

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)

- 1 Answer the following: (10 X 02 = 20 Marks)
- Define significant figure.
 - Define Lewis acid and base with example.
 - Write indicators used in complexometric titration.
 - Define adsorption indicator with example.
 - Give Nernst equation with notations.
 - Define specific conductance.
 - Define resonance, fluorescence and Stokes shift.
 - Enlist different atomizers used in AAS.
 - Define unpolarised and plane polarised light.
 - 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.~~