

First Year B.Pharm Degree Examinations, July 2015

(2012 - 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 reaction and mechanism involved in Cannizaro's reaction and Perkin's reaction
2. Explain Kekule's structure of benzene. Discuss the theory of orientation in mono substituted benzene.
3. What is diazotization. Describe the preparation and reactions of Benzene Diazonium Chloride

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

4. Mention two methods of synthesis and three chemical reactions of carboxylic acids.
5. Define isomerism and elaborate the different types with examples.
6. Explain the basicity of amines.
7. 1,4 addition reactions of conjugated alkadienes
8. Hydrogen bonding in alcohols.
9. How do you distinguish between an aldehyde and a ketone.
10. Explain Walden's inversion with example.
11. What is Fries rearrangement. Explain with mechanism.
12. Explain Hoffmann's degradation of amides.
13. Mention the method of preparation and any two synthetic uses of Diethyl malonate.
14. Discuss the free radical mechanism for the chlorination of methane.
15. Mention the distinguishing features of sp^2 and sp^3 hybridisation. Explain with suitable examples.
16. Explain dehydrohalogenation and E2 Mechanism
17. State Markovnikov's rule. Give Mechanism
