QP CODE: 211331 Reg. No:......

Second Semester M.Pharm Degree Examinations July 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. Discuss in detail about the principle, instrumentation and applications of HPTLC.
- 2. Explain the principle and applications of ELISA. Add a note on radio immunoassay of insulin.
- 3. Explain the principle, instrumentation and applications of Raman spectroscopy

Short Notes (9x5=45)

- 4. Principle involved in GC-MS
- 5. Woodward- Fieser rule for 1,3- butadienes and cyclic dienes.
- 6. Fragmentation rules considering any two important functional groups.
- 7. Interpretation of any two organic compounds using NMR spectroscopy.
- 8. Flash chromatography
- 9. Add a note on meta stable ions and ring rule in mass spectroscopy.
- 10. Principle and applications of TGA.
- 11. Theory and working of ATR-IR
- 12. Principle and applications of super critical fluid chromatography
