

**FACULTY OF PHARMACY****Pharm-D (6-YDC) III-Year (Main & Backlog) Examination, June/July 2019****Subject : Pharmaceutical Analysis****Time : 3 Hrs****Max. Marks: 70****Note : Answer all the questions from Part-A. Answer any five questions from Part-B.****PART- A(10x2=20 Marks)**

- 1 Write the principle involved in Electrophoresis?
- 2 Define validation and calibration.
- 3 Name different type of detectors used in IR?
- 4 Distinguish between TLC and HPTLC.
- 5 Write and explain Bragg's equation?
- 6 Write abt the reference standard used in NMR.
- 7 Explain the principle of separation involved in ion exchange chromatography?
- 8 Write the composition of karlfischer reagent?
- 9 Explain different types of transitions in UV region?
- 10 Write the principle involved in Atomic Emission Spectroscopy?

**PART – B (5x10=50 Marks)**

- 11 Write short notes on
  - (a) ISO-9000 (4)
  - (b) Calibration of UV VIS Spectroscopy (or) HPLC (6)
- 12 Discuss the principle and instrumentation of GLC? (10)
- 13 Explain the principle and instrumentation of Polarography. (10)
- 14 Discuss the principle and different Conductometric titration. (10)
- 15 (a) Write abt different types of ionisation techniques used in Mass spectroscopy (5)  
(b) Explain the principle and instrumentation of ESR. (5)
- 16 Write the instrumentation and applications of HPLC. (10)
- 17 Explain the principle and development technique of Paper chromatography? (10)
- 18 Describe the construction and working of DSC and DTA? (5+5)

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