

QP CODE: 302326

Reg. No:

**Third Year Pharm D Degree Regular/Supplementary Examinations
December 2021**

Pharmaceutical Analysis

Time: 3 Hours

Total Marks: 70

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw Diagrams wherever necessary.*

Essays

(3x10=30)

1. Describe total quality management.
2. Explain the working of any one specific (or solute) property detector and one bulk property detector used in HPLC.
3. How are solid, liquid and gas samples handled in IR spectroscopy

Short notes

(8x5=40)

4. State Beer - Lambert's law and derive an equation for the same
5. Write a note on statistical quality control
6. Explain various types of plate preparation techniques in thin layer chromatography.
7. Any two advantages and limitations each of pneumatic pump, piston pump and syringe pump used in HPLC.
8. List the applications of gel filtration and affinity chromatography.
9. Why oxygen should be removed from the analyte solution before polarographic analysis. Explain.
10. Explain premix laminar and total consumption burners
11. Explain differential scanning calorimetry. Differentiate between heat flux and power compensation DSC
