2012 Scheme

QP CODE: 212006 **Reg. No: ……..**

Second Year B.Pharm Degree Supplementary Examinations December 2019

Pharmaceutical Analysis

Time: 3 Hours **Total Marks: 100**

- Answer all Questions.
- Write equations wherever necessary.

Essays **(3x10=30)**

1. Classify solvents used in non-aqueous titrations with atleast two examples each. Explain the preparation and standardization of 0.1M perchloric acid.
2. Explain the principle of complexometric titrations. What are the different types of complexometric titrations and importance of buffers.
3. Explain Kjeldhal method of nitrogen estimation and choice of indicators in neutralization titrations

Short notes **(14x5=70)**

4. Calibration of a burette
5. Derive Henderson Hasselbach equation
6. Explain the theory of estimation of boric acid by aqueous acid base titration method
7. Explain the principle involved in non-aqueous titration with an example.
8. Chromophore theory of indicators with example
9. Explain titrations involving ceric ammonium sulphate
10. Explain Karl Fischer method of moisture analysis
11. Volhard's method
12. Define reduction and oxidation. Write Nernst equation with all symbols explained.
13. Explain permanganometric titration
14. List the ideal properties of a precipitate for gravimetric analysis and briefly mention the methods to accomplish the same
15. Explain thermogravimetry and its pharmaceutical applications
16. The principle of diazotization titration along with methods of detecting the end point
17. Each proton of phosphoric acid can be differentially titrated with a strong base in aqueous media, where as those of citric acid cannot be. Comment.

****