

First Year B.Pharm Degree Examinations - August 2014

**(2012 - Scheme)**

**PHARMACEUTICAL CHEMISTRY - II**  
**(Organic Chemistry)**

**Time: 3 Hours**

**Total Marks: 100**

- Answer all Questions.
- Write equations wherever necessary.

**Essay**

**(3x10=30)**

1. Define and mention the mechanism of Markonikovs & Antimarkonikovs addition.
2. Explain the effects of substituents on electrophilic aromatic substitution with examples.
3. "Discuss the mechanism involved in Perkins reaction and Cannizzaro reaction

**Short notes**

**(14x5=70)**

4. Explain Bayer's theory and its limitations.
5. Discuss the mechanism involved in chlorination of methane.
6. Saytzeff's rule.
7. Explain the 1, 4 addition reaction and stability of alkadienes.
8. Explain the acidity of phenols.
9. Mention the example and mechanism of Fries rearrangement.
10. What is Oppenauer oxidation with suitable example.
11. Explain the acidity of carboxylic acids and stability of carboxylate ions.
12. Two methods for the synthesis of aldehydes and explain its reactivity
13. Mechanism of Reformatsky reaction.
14. Explain diazotisation and reaction of diazonium salts.
15. Malonic and acetoacetic esters and its importance in synthesis
16. Discuss the mechanism of  $SN_2$  and  $SN_1$  reactions.
17. Explain  $SP^3$  And  $SP^2$  hybridisation.

\*\*\*\*\*