

**Third Year Pharm D Degree Supplementary Examinations May 2025**  
**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. Explain the principle, instrumentation and application of gas liquid chromatography.
2. With any labeled diagram, explain the instrumentation of IR spectroscopy.
3. Explain in detail, the construction and working of electrodes, types of potentiometric titration and its applications.

**Short notes**

**(8x5=40)**

4. Write down the principle and various coating techniques in TLC.
5. Write briefly about Quality of equipment and TQM.
6. Write short notes about gel electrophoresis and its applications.
7. Write briefly about DME and ilkovic's equation and its significant.
8. Write short notes about UV detectors and its working principles.
9. Write short notes about different types of burners used in flame photometry.
10. Write different types of ions produced in mass spectrum and its application.
11. Write short notes about Jablonski diagram.

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