



Class 10 Science | Carbon And Its Compounds

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

1. Carbon commonly forms four covalent bonds because its valency is:

- A. 1 B. 4 C. 2 D. 8

2. Carbon's ability to form long chains is called:

- A. Precipitation B. Neutralisation
C. Calcination D. Catenation

3. Which hydrocarbon is unsaturated?

- A. C_2H_4 B. C_3H_8 C. C_2H_6 D. CH_4

4. Members of one homologous series have the same:

- A. Number of carbon atoms
B. Molecular formula
C. Functional group
D. Molecular mass

5. Successive members of a homologous series differ by:

- A. CH_4 B. CO_2 C. H_2O D. CH_2

6. The functional group in CH_3CH_2OH is:

- A. Aldehyde B. Hydroxyl C. Carboxyl D. Ketone

7. The compound CH_3COOH is named:

- A. Propanone B. Ethanol
C. Ethanal D. Ethanoic acid

8. Oxidising ethanol with suitable oxidant gives:

- A. Methane B. Ethanoic acid
C. Ethene only D. Sodium ethoxide

9. Ethanol heated with concentrated H_2SO_4 at 443 K mainly forms:

- A. Ethene B. Methanol
C. Ethanoic acid D. Ethane

10. Ethanoic acid reacts with ethanol in acid catalyst to form an:

- A. Ester B. Amine
C. Alkane D. Inorganic carbonate

11. Hydrogenation of vegetable oil uses a catalyst such as:

- A. Sodium chloride B. Nickel
C. Calcium carbonate D. Sulfur

12. Methane reacts with chlorine in sunlight mainly by:

- A. Neutralisation B. Addition
C. Precipitation D. Substitution

13. In a soap micelle, the hydrocarbon tails point mainly:

- A. Only upward
B. Outward into water
C. Inward toward grease
D. Away from all oil

14. Soap forms scum in hard water due to:

- A. Excess pure water
B. Hydrogen gas formation
C. Dissolved sugar
D. Insoluble calcium and magnesium salts

15. Which formula represents a ketone?

- A. CH_3COCH_3 B. CH_3COOH C. CH_3OH D. CH_3CHO

ANSWER KEY — check after completing all 15 questions

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

Original exam-style practice • Reference notes: www.physics.guru/cbse-practice-papers/ • Not an official paper