

# Rajiv Gandhi University of Health Sciences, Karnataka

## First Semester B. Pharm Degree Examination – 04-Nov-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. What are primary and secondary standards? Give examples of primary standards used in different types of titrations. Enlist the ideal properties of primary standards

**OR**

Define indicators. Write in detail about different theories of acid base indicators with examples

2. Define oxidation and reduction. Explain the principle and reactions involved in the titration of potassium dichromate with suitable example. Write its advantages.

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

3. Explain the different methods of expressing concentrations of solution.

**OR**

How will you prepare and standardize 100 ml of 0.1N Potassium Permanganate?

4. Explain different types of non-aqueous solvents with examples.

**OR**

What is Gravimetric analysis? Write the principle involved in the gravimetric estimation of Barium sulphate.

5. Explain the titration curve of strong acid versus strong base, mention the choice of indicators with different strength for the titration
6. Write the principle and reaction involved in the assay of Sodium Chloride by Volhard's method
7. How will you prepare and standardize 500 ml of 0.1N EDTA?
8. Name different Electrodes used in Potentiometry and explain the working of standard calomel electrode and write its advantages
9. Give the construction and working of DME

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

10. Define Masking and demasking agent with example.
11. Name the indicators used in non-aqueous titration.
12. Differentiate between co-precipitation and post precipitation.
13. Define Iodimetry and Iodometry.
14. Define molar conductance and specific conductance.
15. Define Polarography. Give its applications.
16. Use of KI in Iodine titration. Give reason.
17. Why 5N sulfuric acid is used in standardization of  $\text{KMnO}_4$ ?
18. Write Ilkovic equation and explain.
19. Write the molecular weight and atomic weight of sodium thiosulphate.

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