

**QP CODE:104326**

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

**First Year Pharm D Degree Regular/Supplementary Examinations  
September 2024**

**Pharmaceutical Organic Chemistry**

**Time: 3 Hours**

**Total Marks: 70**

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Write equation wherever necessary.*

**Essay**

**(3x10=30)**

1. Describe about Bayer's strain theory and explain how sachse-mohr theory accounts for pit falls of Bayer's theory.
2. Explain the mechanism of Friedel crafts acylation and alkylation.
3. Classify substituents. Explain their influence on electrophilic aromatic substitution in terms of orientation and reactivity.

**Short notes:**

**(8x5=40)**

4. Explain SN1 mechanism with suitable examples and give evidence.
5. Write the mechanism involved in aldol condensation.
6. Explain about the oxidation and reduction reactions.
7. Describe the mechanism of dehydration of alcohol.
8. Explain the kinetics and mechanism of E2 reaction.
9. Explain the preparation, test for purity and assay of salicylic acid.
10. Write the free radical halogenation reaction of alkenes with mechanism.
11. Explain Markownikoff's rule and peroxide effect.

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