

QP CODE:104326

Reg. No: .....

**First Year Pharm D Degree Supplementary Examinations May 2023  
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**

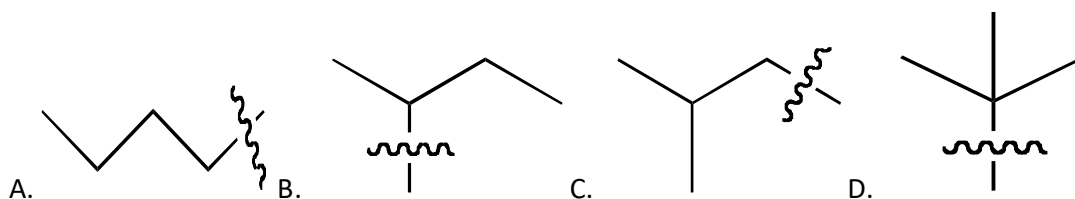
**(3x10=30)**

1. Explain in detail about Bayer strain theory and its limitations.
2. Elaborate about the E2 and E1 reactions with mechanism and kinetics.
3. Explain the mechanism of Hoffman rearrangement, with synthetic applications and peroxide effect.

**Short notes:**

**(8x5=40)**

4. Add a note on types of solutes and solvents with suitable examples.
5. Mention the rules for IUPAC nomenclature and three basic parts in naming the organic compounds with examples. Name the following



6. Differentiate  $S_N^1$  and  $S_N^2$  reactions.
7. Rearrangement of carbocation.
8. Define acidity constant and effect of substituents on acidity of carboxylic acids.
9. Define basicity constant and compare the basicity between the aliphatic and aromatic amines.
10. Write the preparation, assay and uses of Nitro-glycerin.
11. Discuss about Reimer-Tieman's reaction.

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