.
2. Describe the preparation, properties, and medicinal uses of Ferrous Sulphate.
3. What are Cathartics? Classify them and give suitable examples.
4. Explain physiological acid-base balance and the role of buffers in the body.

5. Write a note on Antidotes and their classification with examples.

6. Discuss the function of major physiological ions (Na+, K+, Ca2+) in the body.

7. Describe the limit test for Chloride with reactions and apparatus.

8. Write a short note on Dental Products and the role of fluoride in dental care.

High-Repetition Topics (Most Likely to Come)

Topic	Times Repeated (2019-25)
Limit Test of Arsenic & Iron	6/6
Hydrogen Peroxide (preparation, mechanism, uses)	6/6
Ammonium Chloride (acidifier/expectorant)	5/6
Sodium Bicarbonate (antacid)	5/6
Sources of Impurities	5/6
Physiological Electrolytes & Acid-Base Balance	5/6
Radioactivity & Safety Precautions	4/6
Cathartics & Antacids	4/6
Haematinics (Ferrous Sulphate)	4/6
Dental Products & Fluoride	4/6