

First Year B.Pharm Degree Supplementary Examinations - August 2014

(2010 - Scheme)**PHARMACEUTICAL CHEMISTRY - II**
(Organic Chemistry)**Time: 3 Hours****Total Marks: 100**

- Answer all Questions.
- Write equations wherever necessary.

Essay**(3x10=30)**

1. Explain electrophilic aromatic substitution reaction with theory of reactivity and orientation in mono substituted benzenes
2. Discuss the mechanism of electrophilic addition reaction in alkenes with suitable example. Explain the Markonikov's rule and Kharasch effect.
3. Explain the mechanism involved in benzoin condensation and Cannizzaro's reaction.

Short notes**(14x5=70)**

4. Define isomerism. Classify the isomers of alkanes with suitable examples.
5. Keto-enol tautomerism in alkynes. Mention the reaction for addition of water in alkynes.
6. Explain E₁ mechanism and Saytzeff's rule with suitable examples.
7. What is Williamson's synthesis. Mention the reaction of ethers with hydro iodide acids.
8. Explain the stability of phenoxide ions. Mention any three reactions of phenols.
9. Explain the hybridization and shape of alkanes
10. Mention any two important methods for preparation of carboxylic acids. Add a note on their acidity.
11. Explain Baeyer strain theory.
12. Explain the low reactivity of halo benzenes towards nucleophilic substitution.
13. Explain oxidation and reduction reactions of carbonyl compounds.
14. Explain hyper conjugation and inductive effect.
15. Hoffmann's degradation of amides.
16. Explain the relative reactivity of primary, secondary and tertiary alcohols. What is Riemer Tiemanns reaction.
17. Explain the relative reactivity of amines. Outline the Hinsberg method of separation of amines.
