Printed Pages : 1 **Roll No.** | | | | | | | | | | | **BOP244**

B.PHARM.

THEORY EXAMINATION (SEM–IV) 2016-17

PHARMACEUTICAL ANALYSIS-II

Time : 3 Hours ***Max. Marks : 100***

Note : *Be precise in your answer. In case of numerical problem assume data wherever not provided.*

SECTION – A

1. Explain the following: **10 x 2 = 20**

(a) Differentiating solvents.
(b) Frontal analysis.
(c) Chelates.
(d) Masking agents.
(e) Dielectric constant.
(f) Mobile phase.
(g) Molar conductance.
(h) Chromatogram.
(i) Guard column.
(j) Peak broadening.

SECTION – B

2. Attempt any five of the following questions: **5 x 10 = 50**

(a) Explain different types of solvents used in non-aqueous titration. How will you prepare 0.1N perchloric acid.
(b) Describe a potentiometric titration assembly with a well-labeled diagram. Briefly enumerate its working systematically.
(c) Explain various methods of visualization of separated sample in chromatography. Write a detail note on HPLC.
(d) Derive the Nernst equation? Write its importance.
(e) Draw a light on instrumentation and application of column chromatography with suitable diagram? Explain different techniques of column preparation.
(f) Write the principle and methodology of thin layer chromatography.
(g) Describe various types of conductometric titration. Write the instrumentation and application conductometric titration.
(h) What is junction potential? Explain the working of any two reference electrode and indicator electrode respectively.

SECTION – C

Attempt any two of the following questions: **2 x 15 = 30**

3 What is underlying principle of complexometric titration? Give appropriate examples in support to your answer. Discuss the various application of complexometric titrations.
4 Explain and classify chromatography? Write the theories in detail. Write the principle and application of paper chromatography.
5 Discuss the principle, instrumentation and application of Conductometry.