

Code: 13R00303

B.Pharm II Year I Semester (R13) Supplementary Examinations November 2016

PHARMACEUTICAL ORGANIC CHEMISTRY – II

Time: 3 hours

Max. Marks: 70

PART – A

(Compulsory Question)

- 1 Answer the following: (10 X 02 = 20 Marks)
- Write the structure and uses of Benzimidazole.
 - Write the synthesis of Oxazole.
 - What is Syn and Anti configuration?
 - What is plane polarized light?
 - What is Alpha Glycosidic linkage?
 - Define acid value and give its significance.
 - What is Oxytocin? And write its functions?
 - Define waxes and write their uses.
 - Write the reaction mechanism of Schmidt reaction.
 - Write about Neighboring Group effect.

PART – B

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

UNIT - I

- 2 Discuss in detail about the following:
- Aromaticity pyrrole, thiophene and furan.
 - Electrophilic substitution reactions of indole.

OR

- 3 Explain the following:
- Basicity of pyrrole and pyridine.
 - Nomenclature of six membered heterocyclic aromatic compounds.

UNIT - II

- 4 Define optical activity and explain in detail about sequence rules.

OR

- 5 Briefly explain the following:
- Enantiomers.
 - Recemic mixture.
 - Meso compounds.
 - Relative configuration.

UNIT - III

- 6 Define carbohydrates and explain: (a) mutarotation. (b) Ring structure of glucose.

OR

- 7 Explain the following in brief:
- Nomenclature of carbohydrates.
 - Osazone formation.
 - Structure of cellulose and starch.

UNIT - IV

- 8 Define and classify amino acids and give any two preparation methods of α -amino acids.

OR

- 9 Write in detail about the following:
- Peptide synthesis.
 - Determination of C-terminal and N-terminal amino acids.

UNIT - V

- 10 Write the reaction mechanism and applications of:
- Beckmann rearrangement.
 - Oppenauer oxidation.

OR

- 11 Write the reaction mechanism of: (a) Mannich reaction. (b) M P V reaction.
