

**PHARMACEUTICAL ANALYSIS
(2010 Scheme)**

Time: 3 Hours

Total Marks: 100

- Answer all Questions.
- Write equations wherever necessary.

Essay

(3x10=30)

1. Explain theory of indicators and how indicators are chosen for neutralization titration such as strong acid Vs. strong base and weak acid Vs strong base.
2. Explain briefly about argentometric titrations. State how will you determine end point in precipitation titrations
3. Explain briefly about complexation and different types of titrations in complexometry.

Short notes

(14x5=70)

4. How will you calibrate burette and volumetric flask and mention its importance.
5. Explain briefly about law of mass action and its application
6. Explain briefly about pharmaceutical buffer solutions and its pharmaceutical applications
7. Redox indicators.
8. Explain the principle and procedure for the estimation of gases by Gay-Lussac method.
9. Define and explain masking and demasking agents and mention its applications.
10. Explain about diazotisation titration
11. Explain mean, median, mode and standard deviation.
12. State Nernst equation and mention its applications.
13. How will you determine pH of a solution. Explain briefly about calculation of pKa value of a solution.
14. Important role of mercuric chloride solution in argentometric titrations
15. Derive Henderson Hesselbatch equation
16. Mention the importance of quality control and explain about accuracy and precision.
17. Explain mixed indicators and its significance.
