Code: 15R00401 **R15**

B.Pharm II Year II Semester (R15) Regular Examinations May/June 2017

PHARMACEUTICAL ANALYSIS – I

Time: 3 hours Max. Marks: 70

PART – A

(Compulsory Question)

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1 Answer the following: (10 X 02 = 20 Marks)

(a) Define significant figure.
(b) Define Lewis acid and base with example.
(c) Write indicators used in complexometric titration.
(d) Define adsorption indicator with example.
(e) Give Nernst equation with notations.
(f) Define specific conductance.
(g) Define resonance, fluorescence and Stokes shift.
(h) Enlist different atomizers used in AAS.
(i) Define unpolarised and plane polarised light.
(j) Enlist the main parts of polarimeter.

PART – B

(Answer all five units, 5 X 10 = 50 Marks)

UNIT – I

2 (a) Explain different types of errors with examples.
(b) Explain the various methods to minimize the errors.

OR

3 (a) Define solubility product and explain its effects.
(b) Explain the principle and reaction involved in the assay of sodium benzoate.

UNIT – II

4 (a) Describe the different types of complexometric titration with suitable examples.
(b) Explain the principle involved in the complexometric titration with suitable example.

OR

5 (a) Describe permanganometry and iodimetry with reactions.
(b) Explain the principle and reaction involved in the assay of copper sulphate.

UNIT – III

6 Explain the various methods used to determine the end point in potentiometry with graph.

OR

7 With neat labelled diagram, explain the construction, working, advantages and disadvantages of dropping mercury electrode.

UNIT – IV

8 Describe the principle, instrumentation and applications of Atomic Absorption Spectrophotometer.

OR

9 Explain the spectral and chemical interferences that occur in Atomic Absorption Spectroscopy.

UNIT – V

10 Describe various grades of reagents used in QC lab and discuss the applications of L.R grade, A.R Grade and 1-LPLC grade reagents in Pharmaceutical industry.

OR

11 How moisture content will be determined in Pharmaceutical industries and discuss in detail Karl-Fisher method with neat labelled diagram.

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