

QP CODE:104326

Reg. No:

**First Year Pharm D Degree Regular/Supplementary Examinations
January 2022
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. Enumerate the mechanism of SN₁ and SN₂ reaction with one example
2. Discuss the different examples of electrophilic aromatic substitution and state the concept of resonance stabilization of benzyl radical
3. Demonstrate the preparation, test for purity and medicinal uses of glyceryl trinitrate

Short notes:

(8x5=40)

4. The mechanism of Kolbe reaction.
5. Compare the acidity of alcohol and phenol
6. Explain bimolecular displacement mechanism with an example
7. Enumerate different intermolecular forces and its role in physical properties
8. Explain the IUPAC nomenclature for alkenes
9. Types of carbocations
10. Explain the stability of cycloalkanes
11. Compare the following: • Protic vs Aprotic solvents • Isomerism vs stereoisomerism
