

First Year B.Pharm Degree Examinations June 2017

PHARMACEUTICAL CHEMISTRY - II

(Organic Chemistry)

(2012 - Scheme)

Time: 3 Hours

Total Marks: 100

- Answer all Questions.
- Write equations wherever necessary.

Essay

(3x10=30)

1. Give the reaction and mechanism of Perkins condensation and aldol condensation.
2. What happens when propene is treated with hydrogen bromide. Discuss the mechanism involved and peroxide effect.
3. Explain the mechanism of nitration in benzene. Add a note on theory of reactivity.

Short notes

(14x5=70)

4. Give stereo specific reduction of alkynes and explain ketoenol tautomerism.
5. Give the mechanism of E₁ and E₂ reaction.
6. Discuss Kolbe-Schmidt reaction and Fries rearrangement.
7. Explain Bayer's theory.
8. Give any three reactions of nucleophilic addition. Add a note on reactivity of carbonyl compounds.
9. Reactivity of the alcohols.
10. What is the application of Hinsberg method. Add a note on acylation of amines.
11. Explain the acidity of phenols.
12. Discuss the decarboxylation reaction in carboxylic acids. Add a note on stability of carboxylate anion.
13. Give the mechanism of Cannizaro's reaction.
14. Explain different types of isomerism with examples.
15. Give a brief account of malonic and acetoacetic esters and their importance in synthesis.
16. Give the low reactivity of halo benzenes.
17. Give the reactions of Williamson's synthesis and Bayer's oxidation.
