**Total Marks: 70** 

Third Year Pharm D Degree Examinations - September 2014

## **Pharmaceutical Analysis**

- Answer all Questions.
- Draw Diagrams wherever necessary.

## Essays

- 1. Discuss the principle, stationary phase, mobile phase, development techniques and applications of paper chromatography.
- 2. Explain the principle and instrumentation of UV-VIS double beam spectrophotometer with a neat diagram.
- 3. Explain the principle and applications of NMR and mass spectra.

## Short notes

- 4. Applications of DSC and DTA in pharmaceutical analysis.
- 5. Explain TQM, ICH and Validation.
- 6. Define mass spectrum. Explain the principle and different types ions produced in mass spectra.
- 7. List the advantages of HPTLC over TLC.
- 8. ESR and its application.
- 9. Differentiate between flame emission and atomic absorption spectroscopy.
- 10. Dropping mercury electrode- its advantages and disadvantages.
- 11. Explain quenching.

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## QP CODE:302326

Time: 3 Hours

(8x5=40)

(3x10=30)