

QP CODE: 211329

Reg. No:.....

Second Semester M.Pharm Degree Examinations August 2018

M.Pharm (Pharmaceutical Analysis)

Paper I: Advanced Instrumental Analysis (MPA 201T)

(2017 Scheme)

Time: 3 Hours

Total Marks: 75

- Answer all Questions.
- Draw Diagrams wherever necessary.

Essays

(3x10=30)

1. Define mass fragmentation. Explain the fragmentation rules with examples.
2. Explain the principle, instrumentation and applications of capillary electrophoresis-mass spectrometry hyphenation.
3. Explain chemical shift, factors influencing chemical shift, NOESY and COSY

Short Notes

(9x5=45)

4. Detectors used in high performance liquid chromatography.
5. Principles involved in high performance liquid chromatography and discuss about affinity chromatography.
6. Principle involved in gel permeation chromatography.
7. Derivatization techniques of gas liquid chromatography.
8. Principle, instrumentation and applications of HPTLC
9. Chiral separation in pharmaceuticals.
10. Principle of 2D nuclear magnetic resonance.
11. Principle and application of super critical fluid chromatography.
12. Working principle of time of flight analyzer
