

THEORY

UNIT – I

Theory, instrumentation and application with regard to drug analysis, decomposition product identification and estimation and metabolite analysis based on the following:

- (a) Ultraviolet – visible spectrophotometry (b) Infrared spectrophotometry

UNIT – II

Theory, instrumentation, practical considerations, structural elucidation and applications of the following:

- (a) H^1 N.M.R & C^{13} N.M.R (b) Mass spectroscopy

UNIT – III

Chromatographic methods: Gas Chromatography including GC-MS, High performance liquid chromatography; H.P.T.L.C and Super critical fluid chromatography.

UNIT – IV

Special Techniques like Immunological methods (RIA – ELISA) and electrophoreses (gel and capillary)

Basic concepts of Good laboratory practices (GLP) and laboratory maintenance. Standard Operating Procedures (SOPs) and validation of some analytical instruments.