Rajiv Gandhi University of Health Sciences, Karnataka

First Semester B. Pharm Degree Examination – 17-Nov-2022

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
All the questions are compulsory

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

1. Define and classify determinate errors with examples. List the methods of minimizing errors

OR

Define oxidation and reduction. Explain the principle and reactions of ferrous sulphate I.P. involved in titration. Give its applications with suitable examples

2. Define the terms ligands and chelates. Describe in detail about estimation of magnesium sulphate by complexometric titration

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

3. Explain the construction and working of standard hydrogen electrode

OR

What is polarography? Explain the terms a) Limiting current b) Polarographic maxima c) Diffusion current d) Supporting electrolytes

4. Give the mechanism of action of adsorption indicators with suitable examples

OR

What type of compounds can be considered as primary standards and why? Give suitable examples

5. Define specific conductance and Molar conductance. Discuss any two conductometric titration curves.
6. Define the terms co-precipitation and post-precipitation with examples.
7. Explain the uses of following in non-aqueous titrations a) Perchloric acid b) Acetic acid c) Acetic anhydride d) Crystal violet
8. Explain the neutralization curve of strong acid with strong base titration.
9. What are the steps involved in gravimetric analysis? Explain with suitable example

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

10. Define qualitative analysis and quantitative analysis.
11. Define accuracy and precision.
12. What are aprotic solvents? Give examples.
13. What are masking and demasking agent? Give examples.
14. How do you prepare 0.1N solution of oxalic acid?
15. Name two compounds which can be estimated by conductometry.
16. What is the difference between conductometry and potentiometry?
17. Write the principle of precipitation titration.
18. Write the conditions for process of digestion in Gravimetry.
19. **Differentiate between Iodometry and Iodimetry**

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