

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

PHARMACEUTICAL ORGANIC CHEMISTRY - I

Time: 3 hours

Max. Marks: 70

PART - A

(Compulsory Question)

- 1 Answer the following: (10 X 02 = 20 Marks)
Briefly explain on:
- Walden Unversion.
 - Oxidation reduction reactions of phenanthrene.
 - Orientation of electron with drawing groups in mono-substituted benzene.
 - Kharasch effect.
 - Stability of carboxylate ion.
 - Synthesis of nitrites.
 - Effect of refractive index on structure of organic molecules.
 - Reduction of aromatic nitro compounds.
 - Concept of hybridization in organic molecules.
 - Relative reactivity of exchange compounds.

PART - B

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

UNIT - I

- 2 (a) Discuss the mechanism of free radical substitution in alkanes.
(b) Explain Sachse-Mohr theory.

OR

- 3 Discuss in detail the electronic effects in organic molecules.

UNIT - II

- 4 Explain the mechanism and stereochemistry of electrophilic addition reactions of alkenes.

OR

- 5 Describe:
- Acidity of alkynes.
 - Factors affecting substitution reactions.

UNIT - III

- 6 Discuss the chemistry of arenas and the benzyne ion concept.

OR

- 7 Explain the structure and stability of benzene.

UNIT - IV

- 8 What do you mean by diazotization reactions? Explain any three reactions of diazonium salts.

OR

- 9 Mention:
- The relative reactivity of primary, secondary of tertiary alcohols.
 - The action of hydro iodic acid on ethers.

UNIT - V

- 10 (a) Write two important methods of preparation carboxylic acids.
(b) Write the reaction and mechanism involved in Aldol condensation.

OR

- 11 (a) Enumerate the important reactions of carbonyl compounds.
(b) Write a detail note on hofmann degradation of amides.