



NG 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) Non-aqueous titrations b) potentiometric titrations
2. Explain the principle and applications of the following reagents
a) Methyl -2 benzthiazolinone hydrazine(MBTH)
b) Para-dimethyl -amino benzaldehyde (PDAB)
3. Explain the the principle and procedure involved in quantitative estimation of drugs containing following functional groups/Element.
a) Carboxyl group b) Halogen group
4. Describe in detail the biological assay of Adsorbed Diphtheria vaccine.

SHORT ESSAY (Answer any Nine)

9 X 5 = 45 Marks

5. Describe analysis of any one drug by RP-HPLC.
6. Explain in brief analysis of any one drug by UV-extinction method.
7. Explain the principle and applications of 2, 6 Dichloroquinone chlorimide in drug analysis?
8. Write the procedure and applications of 1, 2 - naphthaquinone-4-sulfonate in drug analysis?
9. Explain a method for determination of calcium.
10. Explain the principle and procedure of any one method for the estimation of Sodium.
11. Describe in brief biological assay of Oxytocin.
12. Write a brief note on biological assay of Heparin sodium IP.
13. Classify residual solvents and describe their permissible limits in drug products.
14. Write a brief note on potential sources of elemental impurities.

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