



Class 11 Chemistry | Hydrocarbons

MCQ WORKSHEET • 15 questions • Choose one correct option • Suggested time: 25 minutes

1. Chlorination of methane in sunlight proceeds mainly by:

- A. Electrophilic addition
- B. Nucleophilic addition
- C. Free-radical substitution
- D. Condensation

2. Ethene reacts with Br₂ in an inert solvent to form:

- A. Bromoethene
- B. Ethane
- C. 1,2-Dibromoethane
- D. Bromoethane

3. Major product of propene with HBr, without peroxide, is:

- A. 2-Bromopropane
- B. 1-Bromopropane
- C. 1,2-Dibromopropane
- D. Propane

4. Propene with HBr in peroxide gives mainly:

- A. 2-Bromopropane
- B. Propane
- C. 1,1-Dibromopropane
- D. 1-Bromopropane

5. Which hydrocarbon gives a precipitate with ammoniacal AgNO₃?

- A. Propane
- B. Propyne
- C. Propene
- D. But-2-yne

6. Hydrogenation of ethyne using Lindlar catalyst gives:

- A. Ethanol
- B. Ethanal
- C. Ethane
- D. Ethene

7. Reductive ozonolysis of propene gives:

- A. Methanal and ethanal
- B. Ethanoic acid and methane
- C. Only methanal
- D. Only propanone

8. Benzene undergoes nitration using:

- A. NaNO₂ and water
- B. Dilute HNO₃ only
- C. NH₃ and O₂
- D. Conc. HNO₃ and conc. H₂SO₄

9. The electrophile in benzene nitration is:

- A. NO₂⁺
- B. NO₃⁻
- C. NO₂⁻
- D. NH₄⁺

10. Which group is meta-directing in electrophilic aromatic substitution?

- A. -NH₂
- B. -NO₂
- C. -OH
- D. -CH₃

11. Complete combustion of 1 mol propane consumes:

- A. 3 mol O₂
- B. 4 mol O₂
- C. 5 mol O₂
- D. 7 mol O₂

12. Which compound can show cis-trans isomerism?

- A. But-1-ene
- B. But-2-ene
- C. 2-Methylpropene
- D. Ethene

13. Most stable conformation of ethane is:

- A. Staggered
- B. Planar trans
- C. Planar cis
- D. Eclipsed

14. Sodium propanoate heated with soda lime yields:

- A. Ethane
- B. Methane
- C. Ethene
- D. Propane

15. Benzene's unusual stability is explained by:

- A. Delocalised π electrons
- B. sp³ carbon atoms
- C. Six ionic bonds
- D. Three isolated double bonds

ANSWER KEY — check after completing all 15 questions

1.C 2.C 3.A 4.D 5.B 6.D 7.A 8.D 9.A 10.B 11.C 12.B 13.A 14.A 15.A