

## **HYDROCARBONS**

- 1. The process of decomposition of organic compound by the application of heat is (a) pyrolysis (b) evaporation (c) sublimation (d) condensation
- 2. Isopropyl bromide on Wurtz reaction gives\_\_\_\_\_
- 3. Calcium carbide on reaction with water gives\_\_\_\_\_
- 4. Assertion –Reason type questions:

In the following questions a statement of assertion followed by a statement of reason is given, Choose the correct answer from the following choices.

- (a) Both assertion and reason are correct statements and the reason is a correct explanation for assertion.
- (b) Both assertion and reason are correct but reason is not a correct explanation for assertion.
- (c) Assertion is correct but reason is incorrect.
- (d) Assertion is wrong but reason is correct.

i.

Assertion: Iodination of alkanes is reversible

Reason: Iodination is carried out in presence Iodic acid

- 5. An alkene on ozonolysis gives a mixture of ethanal and pentan-3-one. Write the structure and IUPAC name of the alkene.
- 6. Which geometrical isomer of 2-hexene will have a higher boiling point? Why?
- 7. Effect the following conversions:
- a) benzene to m-nitrochlorobenzene
- b) benzene to acetophenone
- c) ethane to benzene
- d) Propan-1-ol to 2,3-dimethyl butane
- e) Ethane to butane
- f) Acetic acid to methane
- g) Acetic acid to ethane

- h) Propan-2-ol to hexane i) Ethyne to benzene