Code: 13R00301

R13

B.Pharm II Year I Semester (R13) Supplementary Examinations June 2018
PHARMACEUTICAL ANALYSIS – I

Time: 3 hours   Max. Marks: 70

PART – A
(Compulsory Question)
*****

1   Answer the following: (10 X 02 = 20 Marks)
  (a)   Write short notes on significant figures.
  (b)   List out any five solvents used in non-aquametry.
  (c)   Write the principle involved in Mohr's method.
  (d)   Write the principle involved in precipitation methods.
  (e)   Write a brief note on conductivity cell.
  (f)   What is migration current and diffusion current?
  (g)   List out the physical and chemical methods for the determination of moisture content in pharmaceutical formulations.
  (h)   Define and write the significance of theoretical plates and HETP.
  (i)   Write the detection techniques used for the identification of compounds by TLC.
  (j)   How do you calibrate volumetric flask?

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

UNIT – I

2   Define indicator. Discuss Ostwald and Quinonoid theories of indicators.
OR
3   Write the applications of non-aqueous titrations.

UNIT – II

4   Give an account on indicators used in precipitation titrations. Add a note on adsorption indicators.
OR
5   Discuss in detail about masking and demasking procedures in complexometry.

UNIT – III

6   Explain different types of conductometric titrations in detail.
OR
7   Discuss the principle and apparatus used in polarography with a neat sketch.

UNIT – IV

8   Discuss the theory, principle and applications of polarimetry.
OR
9   Explain the method of estimation of moisture content in pharmaceutical formulations by Karl-Fischer method with a neat labeled sketch.

UNIT – V

10   Write a detailed note on column chromatography with special emphasis on adsorbents used, preparation of column and methods of detection.
OR
11   Explain principle, preparation of plates and visualization of spots and applications of TLC including stationary phases used.

*****