

**IV B. Pharmacy I Semester Regular/Supplementary Examinations, Oct/Nov - 2017**  
**PHARMACEUTICAL ANALYSIS-II**

Time: 3 hours

Max. Marks: 70

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- Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)  
2. Answering the question in **Part-A** is Compulsory  
3. Answer any **THREE** Questions from **Part-B**
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**PART -A**

1. a) Write the basic principle involved in IR spectroscopy. (4M)
- b) What is molecular ion peak and base peak? (4M)
- c) State the applications of DTA. (3M)
- d) What are the types of resin used in ion exchange chromatography? (3M)
- e) Define HETP and Retention Factor. (4M)
- f) Write the applications of LCMS. (4M)

**PART -B**

2. a) Derive Beer and Lambert's law and explain the deviations from the laws. (9M)
- b) Write the instrumentation and sampling techniques in IR spectroscopy. (7M)
3. a) Write the basic principle and instrumentation of Mass Spectrometry. (10M)
- b) Discuss the principle involved in ESR. (6M)
4. a) Explain the basic principle and applications of atomic absorption spectroscopy. (9M)
- b) Write a note on Radio Immuno Assay. (7M)
5. a) Discuss the principle and types of paper chromatography. (10M)
- b) Write the principle involved in gel chromatography. (6M)
6. a) Explain the principle and instrumentation of GLC. (10M)
- b) Write the applications of HPTLC. (6M)
7. a) Explain the principle and instrumentation of LCMS. (10M)
- b) Write the applications of Electrophoresis. (6M)

