Code: 13R00303 **R13**

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)

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1 Answer the following: (10 X 02 = 20 Marks)

(a) Write the structure and uses of Benzimidazole.
(b) Write the synthesis of Oxazole.
(c) What is Syn and Anti configuration?
(d) What is plane polarized light?
(e) What is Alpha Glycosidic linkage?
(f) Define acid value and give its significance.
(g) What is Oxytocin? And write its functions?
(h) Define waxes and write their uses.
(i) Write the reaction mechanism of Schmidt reaction.
(j) 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:

(a) Aromaticity pyrrole, thiophene and furan.
(b) Electrophilic substitution reactions of indole.

OR

3 Explain the following:

(a) Basicity of pyrrole and pyridine.
(b) Nomenclature of six membered heterocylic aromatic compounds.

UNIT - II

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

OR

5 Briefly explain the following:
(a) Enantiomers. (b) Recemic mixture. (c) Meso compounds. (d) Relative configuration.

UNIT - III

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

OR

7 Explain the following in brief:
(a) Nomenclature of carbohydrates.
(b) Osazone formation.
(c) 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:
(a) Peptide synthesis. (b) Determination of C-terminal and N-terminal amino acids.

UNIT - V

10 Write the reaction mechanism and applications of:
(a) Beckmann rearrangement. (b) Oppenauer oxidation.

OR

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

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