

**Q P CODE: 104326**

**Reg. No: .....**

**First Year Pharm D Degree Supplementary Examinations  
January 2019**

**Pharmaceutical Organic Chemistry**

**Time: 3 Hours**

**Total Marks: 70**

- Answer all Questions.
- Write equation wherever necessary.

**Essay**

**(3x10=30)**

1. Describe the reaction and mechanism of Cannizaro's reaction 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:**

**(8x5=40)**

4. Describe stereo specific reduction of alkynes and explain keto-enol tautomerism.
5. Describe the preparation assay and medicinal uses of dimercaprol, chlorbutol and aspirin.
6. Discuss Kolbe-Schmidt reaction and Fries rearrangement.
7. Explain mechanism and stereochemistry of  $SN_1$  reaction.
8. Give any three reactions of nucleophilic addition. Add a note on reactivity of carbonyl compounds.
9. Explain the reactivity of the alcohols.
10. Explain acidity of phenols.
11. Discuss the decarboxylation reaction in carboxylic acids. Add a note on stability of carboxylate anion.

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