Rajiv Gandhi University of Health Sciences, Karnataka First Semester B.Pharm Degree Examination – 04-Dec-2020

Time: Three Hours

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)

- 1. What are the different methods of expressing concentration? How will you prepare and standardise 250ml of 0.1N potassium permanganate
- 2. Differentiate between alkalimetry and acidimetry with an example. Explain the selection of indicators in the titration between weak acid with a strong base using neutralization curve.
- 3. Define and classify Redox titrations. Explain titration with potassium iodate.

SHORT ESSAYS (Answer any Seven)

- 4. Define and classify error. Explain two methods of minimizing errors.
- 5. Explain the principle involved in the complexometric titration and how will you assay magnesium sulphate I.P.
- 6. Mention the different theories of neutralization indicators and explain any one.
- 7. Give the principle and procedure involved in assay of ephedrine hydrochloride I.P.
- 8. Explain the conductometric titration curve of strong acid with strong Alkali. Mention applications of conductometry.
- 9. Write the principle and applications of polarographic analysis.
- 10. Explain the principle and procedure in the Volhard's method and modified Volhard's method.
- 11. Explain what is co-precipitation and post-precipitation with an example each. What is the effect of washing with an electrolyte in each of the above cases?
- 12. Give the construction, working and application of calomel electrode.

SHORT ANSWERS

- 13. Explain effect of temperature in non-aqueous titrations.
- 14. Define molar conductance and specific conductance.
- 15. Define the terms accuracy and precision.
- 16. Give two examples each for self indicator and internal indicator in redox titration.
- 17. What is the difference between 'chelates' and 'complexes'?
- 18. What is standard hydrogen electrode?
- 19. Define mixed indicators and universal indicators.
- 20. Differentiate 'qualitative' and 'quantitative' analysis.
- 21. What is the importance of common ion effect in gravimetry?
- 22. Mention an advantage and a disadvantage of dichrometric determination.

1 x 10 = 20 Marks

7 x 5 = 35 Marks

10 x 2 = 20 Marks

Max. Marks: 75 Marks