

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

PHARMACEUTICAL ORGANIC CHEMISTRY – II

Time: 3 hours

Max. Marks: 70

PART – A

(Compulsory Question)

- 1 Answer the following: (10 X 02 = 20 Marks)
- (a) Explain about aromaticity and basicity of pyridine, pyrazine and pyrimidine.
 - (b) What is zwitterion? Explain it.
 - (c) Define isoelectric point.
 - (d) What is epimerization?
 - (e) Explain about chirality.
 - (f) What is rancidity of oils?
 - (g) Name and write structures of any two drugs containing indole moiety.
 - (h) Define acid value.
 - (i) Write about enantiomers with suitable examples.
 - (j) Write about E & Z configuration.

PART – B

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

UNIT – I

- 2 Explain about glucose ring structure.

OR

- 3 Write the important reactions of glucose.

UNIT – II

- 4 Classify amino acids and proteins. Write about CTAA and NTAA concept and peptide synthesis.

OR

- 5 Write about the structure and chemistry of insulin, oxytocin and heparin.

UNIT – III

- 6 Write a note on fat analysis and its significance. Write the difference between fat, oil and waxes.

OR

- 7 What is racemic mixture and write about various methods of resolution of racemic mixtures?

UNIT – IV

- 8 What are elements of symmetry and explain with suitable examples? Write a note on sequence rules.

OR

- 9 Write about transition metal complexes.

UNIT – V

- 10 Write the mechanism and applications of Beckmann rearrangement and Birch reduction.

OR

- 11 Write the mechanism and applications of Mannich reaction and Michael addition reactions.
