

QP CODE: 111328

Reg. No:.....

First Semester M.Pharm Degree Supplementary Examinations July 2019

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. Draw a schematic diagram and explain various components of double beam UV-spectrophotometer. Write the applications of UV- visible spectroscopy
2. Explain principle, instrumentation, working conditions and applications of gel electrophoresis
3. Explain the principle, instrumentation, merits & demerits and pharmaceutical applications of derivative differential thermal analysis (DDTA)

Short Notes

(9x5=45)

4. What is chemical shift. Explain the factors influencing the chemical shift
5. Explain how X-rays are produced
6. The principle and instrumentation of high performance liquid chromatography
7. Outline the principles and applications of FT-NMR
8. Describe MALDI mass spectroscopy
9. Explain isoelectric focusing and capillary electrophoresis
10. Describe briefly the principle, instrumentation and applications of column chromatography
11. Discuss the instrumentation and applications of flame emission spectroscopy
12. Explain spin-spin coupling and coupling constant in NMR spectroscopy
