

**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  $\text{E}_2$  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  $\text{SN}^1$  and  $\text{SN}^2$  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