

2012 Scheme

QP CODE: 212006

Reg. No:

Second Year B.Pharm Degree Supplementary Examinations February 2022 Pharmaceutical Analysis

Time: 3 Hours

Total Marks: 100

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers*
- *Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Write equations wherever necessary.*

Essays

(3x10=30)

1. Explain the neutralization curve for the titration of 0.1 M Phosphoric acid against 0.1 M Potassium hydroxide. Comment on the selection of an indicator for the above titration
2. (a) Explain standard oxidation potential and Nernst equation.
(b) Write the conditions for Iodometry titrations.
3. Discuss the basic concepts in gravimetric analysis. What are the various precipitation techniques. Discuss on thermogravimetry.

Short notes

(14x5=70)

4. Explain in detail the principle of direct and back complexometric titration with an example for each.
5. Explain the principle of non-aqueous titration of weak bases with an example.
6. Explain the working of adsorption indicators with a suitable example.
7. Classify errors and explain methods to minimize them.
8. Explain in brief the principle for the determination of sulpha drugs by diazotization titration.
9. Write a note on the common ion effect and its significance.
10. Write the advantages of potassium dichromate over potassium permanganate as a titrant in redox titrations.
11. Explain the correction factors to be considered in the calibration of graduated volumetric glassware.
12. Explain the stability constant of the metal-EDTA complex and the factor affecting it.
13. Classify the solvents used in non-aqueous titrations with two examples in each class.
14. Write the difference between Mohr's method and Volhard's method for the determination of halides with one example each.
15. How is 0.1M sodium nitrite prepared and standardized.
16. What are the advantages and disadvantages of starch as an indicator in Iodine titration.
17. Write a note on Kjeldahl's method of nitrogen estimation.
