

QP CODE: 302326

Reg. No:

**Third Year Pharm D Degree Regular/Supplementary Examinations
November 2024**

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. Discuss the principle and components of GLC (Gas liquid chromatography).
Explain the working principle of any two detectors used in GLC with neat labeled diagram.
2. Explain the principle and instrumentation of double beam UV spectrophotometer.
3. Explain the concept of statistical quality control and its significance.

Short notes

(8x5=40)

4. Explain the principle and instrumentation of DSC.
5. State and explain Beer's & Lambert's law, its derivation and its deviation.
6. Write down the principle and theory of fluorescence spectroscopy.
7. Write short notes on TQM.
8. Describe the construction and working principle of Hollow cathode lamp and its merits and demerits.
9. Write down the working principle of polarography.
10. Write down the various sampling techniques in IR Spectroscopy.
11. Explain the characteristics of solvents used in NMR spectroscopy.
