Printed Pages : 2

BOP244

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 150410

Roll No. ☐☐☐☐☐☐☐☐☐☐

B.Pharm.

(SEM IV) THEORY EXAMINATION, 2014-15

PHARMACEUTICAL ANALYSIS-II

Time : **3** Hours]   [Total Marks : **70**

Note: Attempt all questions . All questions carry equal marks.

1   Attempt **any four** parts of the following: **3.5×4=14**

(a)   How would you prepare and standardize sodium EDTA solution?

(b)   Discuss the various types of non-aqueous solvents.

(c)   Explain the theory of indicator used in complexometry.

(d)   Write a note on pharmaceutical importance of non-aqueous titrations.

(e)   Explain what is complexation. Explain the role of masking and demasking agent in complexometric titration.

2   Attempt **any four** parts of the following: **3.5×4=14**

(a)   Explain construction and working of glass electrode with the help of neat diagram.

(b) Explain the basis of counductometric titration along with the apparatus.

(c) Explain Nernst equation in detail.

(d) Discus the principle and schematic diagram of the apparatus used in potentiometric titrations.

(e) Write a short note on salt bridges.

3 Attempt **any two** parts of the following: 7×2=14

(a) Discuss the various adsorbents used in TLC and its pharmaceutical applications.

(b) Give the principle and working of paper chromatography.

(c) Write a short note on plate and rate theory of chromatography.

4 Attempt **any two** parts of the following: 7×2=14

(a) Explain the principle and working of column chromatography with elution development chromatogram.

(b) Explain the working of HPLC instrument with schematic diagram and its applications.

(c) Discuss the various types and detectors used in GLC with schematic diagram.

5 Attempt **any two** parts of the following: 7×2=14

(a) Discuss the theory of Kjeldahl method. How will you determine the percentage of nitrogen in an organic compound?

(b) Write a note on Radioimmunoassay.

(c) Explain the principle and working of polarography with neat diagram.