

QP CODE: 111331

Reg. No:.....

First Semester M.pharm Degree Examinations March 2019

M.Pharm (Pharmaceutical Chemistry)

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 principle of nuclear magnetic resonance (NMR). Describe the techniques used in spin-spin decoupling.
2. Explain the principle, instrumentation and factors affecting results in thermal gravimetric analysis.
3. Explain the parameters used in gas chromatographic separation. Describe the quantitative methods used for estimation of a drug by gas chromatography

Short Notes

(9x5=45)

4. Explain any two methods for production of X-rays.
5. Explain the principle and working conditions of capillary electrophoresis.
6. Explain any two ionization techniques in mass spectroscopy (MS).
7. Finger print region in IR spectrum.
8. Explain principle and instrumentation of flame emission spectroscopy.
9. Explain the chemical shift in ^{13}C NMR spectroscopy
10. Briefly explain the principle and working condition of ultra-high performance liquid chromatography.
11. Explain the techniques used for the simultaneous estimation of multi components in an analyte. Explain two such methods of analysis in detail.
12. Explain the principle and instrumentation of column chromatography.
