

**B PHARM**  
**(SEM II) THEORY EXAMINATION 2017-18**  
**PHARMACEUTICAL ORGANIC CHEMISTRY-I**

*Time: 3 Hours**Total Marks: 75***Note:** 1. Attempt all Sections.**SECTION A**

- 1. Attempt all questions in brief. 10 x 2 = 20**
- a. Write down the structure of 2,2,4-trimethylpentane and amyl alcohol
  - b. What are chiral and achiral compounds?
  - c. Discuss any two method of preparation of alkanes.
  - d. What is Hybridization?
  - e. Define structure and uses of Chloroform and Ethyl alcohol.
  - f. What is Vector Meyer's test?
  - g. Discuss the preparation of ketone from geminal di halides.
  - h. Define crossed aldol condensation.
  - i. What do you mean by nucleophile?
  - j. Define structure and uses of Acetic acid and Lactic acid,

**SECTION B**

- 2. Attempt any two parts of the following: 2 x 10 = 20**
- a. Differentiate E<sup>1</sup> and E<sup>2</sup> reactions with their kinetics and order of reactivity of alkyl halides. Explain factors affecting E<sup>1</sup> and E<sup>2</sup> reactions.
  - b. Give the methods of preparation of alkyl halides. Discuss about SN<sup>1</sup> and SN<sup>2</sup> reactions in detail.
  - c. What is carbonyl compound? Explain their qualitative test and methods of preparation.

**SECTION C**

- 3. Attempt any five parts of the following: 7 x 5 = 35**
- a. Give the detailed classification of organic compounds
  - b. Define Sp<sup>3</sup> hybridization in alkanes. Explain halogenation reaction of alkanes.
  - c. Describe Markovnikov and Anti-Markovnikov rule with suitable examples.
  - d. Discuss methods of preparation and reactivity of conjugated dienes.
  - e. Describe a detailed account of nucleophilic addition reaction of carbonyl compounds.
  - f. Explain Cannizzaro and Perkin reaction with mechanism.
  - g. Give the methods of preparation and reactivity of carboxylic acids. Explain the acidity of carboxylic acid.