

B.Pharm III Year II Semester (R13) Supplementary Examinations May/June 2018

PHARMACEUTICAL ANALYSIS – II

Time: 3 hours

Max. Marks: 70

PART – A

(Compulsory Question)

- 1 Answer the following: (10 X 02 = 20 Marks)
- (a) What are photochemical reactions?
 - (b) Enlists types of bending vibrations in IR.
 - (c) Give effects of environment on NMR spectra.
 - (d) What do you know about isotope peaks?
 - (e) What is maximum burning velocity in cm/sec of hydrogen and acetylene gas?
 - (f) Define luminescence and phosphorescence.
 - (g) Name the windows from which X-ray tube made.
 - (h) Define ORD and CD.
 - (i) Which type of solid supports used in GC? Explain.
 - (j) Enlists the main types of pumps used in HPLC.

PART – B

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

UNIT – I

- 2 Discuss instrumentation and applications of double beam UV-spectrophotometer.

OR

- 3 Give principle and applications of FT-IR. Add a note on molecular vibrations in IR.

UNIT – II

- 4 Explain instrumentation of NMR spectroscopy along with the chemical shift.

OR

- 5 Describe fragmentation process and patterns in mass spectrometry.

UNIT – III

- 6 Illustrate the spectrofluorometer instrument. Give its advantages and disadvantages.

OR

- 7 Compare flame emission photometry and AAS. Discuss interference in detail.

UNIT – IV

- 8 How will you analyze powder samples? State and explain Bragg's equation with examples.

OR

- 9 Describe Radio Immune Assay (RIA) in detail.

UNIT – V

- 10 Discuss GC-MS with its applications in pharmaceutical analysis.

OR

- 11 Give principle, instrumentation and applications of HPLC in pharmaceutical analysis.
