Rajiv Gandhi University of Health Sciences, Karnataka

First Semester B.Pharm Degree Examination – 31-May-2023

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 errors. Describe the various methods used to minimize the errors

OR

What are non-aqueous titrations? Explain in detail the types of solvents used in non-aqueous titrations. Explain the assay of sodium benzoate I.P

2. Define the terms 'oxidation' and 'reduction'. Enumerate the applications of cerimetry. Explain the assay of ferrous sulphate I.P. by cerimetry

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

3. What are primary and secondary standard substances? Mention the requirements of an ideal primary standard

OR

Mention any four adsorption indicators used in Fajan's method and explain the mechanism of action

4. **How do you prepare and standardize 0.1 N perchloric acid solution?**

OR

Explain the quinoid theory of acid base indicators with a suitable example

5. Discuss the principle and applications of Argentometric titrations with examples
6. Explain the principle and procedure involved in the estimation of calcium gluconate I.P.
7. Define polarography. Give its applications. Mention two electrodes used in polarographic determination
8. Define conductometric titration. Explain the conductometric titration curve for strong acid with weak base
9. Write the construction and working of glass electrode. List out its advantages and disadvantages

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

10. Explain the importance of significant figures
11. Define the terms Normality and Molarity
12. Mention any two neutralization indicators with their colour change intervals at different pH
13. Define Co-Precipitation and Post Precipitation
14. What are mixed indicators? Give an example with specific use
15. What are Chelating agents? Give examples
16. Enumerate the Nernst equation
17. What is a levelling effect?
18. Define ligand. Give two examples
19. What is null point potentiometry?

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