Rajiv Gandhi University of Health Sciences, Karnataka

First Semester B.Pharm Degree Examination – 04-Dec-2020

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) 1 **x 10 = 20 Marks**

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) **7 x 5 = 35 Marks**

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 **10 x 2 = 20 Marks**

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.

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