## SHIVAJI COLLEGE, UNIVERSITY OF DELHI

## **DEPARTMENT OF CHEMISTRY**

## INTERNAL ASSIGNMENT

(Academic Year 2023-24)

Name of the Course : B.Sc. (Hons.) Chemistry

Name of the Paper : Basic Concepts and Aliphatic Hydrocarbons (UPC -2172011102)

Semester : I

Maximum Marks : 24

Last Date of Submission : 21/11/2023

Faculty Name : Dr. Bhaskar Mohan Kandpal & Dr. Parveen Gahlyan

Q.1 Explain any five:

 $(6 \times 2 = 12)$ 

- i) Why bromination of trans-2-butene gives meso dibromo product while bromination of cis-2-butene gives racemic mixture?
- ii) Out of alkene and alkyne, which is more reactive and why?
- iii) Explain the hydration of alkenes with mechanism.
- iv) Propene reacts with HBr in presence of peroxide to give 1-bromopropane whereas in absence of peroxide it gives 2-bromopropane.
- v) Explain why bromination is more selective and less reactive than chlorination of alkenes?
- vi) Arrange the following in increasing order of acidity with giving suitable reasons
  - a) Acetic acid, 1-chloro acetic acid and propanoic acid
  - b) Phenol, Ethanol, Acetic acid.

## Q. 2 Predict the products of the following reactions-

 $6 \times 2 = 12$ 

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Excess

Signature of the Teacher:

vi)

Parveen Garlyan