

QP CODE: 302326

Reg. No:

Third Year Pharm D Degree Examinations – July 2016

Pharmaceutical Analysis

Time: 3 Hours

Total Marks: 70

- Answer all Questions.
- Draw Diagrams wherever necessary.

Essays

(3x10=30)

1. Explain the principle, stationary phase used, preparation of plates, development of chromatogram, visualization techniques and applications of thin layer chromatography. How separation efficiency is increased in HPTLC.
2. What do you mean by reference electrode and indicator electrode. Give examples and explain the construction and working of any one reference electrode and one indicator electrode. Add a note on the detection of end point from potentiometric titration curve.
3. Explain the theory of fluorescence and factors affecting fluorescence intensity. Add a note on quenching of fluorescence, types of quenching and applications of fluorimetry.

Short notes

(8x5=40)

4. Concept of validation and types of validation in pharmaceutical industry
5. Flame Ionization Detector and thermal conductivity Detector used in gas chromatography
6. Principle and applications of gel filtration chromatography.
7. Current voltage curve in polarography
8. Beer – Lambert’s law and deviations from Beer – Lambert’s law
9. Vibrational modes in poly atomic molecules and sample preparation techniques for IR spectroscopy
10. Theory of NMR spectroscopy
11. Monochromators used in UV-Visible spectroscopy
