

B.Pharm I Year (R13) Supplementary Examinations December 2017

PHARMACEUTICAL ORGANIC CHEMISTRY – I

Time: 3 hours

Max. Marks: 70

PART – A
(Compulsory Question)

- 1 Answer the following: (10 X 02 = 20 Marks)
Write short notes on:
- Williamson's synthesis.
 - Diazotisation.
 - Effect of HCN on carbonyl compounds.
 - Differentiation between nitriles and isonitriles.
 - Kharasch effect.
 - SP² hybridization.
 - Basicity of amines.
 - Effect of hydroxyl ions on monosubstituted benzenes.
 - Cannizzaro reaction.
 - Polar solvent effect in nucleophilic substitution reactions.

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

- 2 Discuss the electronic effects in the organic molecules.

OR

- 3 Discuss the stability of cyclohexanes. Add a note on baeyer strain theory.

UNIT – II

- 4 Explain the mechanism, stereochemistry and kinetics of nucleophilic substitution reactions.

OR

- 5 Explain the electrophilic addition reactions of conjugated dienes. Mention the Saytzeff rule.

UNIT – III

- 6 Elaborate the structure and reactions of anthracene.

OR

- 7 Discuss the structure and reactions of benzene.

UNIT – IV

- 8 Explain the acidity of phenol with examples. Give any three methods of preparation also.

OR

- 9 Discuss the relative reactivities of primary, secondary and tertiary alcohols. Write the effect of HG on ethers.

UNIT – V

- 10 Briefly explain on:

- Reformatsky reaction.
- Oppenauer oxidation.
- Relative reactivities of carbonyl compounds.

OR

- 11 (a) Describe the method of preparation & properties of malonic esters. Mention its importance in organic synthesis.
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- (b) What do you mean by Hoffmann's degradation?