

**Q P CODE: 104326**

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

**First Year Pharm D Degree Examinations July 2018**

**Pharmaceutical Organic Chemistry**

**Time: 3 Hours**

**Total Marks: 70**

- Answer all Questions.
- Write equation wherever necessary.

**Essay**

**(3x10=30)**

1. Give the stereochemistry, mechanism and reactivity of  $SN_2$  reaction. Add a note on stereochemistry of  $SN_1$  reaction.
2. Explain the theory of orientation with suitable examples in electrophilic aromatic substitution.
3. Discuss the mechanism involved in Cannizzaro's reaction and Benzoin condensation.

**Short notes:**

**(8x5=40)**

4. Explain Williamson's synthesis and diazotization reaction.
5. Define and give the classification of isomers.
6. Peroxide effect.
7. Explain Friedel craft acylation with mechanism.
8. Explain Hoffmann's degradation of amides.
9. Explain the basicity of amines.
10. What are conjugated dienes and add a note on their stability.
11. Explain chlorination of methane with mechanism.

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