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)

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

- 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)

 $7 \times 5 = 35 \text{ Marks}$

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

- 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.
