Rajiv Gandhi University of Health Sciences, Karnataka

First Semester B. Pharm Degree Examination – 12-Nov-2021

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 standard.
    OR
    Explain the procedure for selection of indicators in the titration between strong acid and strong base using neutralization curves.

2. Define oxidation and reduction. Give the applications of cerimetry with suitable examples.

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

3. Write the equation involved in the titration of iodine and sodium thiosulphate solutions. Explain the reactants and products.
    OR
    Explain theory of acid base indicators in detail.

4. What is leveling effect in non-aqueous titrimetry? Explain in detail.
    OR
    Discuss the principle and applications of Argentometric titrations with example.

5. Explain the principle involved in the Complexometric titrations in detail and how will you estimate Magnesium Sulphate.

6. What is meant by Gravimetric analysis? Describe the techniques used for successful estimation of Barium.

7. Explain the Conductometric titration curve of mixture of weak and strong acids with strong alkali.

8. What are the reference and indicator electrodes used in potentiometric titrations? Explain construction and working of any one electrode.

9. Write the principle and applications of Polarographic analysis.

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

10. What are atomic mass and molecular mass?

11. Give example for personal error and operative error.

12. Give one example each for self indicator and internal indicator.

13. How do you determine the end point in acid base titrations?

14. Name some indicators used in non-aqueous titrations.

15. What are sequestering agents? Give examples.

16. Why ignition process is carried out in gravimetry.

17. Calculate equivalent weight of Potassium Permanganate and Iodine.

18. Define conductance and resistance.

19. What is Null point potentiometry?

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