

Code No: B1106/R10

Set No. 1

I B.Pharmacy I Semester Supplementary Examinations, May 2017

PHARMACEUTICAL ORGANIC CHEMISTRY -I

(Pharmacy)

Time: 3 hours

Max Marks: 75

Answer any FIVE Questions
All Questions carry equal marks

1. (a) Define Mesomeric effect. Classify with examples. Explain in brief Mesomeric effect.
(b) Explain briefly about Hyper conjugative effect with examples. [8+7]
2. (a) What are saturated Hydrocarbons? Explain the different systems of naming alkanes.
(b) Define Isomerism and Conditional Isomerism. Explain in brief the Isomerism and conformations of alkanes. [8+7]
3. (a) What are the Conjugated Alkadienes? Write the 1,4 addition reaction with mechanism. Explain the stability of conjugated-alkadienes.
(b) Explain in brief the activity of 1-alkynes. [8+7]
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) Write in detail nomenclature of benzene derivatives with suitable examples.
(b) Describe the Molecular Orbital Picture of benzene with heats of hydrogenation. [7+8]
6. Write the Reaction Mechanism, kinetics, energetics, stereochemistry and factors influencing SN 2 Mechanism? Add a note on Walden Inversion? [15]
7. (a) Write short notes on [8+7]
(i) Antiaromaticity (ii) Aromaticity of Heterocyclic Compounds
(b) Enlist various Electrophilic Aromatic Substitution Reactions of Benzene? Add a note on Friedel Crafts Reactions.
8. (a) Describe the following Methods of Preparation of Alkyl halides with suitable examples
(i) Finkelstein Method
(ii) Hunsdiecker Method
(b) Explain why Alkyl halides undergo Nucleophilic Aliphatic Substitution Reactions? Enlist various Nucleophilic Aliphatic Substitution Reactions of Alkyl halides for preparation of different classes of Organic compounds? [8+7]