

First Year B.Pharm Degree Supplementary Examinations, August 2016

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

- Answer all Questions.
- Write equations wherever necessary.

Essay**(3x10=30)**

1. Explain Baeyer strain theory, Sachse Mohr theory and ring stability of cyclo hexane with its chair and boat conformation.
2. Explain Markovnikov's rule and Kharasch effect with suitable examples in alkenes.
3. Explain the mechanism of
 - Reformatsky's reaction
 - Aldol condensation

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

4. Describe the method for formation of metal acetylides and explain the stereospecific reduction of alkynes.
5. Describe acetoacetic esters and its importance in synthesis.
6. Explain the mechanism of free radical substitution reaction in alkanes
7. What is Perkins reaction. Explain with mechanism.
8. Explain the basicity of amines.
9. Explain the acidity of carboxylic acids and add a note on dicarboxylic acids.
10. Explain the replacement reaction of hydroxyl group by halogens in alcohols.
11. Explain electromeric and mesomeric effects in organic molecules.
12. Mention about the relative reactivities of carbonyl compounds and any two methods of preparation of them.
13. Explain Walden's inversion and any three general methods of preparation of alcohols.
14. Define hyper conjugation and explain stability of conjugated dienes.
15. Hoffmann's degradation of amides
16. Explain the effect of halogen on electrophilic aromatic substitution.
17. Mention any two methods of synthesis of nitriles and explain its reactivity.
