Total No. of Questions :5] *[Total No. of Printed Pages : 2*

Roll No .....

PY - 602

B.Pharmacy VI Semester

Examination, June 2016

Pharmaceutical Analysis - II

Time : Three Hours

Maximum Marks : 70

Note: i) Answer five questions. In each question part A, B, C is compulsory and D part has internal choice.

ii) All parts of each question are to be attempted at one place.

iii) All questions carry equal marks, out of which part A and B (Max. 50 words) carry 2 marks, part C (Max. 100 words) carry 3 marks, part D (Max. 400 words) carry 7 marks.

iv) Except numericals, Derivation, Design and Drawing etc.

1. a) Define chromatography with suitable examples.
   b) Define Beer-Lambert Law.
   c) Differentiate between HPLC and HPTLC.
   d) Write the principle of UV/VIS spectrophotometry and describe its instrumentation.

   Or

   Explain the Woodward Fisher rules with some suitable example.

2. a) What is Phosphorescence?
   b) Discuss the principle of IR spectrophotometry.
   c) Differentiate between IR and FTIR.
   d) What is IR Spectrophotometry? Write its application in Pharmaceutical research.

Or

Write a detailed note on fluorimetry.

3. a) Enlist the mane of mass analyzers.
   b) What do you mean by Base peak in mass spectrometry?
   c) Give the application of X-ray diffraction.
   d) Explain the principle of X-ray diffraction analysis.

   Or

   What are different ionization techniques in mass spectrometry?

4. a) Enlist the detectors and sources used in atomic absorption spectroscopy.
   b) Give in short the principle of NMR spectroscopy.
   c) Differentiate between 1HNMR and 13 CNMR principles.
   d) What do you mean by Chemical Shift, Discuss the factor affecting chemical shift values in NMR spectroscopy.

   Or

   Write the instrumentation and application of NMR spectroscopy.

5. a) Discuss the principle of Flame Photometry.
   b) Discuss the principle of Radioimmunoassay.
   c) Write the working of flame photometer.
   d) Discuss in detail the application of Radioimmunoassay.

   Or

   Write a brief notes on applications of flame photometry.

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