

Third Year Pharm D Degree Examinations June 2017

Pharmaceutical Analysis

Time: 3 Hours

Total Marks: 70

- Answer all Questions.
- Draw Diagrams wherever necessary.

Essays

(3x10=30)

1. Classify high performance thin layer chromatography (HPTLC) based on mode of separation and explain the working principle involved in HPTLC with the help of a neat diagram.
2. Draw a neat sketch of a double beam UV-Visible spectrophotometer and explain the operational mode of its each component. Why a double beam UV-Visible spectrophotometer gives more precise and reproducible results in comparison to a single beam UV-Visible spectrophotometer.
3. Describe the working of a polarograph. Briefly explain the importance of supporting electrolyte and maxima suppressors in getting proper polarographic wave (CV curve).

Short notes

(8x5=40)

4. Explain the various methods of sample handling in IR- spectroscopy.
5. What are quenching and its factors in fluorescence spectroscopy.
6. Explain the principle and importance of resins used in ion- exchange chromatography.
7. Different conductometric titrations.
8. Explain the types of ions produced in mass spectrometer and applications of mass spectroscopy.
9. List the detectors used in gas liquid chromatography and explain the functioning of any one.
10. ICH guidelines.
11. Explain the theory of chemical shift in nuclear magnetic resonance spectroscopy.
