

First Year B.Pharm Degree Supplementary Examinations - March 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 the stability and structure of benzene
2. List any one method of preparation and reaction of acid derivatives. Explain the mechanism of hydrolysis of esters.
3. Explain nucleophilic aliphatic substitution reactions with suitable examples. Add a note on Walden's inversion.

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

4. What are nitro compounds. Explain the acidity of nitro compounds.
5. Mention any two methods for preparation of carbonyl compounds and explain the polarity of carbonyl compounds.
6. Explain the mechanism of free radical substitution reaction of alkanes.
7. What is Williamson's synthesis. Add a note on Zeisel's method.
8. Explain the acidity of phenols.
9. What is diazotization reaction. Mention any two reactions of diazonium salts.
10. Explain briefly malonic esters and mention its importance in synthesis.
11. Explain Bayer's strain theory.
12. Classify alcohols. Mention any two methods for the preparation of different classes of alcohols
13. Explain Fries rearrangement.
14. Explain hyper conjugation and resonance with examples.
15. Explain the reaction and mechanism of benzoin condensation reaction.
16. Explain Saytzeff's rule for elimination reactions.
17. Mention the cis-hydroxylation and polymerization reactions in alkenes.
