

First Year B.Pharm Degree Supplementary Examinations, July 2015

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

- Answer all Questions.
- Write equations wherever necessary.

Essay**(3x10=30)**

1. Mention two methods of synthesis of nitriles, explain its reactivity and describe the functional reactions of nitriles.
2. Define the term aromaticity. Discuss the modern theory of aromaticity, making a special mention of Huckel rule.
3. Explain the mechanism and synthetic applications of Perkin's reaction and Diazotisation reactions.

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

4. What are the distinguishing features of sp and sp² hybrid orbitals and explain with examples.
5. Explain why chair conformation of cyclohexane is more stable than boat conformation
6. Explain the mechanism of peroxide effect.
7. What is Williamson's synthesis. Explain the action of hydroiodic acid on ethers.
8. Mention four different methods of preparation of alcohol.
9. Explain the relative reactivities of carbonyl compounds.
10. What is esterification reaction and explain its mechanism.
11. Explain the mechanism of cannizaro's reaction
12. What are acid amides. Mention one method of preparation and two reactions of acid amides.
13. List any three synthetic applications of acetoacetic ester
14. What are nitro compounds. List any two reactions of aromatic nitro compound
15. Explain the low reactivity of halobenzenes towards nucleophilic substitution reaction
16. Explain Bayer's strain theory
17. How will you convert phenol into picric acid and salicylic acid .
