

# Rajiv Gandhi University of Health Sciences, Karnataka

First Semester B.Pharm Degree Examination – DEC-2018

**Time: Three Hours**

**Max. Marks: 75 Marks**

## **Pharmaceutical Analysis - I**

**Q.P. CODE: 5002**

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. Define and classify determine errors with examples. List the methods of minimising errors.
2. Classify acid base titrations. Explain the Quinonoid theory of indicators with example.
3. Define oxidizing and reducing agents with suitable examples. Explain the principle involved in the iodometric titrations.

### **SHORT ESSAYS (Answer any Seven)**

**7 x 5 = 35 Marks**

4. How do you prepare and standardise the following compounds – a) 500ml of 0.1N hydrochloric acid b) 250ml of 0.1N sodium hydroxide.
5. What is usefulness of mixed and universal indicators?
6. Explain the uses of the following in non aqueous titrations – a) perchloric acid b) acetic acid c) acetic anhydride d) crystal violet.
7. Explain the principle and procedure involved in Volhards method and modified Volhards method.
8. Explain the principle and procedure involved in the estimation of Calcium Gluconate.
9. Explain what is co-precipitation and post-precipitation with example.
10. Explain the titrimetric curves obtained in conductometric titration a) strong acid Vs weak base b) strong base Vs strong acid.
11. Explain the construction and working of glass electrode. What are the advantages of glass electrode?
12. Give the construction and working of DME.

### **SHORT ANSWERS**

**10 x 2 = 20 Marks**

13. Give the pH range of phenolphthalein and methyl orange indicators.
14. Give the role of starch as an indicator in redox titrations.
15. Give a list of methods of expressing concentration.
16. How do you calculate stiochiometric end point in acid base titrations.
17. Name the solvents used in non-aqueous titrations.
18. What is the difference between chelates and the complexes?
19. List the optimum conditions for precipitation in gravimetric analysis.
20. Calculate equivalent weight of Hydrogen peroxide and Oxalic acid.
21. Name two compounds which can be estimated by conductometry.
22. Write the importance of Nernst equation.

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