

**First Year B.Pharm Degree Supplementary Examinations October 2018**

**Pharmaceutical Chemistry - II**

**(Organic Chemistry)**

**(2012 Scheme)**

**Time: 3 Hours**

**Total Marks: 100**

- Answer all Questions.
- Write equations wherever necessary.

**Essay**

**(3x10=30)**

1. Define and explain the mechanisms involved in elimination reactions. Add a note on Saytzeff's rule.
2. Explain the Kekulé's structure of benzene and its molecular orbital structure. Explain the theory of orientation with examples.
3. Discuss the mechanism involved in Cannizzaro's reaction and Benzoin condensation.

**Short notes**

**(14x5=70)**

4. Explain Williamson's synthesis and Ziesel's method.
5. Define and classify isomers.
6. Kharasch effect with reactions.
7. Explain the stereo specific reduction of alkynes. Add a note on keto-enol tautomers.
8. Explain Hofmann's degradation of amides.
9. Give an example and mechanism of Kolbe –Schmidt reaction.
10. What are conjugated dienes. Add a note on their stability.
11. Explain Walden inversion with example.
12. Mention two methods of synthesis of carbonyl compounds and explain their reactivity.
13. Mechanism of aldol condensation.
14. Dicarboxylic acids.
15. Explain basicity of amines.
16. Give the different mechanisms of aliphatic nucleophilic substitution reactions.
17. Explain inductive, electromeric and mesomeric effects.

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