

QP CODE: 211331

Reg. No:.....

**Second Semester M.Pharm Degree Supplementary Examinations
January 2019**

M.Pharm (Pharmaceutical Chemistry)

Paper I - Advanced Spectral Analysis (MPC 201T)

(2017 Scheme)

Time: 3 Hours

Total Marks: 75

- Answer all Questions.
- Draw Diagrams wherever necessary.

Essays

(3x10=30)

1. Explain the general fragmentation rules for organic compounds in mass spectroscopy
2. Outline the theory of 1D NMR spectroscopy
3. Explain principle, instrumentation and any two applications of super critical fluid chromatography

Short Notes

(9x5=45)

4. Explain Woodward-Fieser rule for 1,3-butadiene and cyclic dienes
5. Give the interpretation of any two organic compounds by IR and NMR spectroscopy
6. Give a brief note on COSY
7. Discuss in detail on HPTLC
8. Differentiate between DTA and TGA
9. Principle and applications of CE-MS
10. Give a brief account of radioimmunoassay of digitalis
11. Explain principle and any three applications of GC-AAS
12. Principle of LC-MS
