

Second Year B.Pharm Degree Examinations - July 2016

PHARMACEUTICAL ANALYSIS**(2012 Scheme)****Time: 3 Hours****Total Marks: 100**

- Answer all Questions.
- Write equations wherever necessary.

Essay**(3x10=30)**

1. What are the different methods by which concentration of a solution can be expressed. Explain the method of preparation and standardization of 500ml of 0.1N sulfuric acid.
2. Explain different methods used in the detection of end point in argentometric titrations
3. In the titration of 0.1N HCl versus 0.1N NaOH, if methyl red ($pT=5.5$) is used as the indicator, what type of error is introduced. State whether methyl red is a suitable indicator or not. Justify your answer. Explain the applications of non-aqueous titrations with examples.

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

4. Explain the method of preparation and standardization of 0.1 N potassium methoxide in toluene-methanol
5. Various methods that are used to decrease co-precipitation
6. Factors that affect solubility of precipitate.
7. Explain the preparation and standardization of ammonium thiocyanate solution
8. Explain the use of masking and demasking agents in complexometric analysis.
9. Explain the term weighed form. What are the requirements for weighed form in gravimetric analysis
10. Explain the factors that affect stability of complex.
11. Explain the method of preparation and standardization of standard solution of 0.1N Iodine solution.
12. Organic precipitants used in gravimetric analysis including its applications.
13. Applications of redox titrations using titanous chloride.
14. Explain Nernst equation and add a note on different types of indicators used in redox titrations along with the examples.
15. Explain estimation of oxygen with suitable diagram.
16. Applications of diazotization titrations.
17. Various types of errors in volumetric analysis.
