

**FACULTY OF PHARMACY**  
**Pharm. D (6 YDC) III-Year (Main) Examination, July 2017**

**Subject : Pharmaceutical Analysis**

**Time : 3 Hrs****Max. Marks: 70**

***Note: Answer all questions from Part - A and answer any five questions from Part-B.***

**PART – A (10 x 2 = 20 Marks)**

- 1 Write the principle involved in gel filtration.
- 2 Define linearity and robustness.
- 3 Name different type of detectors use in GLC.
- 4 Distinguish between HPLC and HPTLC.
- 5 Define Hook's law and write its equation.
- 6 Write abt the reference electrode used in potentiometry.
- 7 Explain the principle of separation involved in ion exchange chromatography
- 8 Write the composition of karlfischer reagent.
- 9 Explain different ions in mass spectroscopy.
- 10 Write the principle involved in AAS.

**PART – B (5 x 10 = 50 Marks)**

- 11 Write short note on :
  - (a) ICH – guidelines
  - (b) Regulatory control
- 12 Discuss the principle and instrumentation of IR spectroscopy.
- 13 Explain the principle and instrumentation of gel electrophoresis.
- 14 Discuss the principle and different amperometric titration.
- 15 (a) Write abt different analyzers used in Mass spectroscopy.  
(b) Define chemical shift and list the varis factors affecting it.
- 16 Write the instrumentation and applications of HPTLC.
- 17 Explain the principle and development technique of column chromatography.
- 18 Describe the construction and working of X-Ray diffraction methods.

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