

Rajiv Gandhi University of Health Sciences, Karnataka

First Semester B.Pharm Degree Examination – 05-May-2025

Time: Three Hours

Max. Marks: 75 Marks

PHARMACEUTICAL INORGANIC CHEMISTRY Q.P. CODE: 5004

Your answers should be specific to the questions asked

Draw neat labeled diagrams wherever necessary

All the questions are compulsory

LONG ESSAYS

2 x 10 = 20 Marks

1. Explain the various sources of impurities in pharmaceuticals. Discuss the importance of limit tests in quality control of pharmaceuticals.

OR

Explain major buffers used in pharmaceutical preparations. What are the advantages and disadvantages of each? What factors must be taken into consideration in the selection of a buffer.

2. Describe the principles, reactions and procedure for the assay of a) Ammonium chloride b) Sodium bicarbonates.

SHORT ESSAYS

7 x 5 = 35 Marks

3. What do you mean by the term monograph? What are the contents of monograph in detail?

OR

What are antimicrobials? Write a note on various iodine preparations.

4. What are gastrointestinal protectives and adsorbents? Write a short note on kaolin.

OR

Write the principle and reaction involved in modified limit test for chlorides in potassium permanganate?

5. What are Antidotes? Give the method of preparation, assay principle with reaction and medicinal uses of Sodium thiosulphate.

6. Describe the precautions for storage and handling of radioisotopes.

7. Define the term emetics. Write the method of preparation and assay of copper sulphate.

8. Describe various methods used to adjust isotonicity.

9. What are GIT agents? Classify them with structural examples. Write a note on acidifiers.

SHORT ANSWERS

10 x 2 = 20 Marks

10. What are dentifrices with structural examples?

11. Ethanolic sulphate standard solution is used in limit test for sulphates. Give reason.

12. What is buffer capacity? Give equation

13. **What are Haematinics? Give the uses of Ferrous Sulphate with structural formula**

14. Discuss the pharmaceutical importance of Bentonite.

15. Classify extra and intra cellular electrolytes with structural examples.

16. **Write the functions of major Physiological ions.**

17. **What are astringents? Write the uses and molecular formula of potash Alum.**

18. Define Isotope, give example

Rajiv Gandhi University of Health Sciences, Karnataka

19. Write the pharmaceutical importance of activated charcoal.

Gen-Z Medicos