

Rajiv Gandhi University of Health Sciences, Karnataka I Year B. Pharm Degree Examination - 13-Jan-2020

Time: Three Hours Max. Marks: 70 Marks

PHARMACEUTICAL INORGANIC CHEMISTRY (RS - 4) Q.P. CODE: 2629

Your answers should be specific to the questions asked. Draw neat, labeled diagrams wherever necessary.

LONG ESSAYS (Answer any Two)

 $2 \times 10 = 20 \text{ Marks}$

- 1. Explain the various sources of impurities in pharmaceuticals. Discuss the importance of limit tests in quality control of pharmaceuticals.
- 2. What are Antacids? Classify them with examples. Give the ideal properties of antacids. Write the preparation, assay and uses of Sodium bicarbonate.
- 3. a. Discuss the physiological acid base balance in the body.
 - b. Write a note on combination of electrolyte replacement therapy.

SHORT ESSAYS (Answer any Six)

 $6 \times 5 = 30 \text{ Marks}$

- 4. Define limit test. Write the principle, reactions and procedure for the limit test for Iron
- 5. Define complexometric titration. Write the principle and reaction involved in the assay method of calcium gluconate.
- 6. Write a note on titration of potassium iodide by using potassium iodate solution.
- 7. Write the method of preparation and standardization of 250 ml of 0.1 M sodium hydroxide solution.
- 8. Explain the mechanism of action of indicators in Fajan's method.
- 9. Define and classify antidotes with examples. Write a note on activated charcoal.
- 10. Explain the different methods of expressing concentration of a solution with examples.
- 11. Name the different types of solvents used in non-aqueous titrations and explain their uses in different titrations.

SHORT ANSWERS $10 \times 2 = 20 \text{ Marks}$

- 12. Write the role of lead acetate cotton wool in arsenic limit test.
- 13. What is achlorhydria? Give its treatment.
- 14. What are emetics? Give example.
- 15. Give the storage condition of potassium permanganate and iodine solution.
- 16. Define the term titration, titrant, titrand and equivalent point.
- 17. What are acid base indicators? Give examples
- 18. Calculate the gram equivalent weight of Sodium thiosulphate and potassium permanganate.
- 19. Differentiate between accuracy and precision.
- 20. Give the role of starch as indication in redox titrations
- 21. Why are nitrobenzene and nitric acid used in modified Volhard's method?
