

Code No: B1106/R10

**R10****I B.Pharmacy I Semester Supplementary Examinations, Feb. 2015****PHARM ORGANIC CHEMISTRY -I****Time: 3 hours****Max Marks: 75**

**Answer any FIVE Questions**  
**All Questions carry equal marks**

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1. (a) Define inductive effect. Classify with examples. Explain in brief inductive effect.  
(b) Write a short note on Electromeric effect. [8+7]
2. (a) Give the general mechanism of Electrophilic addition reactions. Discuss the Electrophilic addition reactions of alkenes with examples.  
(b) Define Markovnikov's rules. Discuss the mechanism with a suitable example. [8+7]
3. (a) What are Conjugated Alkadienes? Write the 1, 4 addition reaction with mechanism. Explain the stability of conjugated-alkadienes.  
(b) Explain in brief the acidity of 1-alkynes. [8+7]
4. (a) Define Birch Reduction? Write the Reaction Mechanism involved in it? Add a note on Synthetic Applications of Birch Reduction  
(b) Explain the statement "Benzene though Unsaturated undergoes Electrophilic Substitution Reactions rather than Electrophilic Addition Reactions" [8+7]
5. Write the Reaction Mechanism for the following Reactions of Benzene  
(a) Nitration (b) Sulphonation (c) Halogenation [5+5+5]
6. (a) What is Saytzeff's Rule? Write a note on Saytzeff Orientation in Elimination Reactions of Alkyl halides?  
(b) Write short notes on  
(i) Reduction of Alkyl halides  
(ii) Formation of Organo Metallic compounds from Alkyl halides [7+8]
7. (a) Write short notes on  
(i) Antiaromaticity  
(ii) Aromaticity of Heterocyclic Compounds  
(b) Enlist various Electrophilic Aromatic Substitution Reactions of Benzene? Add a note on Friedel Crafts Reactions [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]

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