Rajiv Gandhi University of Health Sciences, Karnataka
First Semester B.Pharm Degree Examination – 30-May-2024

Time: Three Hours   **Max. Marks: 75**

PHARMACEUTICAL ANALYSIS - I
Q.P. CODE: 5002

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

LONG ESSAYS   **2 x 10 = 20 Marks**

1. Define and classify error with suitable examples. explain the various methods of minimizing errors

OR

   Explain neutralization curve of strong acid vs strong base at various concentrations. Add a note on choice of indicator in each case.

2. Explain redox titrations and classify them with suitable examples.

SHORT ESSAYS   **7 x 5 = 35 Marks**

3. Write a note on different methods of expressing concentrations.

OR

   Explain principle of assay of ammonium chloride I.P. with suitable equation and explaining the role of neutral formaldehyde solution.

4. Explain in brief the various solvents used in non-aqueous titrations with suitable examples

OR

   Explain the Mohr's method of precipitation titration. What are its limitations?

5. Explain the estimation of magnesium sulphate with suitable equation.

6. Explain in brief co-precipitation and post-precipitation with examples

7. Write the construction, working and applications of glass membrane electrode

8. Define Polarography and explain Ilkovic equation and write the applications of Polarography

9. Define cell constant and explain in brief molar conductance and specific conductance

SHORT ANSWERS   **10 x 2 = 20 Marks**

10. Write the difference between primary standard substance and secondary standard substance

11. Short note on significant figures

12. Write the difference between Acidimetry and Alkalimetry

13. What is levelling effect?

14. Differentiate 'Drying' and Incineration' in gravimetric analysis

15. Write the difference between chelates and ligands

16. Give an example for titration with potassium permanganate and give its equation

17. Explain use of starch mucilage as indicator in Iodometric determination.

18. Mention the various methods for the determination of end point in potentiometry

19. What is common ion effect? Explain its use in pharmaceutical analysis.

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