

QP CODE: 302326

Reg. No:

**Third Year Pharm D Degree Supplementary Examinations
January 2020**

Pharmaceutical Analysis

Time: 3 Hours

Total Marks: 70

- Answer all Questions.
- Draw Diagrams wherever necessary.

Essays

(3x10=30)

1. How is a new analytical method for a drug product validated as per ICH guidelines. Explain in detail.
2. List and explain various development techniques in paper chromatography.
3. Explain deviation from Lambert Beer's law

Short notes

(8x5=40)

4. Enlist and briefly explain the elements of good laboratory practices.
5. Column development techniques in column chromatography.
6. What is ion exchange chromatography. Explain its principle and factors affecting the same.
7. What are the types of electrophoresis. Explain.
8. Define – molar conductance, specific conductance, resistance, cell constant and equivalence conductance.
9. Define λ_{max} . What are the various shifts observed in λ_{max}
10. Why fluorometric analysis is more specific than UV spectrometric analysis. Differentiate a fluorimeter and UV spectrophotometer.
11. What are the various types of peaks observed in a mass spectrum. List their analytical applications
