

B.PHARM.
THEORY EXAMINATION (SEM-II) 2016-17
PHARMACEUTICAL ORGANIC CHEMISTRY

Time : 3 Hours

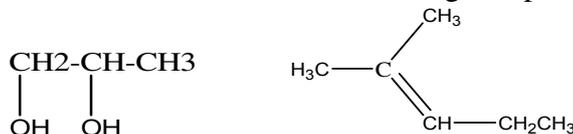
Max. Marks : 70

SECTION – A

1. Attempt the following:

7x2 = 14

(a) Give the IUPAC name of following compounds.



- (b) How many angle strains are developed in cyclo propane and why cyclopropane are unstable and cyclopentane are stable.
- (c) Give the reactivity order of SN1 reaction. Carbocation rearrangement takes place in which type of nucleophilic substitution reaction.
- (d) Mannich base are formed by the reaction between A+B+C. give the name of A, B & C.
- (e) What is Bakelite and Arenes.
- (f) What are active methylene compounds?
- (g) Give Saytzeff rule.

SECTION – B

2. Attempt any five parts of the following questions:

5x7 = 35

- (a) Explain the phenomenon resonance with example and also discuss about the geometrical isomerism.
- (b) Describe Baeyer strain theory. Give the mechanism of free radical substitution.
- (c) Write aromaticity in aromatic compound and also discuss the reactivity & orientation in aromatic substitution.
- (d) Give the preparation and chemical reaction of acetoacetic ester and toluene.
- (e) Discuss the specification of configuration and conformational analysis.
- (f) Give any two methods of preparation of alkyl halide. Discuss about SN1 and SN2 reactions.
- (g) Give the preparation, reaction and application of naphthalene.
- (h) Explain electrophilic and free radical additions in dienes.

SECTION – C

Attempt any two parts of the following questions:

2x10.5 = 21

3. Discuss the different hypothesis with reference to the structure of benzene. Give electrophilic aromatic and nucleophilic substitution reaction of phenols.
4. Give nucleophilic substitution and nucleophilic elimination of alcohols and also give nucleophilic addition reaction of amines and acetaldehyde.
5. Give definition, reaction mechanism & application of any two.
- (i) Meerwein-Ponndorf-Verley reduction
 - (ii) Aryl diazonium salts
 - (iii) Hofmann rearrangement