

I B.Pharmacy I Semester Supplementary Examinations, Feb/Mar 2014
PHARM ORGANIC CHEMISTRY -I

Time: 3 hours

Max Marks: 75

Answer any FIVE Questions
All Questions carry equal marks

1. (a) Classify different types of organic reagents. Explain in brief Electrophilic reagents with examples. How do they attack the substrate?
(b) What are nucleophilic reagents? Classify with examples. How nucleophiles attack the substrate? [8+7]
2. (a) Explain relative stabilities, heat of combustion and hydrogenation.
(b) What are cycloalkanes? Discuss Bayer's strain theory to explain the stability of cycloalkanes. [8+7]
3. (a) Write a note on Kharasch effect.
(b) Explain Bayer's oxidation of alkenes.
(c) Discuss the polymerization of alkenes with example. [5+5+5]
4. (a) Explain the statement "Benzene undergoes Electrophilic Aromatic Substitution Reactions"
(b) Write short notes on Activating and Deactivating Groups in Electrophilic Aromatic Substitution Reactions of Substituted Benzene [8+7]
5. (a) What are Aromatic compounds? Explain the Structure of Benzene
(b) Write short notes on (i) Huckel's Rule (ii) Stability of Benzene [5+10]
6. Write reaction mechanism, kinetics, energetics, stereochemistry and factors influencing SN^2 Mechanism? Add a note on Walden Inversion? [15]
7. (a) Write Haworth synthesis of Naphthalene and describe Reaction Mechanism involved in it?
(b) What happens when Anthracene is subjected for Reduction with
(i) Sodium metal in Ethanol
(ii) Hydrogen in presence of Nickel catalyst [8+7]
8. (a) What are Aryl halides and give examples? Explain why Aryl halides are less reactive than Alkyl halides towards Nucleophilic Substitution Reactions?
(b) Describe any Three important Methods of Preparation of Aryl halides with suitable Examples? [8+7]

