

VINAYAKA MISSION'S RESEARCH FOUNDATIONS, SALEM
(Deemed to be University)

B.PHARM. DEGREE EXAMINATION – August 2019
Fourth Year

MODERN METHODS OF PHARMACEUTICAL ANALYSIS

Time : Three hours

Maximum: 70 marks

I. Write essays on any **TWO** questions: (2 x 15 = 30)

1. a) Principles of atomic absorption spectroscopy.
b) Factors affecting gas chromatography.
2. a) Principle of IR spectroscopy
b) Instrumentation of IR spectrometer.
3. a) UPLC instrumentation.
b) Application of UPLC.

II. Write short essays on any **SIX** questions: (6 x 5 = 30)

4. Mass Detector.
5. Thin Layer chromatography.
6. Applications of NMR spectroscopy.
7. Note on ion exchange chromatography.
8. Sathl's triangle.
9. Applications of UV spectroscopy.
10. Theory of Turbidimetry.
11. Factors affecting fluorescence.

III. Write short notes on any **FIVE** questions: (5 x 2 = 10)

12. Spectral shift.
13. Quenching.
14. Differential scanning calorimetry.
15. Advantage of MALDI.
16. Disadvantages of paper chromatography.
17. Sources of ionization.
