

QP CODE: 111328

Reg. No:.....

First Semester M.pharm Degree Examinations April 2018

M.Pharm (Pharmacology)

Paper I: Modern Pharmaceutical Analytical Technique (MPA101T)

Time: 3 Hours

Total Marks: 75

- Answer all Questions.
- Draw Diagrams wherever necessary.

Essays

(3x10=30)

1. Explain the theory, instrumentation and application of infrared spectroscopy
2. Explain the principle and application of NMR spectroscopy
3. Explain the working principle and applications of gas chromatography

Short Notes

(9x5=45)

4. Explain the influence of solvents on the UV-visible absorption spectrum
5. Explain the principle behind adsorption and ion-exchange chromatography
6. Compare and contrast HPLC and HPTLC
7. Gel electrophoresis
8. Potentiometry
9. Explain spin-spin coupling and coupling constant
10. Explain the mass spectroscopy fragmentation rules
11. Applications of X-ray diffraction
12. Differential thermal analysis.
