

B PHARM
(SEM II) THEORY EXAMINATION 2022-2023
PHARMACEUTICAL ORGANIC CHEMISTRY-I

Total Marks: 75

Time: 3 Hours

Note: Attempt all Sections. If require any missing data then choose suitably.

SECTION A

10 x 2 = 20

1. Attempt all questions in brief.
- Give structure of the following compounds :-
i) Acetic acid ii) Lactic acid iii) Salicylic acid iv) Succinic acid
 - Enlist qualitative tests for Alcohol.
 - What is Aldol condensation?
 - Explain Acidity of Carboxylic acids and Basicity of Aliphatic Amines.
 - What are SN₁ and SN₂ reactions? Give examples.
 - Explain SP³ hybridization in Alkanes.
 - What is structural isomerism in organic compounds? Give examples.
 - What are Alkyl Halides?
 - Explain in brief Nucleophilic addition.
 - What is Diel-Alder reaction?

SECTION B

2 x 10 = 20

2. Attempt any two parts of the following:
- Explain factors affecting SN₁ and SN₂ reactions in detail.
 - What are E₁ and E₂ reactions? Give Markownikoff's orientation.
 - What is Inductive effect? Give qualitative tests for Carboxylic acid, Amides and Ester.

SECTION C

7 x 5 = 35

3. Attempt any five parts of the following:
- Discuss three methods of preparation of Amines.
 - Explain Saytzeff's rule with suitable examples.
 - Give chemical tests to differentiate between primary secondary and tertiary Alcohols.
 - Write a note on Cannizzaro reaction.
 - Write IUPAC nomenclature rules for the naming of carboxylic acids.
 - Explain Ozonolysis and electrophilic addition reaction of Alkenes.
 - What is IUPAC system of nomenclature of organic compounds?