

## First Year B.Pharm Degree Supplementary Examinations June 2017

## PHARMACEUTICAL CHEMISTRY - II

(Organic Chemistry)

(2010 - Scheme)

Time: 3 Hours

Total Marks: 100

- Answer all Questions.
- Write equations wherever necessary.

## Essay

(3x10=30)

1. Explain nucleophilic aliphatic substitution reactions with suitable examples
2. Explain the mechanism involved in benzoin condensation and Cannizzaro's reaction
3. Explain the method of preparation and any three synthetic reactions of acetoacetic esters.

## Short notes

(14x5=70)

4. Explain Bayer's strain theory
5. Stability of conjugated dienes
6. Mechanism of peroxide effect
7. List any five differences between  $S_N1$  and  $S_N2$  reaction
8. Explain the hybridization and shape of alkanes
9. Explain different types of isomerism with examples
10. What is Fries rearrangement. Explain with mechanism
11. Explain the 1, 4 addition reaction and stability of alkadienes
12. Explain esterification reaction with mechanism
13. Williamson's synthesis
14. Explain mesomeric and electromeric effect in organic molecules
15. Relative reactivities of  $1^\circ$ ,  $2^\circ$  and  $3^\circ$  alcohols
16. List any two methods for the preparation of aldehydes and ketones
17. Huckle's rule

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