

QP CODE:104326

Reg. No:

**First Year Pharm D Degree Supplementary Examinations June 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. What is electrophilic aromatic substitution reaction. Explain the effect of substituents with example.
2. Discuss the reaction, mechanism and application of the following reactions:
 - Reimer Tiemann Reaction
 - Aldol Condensation.
3. Explain the mechanism of nitration in benzene. Discuss the mechanism involved in peroxide effect.

Short notes:

(8x5=40)

4. Wittig reaction and Kolbe reaction
5. Bimolecular displacement mechanism
6. Discuss oxidation and reduction reaction with examples
7. Explain the mechanism of free radical substitution reaction with suitable example
8. Protic and Aprotic solvent
9. Write preparation assay, limit test and uses of tartaric acid and glyceryl trinitrate
10. Friedel craft alkylation and acylation
11. SN₁ vs SN₂
