[Max. Marks: 75] [Time: 3 Hours]

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)

 $3 \times 10 = 30 \text{ Marks}$

- Explain the theory of redox titrations and give the Nernst equation. Add a note on iodimetry and iodometry?
- 2. procedure applications Explain the principle, and of the following reagent a) Paradimethyl-amino cinnamaldehyde (PDAC) b) 2,6-Dichloroquinone chlorimide?
- 3. Explain the principle and procedure involved in quantitative estimation of the following functional group a) Carboxyl group b) Ester group
- 4. Explain in detail Biological assay of Rabies vaccine.

SHORT ESSAY (Answer any Nine)

9 X 5 = 45 Marks

- 5. Explain the principle and reaction for the assay of sodium benzoate.
- 6. How will you estimate quantitatively calcium?
- 7. Explain the principle and application of Bratton-Marshall reagent?
- 8. How will you carry out the biological test for Oxytocin?
- 9. Define and classify impurities in drug substances.
- 10. Explain in brief on stability studies?
- 11. Give short notes on Antivenom?
- Explain the principle and procedure involved in quantitative estimation of Methoxyl functional 12.
- Define complexometric titrations and explain with an example? 13.
- Discuss brief account on 3, 5-Dinitro salicylic acid (DNSA). 14. NAMELIE