

# Rajiv Gandhi University of Health Sciences, Karnataka

First Year Pharma-D Examination - Feb/March 2011

**Time: Three Hours**

**Max. Marks: 70 Marks**

## PHARMACEUTICAL INORGANIC CHEMISTRY

### Q.P. CODE: 2855

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

#### LONG ESSAYS (Answer any Two)

**2 x 10 = 20 Marks**

1. Discuss the sources of impurities in pharmaceuticals with examples. How do impurities affect the quality of pharmaceutical substances
2. Describe the principle involved in the Mohr's and volhard's method for the determination of chlorides. Explain the mechanism of indicators in the determination of end point in Fajan's method with examples
3. Explain the principle and reactions involved in the assay of ferrous sulphate and sodium benzoate

#### SHORT ESSAYS (Answer any Six)

**6 x 5 = 30 Marks**

4. Write the principle involved in limit test for iron
5. What are antacids? Classify them with examples. Write the method of preparation of aluminium hydroxide gel. <https://www.rguhsonline.com>
6. Give a brief account of oral rehydration salts and their formulations
7. Give the method of preparation and uses of nitrous oxide as medicinal gas
8. What are antidotes? Out line the role of activated charcoal in poisoning
9. What are anticaries agents? Write the method of preparation and uses of sodium fluoride
10. Differentiate between iodometry and iodimetry
11. What are emetics? Give the assay principle involved in copper sulphate

#### SHORT ANSWERS

**10 x 2 = 20 Marks**

12. What is back titration?
13. How do you prepare 100 ml of 0.1 N sodium hydroxide volumetric solution
14. Write the storage condition of potassium permanganate volumetric solution
15. Why dilute nitric acid used in limit test for chlorides
16. What is self indicator
17. What are saline cathartics? Give examples
18. Write the reaction involved in assay of hydrogen peroxide
19. What are astringents? Give examples
20. What is the importance of calcium in human nutrition
21. Complete the following reactions and balance them if necessary
  - a)  $\text{AgNO}_3 + \text{NH}_4\text{SCN} \rightarrow$
  - b)  $\text{I}_2 + \text{Na}_2\text{S}_2\text{O}_3 \rightarrow$