

Rajiv Gandhi University of Health Sciences, Karnataka
First Semester B.Pharm Degree Examination – DEC-2017

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)

2 x 10 = 20 Marks

1. What are errors and classify them. Define accuracy and precision. Describe the steps to minimize errors.
2. What are Neutralization curves? Explain the selection of indicators in the titration between weak acid with strong base using neutralization curves.
3. Define oxidation and reduction. Explain the principle involved in titration with potassium dichromate. Give its applications with suitable examples.

SHORT ESSAYS (Answer any Seven)

7 x 5 = 35 Marks

4. What is pharmaceutical analysis? Explain different types of analysis. What is its scope in pharmacy?
5. What are indicators? Explain the theory of indicators used in acid base titrations?
6. Explain the reason behind why water is not used in non-aqueous titration.
7. Give the mechanism of action of adsorption indicators with suitable examples.
8. Classify complexometric titrations. Explain each type with suitable examples.
9. What is gravimetry? Explain the following terms a) Digestion b) ignition c) Ash treatment d) Incineration.
10. Write the principle, instrumentation and applications of conductometry.
11. Enumerate the various types of electrodes in potentiometry. Give the working of Calomel electrode.
12. What is polarography? Explain the terms a) limiting current b) polarographic maxima c) diffusion current d) supporting electrolytes.

SHORT ANSWERS

10 x 2 = 20 Marks

13. What are systematic errors and random errors? Give examples.
14. What is color change interval of an acid base indicator? Give its importance.
15. How do you prepare acetous Perchloric Acid?
16. Complete and balance the equation: $\text{KMnO}_4 + \text{H}_2\text{C}_2\text{O}_4 + \text{H}_2\text{SO}_4 \rightarrow$
17. What is masking agent? Give example for masking by precipitation.
18. Write the conditions for process of digestion in Gravimetry.
19. What is Specific conductance and Molar conductance?
20. What is standard hydrogen electrode?
21. Define Qualitative Analysis and Quantitative Analysis.
22. What is Cerimetry? Give its applications.
