

B PHARM
(SEM-II) THEORY EXAMINATION 2018-19
PHARMACEUTICAL ORGANIC CHEMISTRY-I

Time: 3 Hours

Total Marks: 75

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

SECTION A

1. Attempt *all* questions in brief.

10 x 2 = 20

- a. Give IUPAC name for $(\text{CH}_3)_2\text{C}=\text{CHC}(\text{C}_2\text{H}_5)=\text{CH}_2$.
- b. Give the structure and uses of Hexamine.
- c. Give the structure and uses of Tartaric acid.
- d. Why chloroacetic acid is more acidic than acetic acid?
- e. Write the structure and uses of Methyl Salicylate.
- f. Why aliphatic amines are more basic than aromatic amines?
- g. Give the structure and uses of Amphetamine.
- h. What is Saytzeff's rule?
- i. What is the effect of base in E_2 reaction?
- j. What is ozonolysis of alkene?

SECTION B

2. Attempt any *two* parts of the following:

2 x 10 = 20

- a. What is isomerism? Explain structural isomerism with suitable examples.
- b. Write reaction and mechanism of Aldol condensation and Benzoin condensation.
- c. What are dienes? Explain 1, 2 and 1,4 addition mechanism in conjugated dienes with suitable examples

SECTION C

3. Attempt any *five* parts of the following:

7 x 5 = 35

- a. Write a note on Markownikoff's orientation.
- b. Write IUPAC nomenclature rules for the naming of carboxylic acids.
- c. Write a detailed account of SN^1 and SN^2 reactions.
- d. Give the chemical tests for alcohols. Give the structure and uses of glycerol.
- e. Write a note on Cannizzaro reaction.
- f. Write chemical tests for amines. Give the structure and uses of ethanolamine.
- g. Write a note on: i) Perkin condensation reaction ii) Inductive effect