

[Time: 3 Hours]

[Max. Marks: 75]

Advanced Pharmaceutical Analysis**Q.P. CODE: 5112**

Your answers should be specific to the questions asked.

Draw neat, labeled diagrams wherever necessary.

LONG ESSAY (Answer any Three)**3 X 10 = 30 Marks**

1. Explain the principle and procedure involved in the assay of any one official drug each as per IP for the following methods.
 - a) Complexometric titrations
 - b) Redox titrations
2. Explain the principle, procedure involved in the analysis of drugs and appropriate applications for the following reagents.
 - a) Folin -ciocalteu reagent.
 - b) Ninhydrin reagent.
3. Explain the different methods for determination of drugs containing the following functional groups?
 - a) Hydroxyl group
 - b) Methoxyl group
4. Explain the pharmacopeial bioassay of Adsorbed tetanus vaccine

SHORT ESSAY (Answer any Nine)**9 X 5 = 45 Marks**

5. Write a brief note on log p determination?
6. What is diazotization titration? Explain the principle and procedure involved in the assay of any one official drug by diazotization titration?
7. Explain the principle and application of Bratton - Marshall reagent in drug analysis.
8. With equations describe analysis of any two compounds by 3, 5- Dinitro salicylic acid (DNSA).
9. Name any two methods for the estimation of ester. Explain the chemical method in brief.
10. Explain the principle and procedure of any one method for the estimation of amino groups?
11. Describe in brief the biological assay of Rabies vaccine?
12. Write a brief note on PCR studies for gene regulation.
13. Explain briefly on qualification of degradation products.
14. Write the scope of Accelerated stability testing.

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