

**Class: X**  
**Subject: chemistry**  
**Topic: Carbon and Its Compounds**  
**No. of Questions: 20**  
**Duration: 60 Min**  
**Maximum Marks: 60**

1. Which of the following is an odd

- A. Ethene
- B. Ethane
- C. Propene
- D. Acetylene

**Sol. B.**

Only ethane is the alkane present, rest are alkenes.

2. Which one of the following is an unsaturated hydrocarbon?

- A. Acetylene
- B. Butane
- C. Propane
- D. Decane

**Sol. A.**

Except acetylene rest have only single bonds.

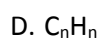
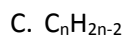
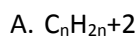
3. Two neighbours of homologous series differ by

- A.  $-\text{CH}$
- B.  $-\text{CH}_2$
- C.  $-\text{CH}_3$
- D.  $\text{CH}_4$

**Sol. A.**

fact

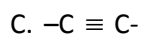
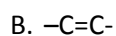
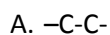
4. General formula of alkyne is



**Sol. A.**

fact

5. Which of the following represents alkynes?

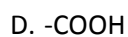
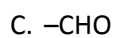
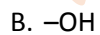
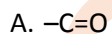


D. None of these

**Sol. C.**

Triple bond

6. Which of the following represents ketones?



**Sol. A.** Keto group

7. Which of the following is not an aliphatic hydrocarbon?

A. Ethene

- B. Ethane
- C. Propyne
- D. benzene

**Sol. A**

Benzene is aromatic

8. Complete combustion of a hydrocarbon gives

- A.  $\text{CO} + \text{H}_2\text{O}$
- B.  $\text{CO}_2 + \text{H}_2\text{O}$
- C.  $\text{CO} + \text{H}_2$
- D.  $\text{CO}_2 + \text{H}_2$

**Sol. A**

fact

9. Which is NOT correct for isomers of a compound?

- A. They differ in physical properties
- B. They differ in chemical properties
- C. They have same molecular formula
- D. They have same structural formula

**Sol. D.**

Fact

10. Buckminsterfullerene is an example of \_\_\_\_\_ of carbon

- A. An isomer
- B. An isotope
- C. An allotrope
- D. A functional group

**Sol. A.**

Fact

11. Who prepared urea the first time by heating ammonium cyanate?

- A. Wholer
- B. Lavoisier
- C. Fuller
- D. Haber

**Sol. A.**

Fact

12. Butanone is a four-carbon compound with the functional group

- A. Carboxylic acid
- B. Aldehyde.
- C. Ketone.
- D. Alcohol

**Sol. C.**

ketone ends with -one.

13. Major constituent of LPG is \_\_\_\_\_.

- A. Ethene
- B. Butane
- C. Propane
- D. Pentane

**Sol. B.**

butane is major component of liquified petroleum gas.

14. The gas used in welding and cutting metals is

- A. Ethyne
- B. Ethene
- C. Ethane
- D. Propene

**Sol. A.**

15. Which of the following statements is not applicable to carbon compounds?

- A. They have low melting and boiling points.
- B. They are ionic in nature.
- C. They form homologous series.
- D. They are generally soluble in organic solvents.

**Sol. B.**

16. Which of the following properties is not true regarding organic compounds.

- A. They are generally covalent compounds.
- B. Show isomerism.
- C. Compounds have high melting and boiling points.
- D. Generally insoluble in water.

**Sol. C**

17. The property of catenation is more marked in case of \_\_\_\_\_.

- A. silicon
- B. hydrogen
- C. oxygen
- D. carbon

**Sol. D.**

Fact

18. The open chain aliphatic hydrocarbon with molecular formula  $C_9H_{16}$  is \_\_\_\_\_.

- A. an alkane
- B. an alkene
- C. an alkyne
- D. acyclic

**Sol. C.**

Fact

19. The double bond between the two carbon atoms in the  $C_2H_4$  molecule indicates

- A. Two pairs of mobile electrons
- B. Two pairs of shared electrons
- C. Two pairs of unpaired electrons
- D. Two pairs of lone electrons

**Sol. B.**

20. Alkenes and alkynes are \_\_\_\_\_.

- A. saturated aliphatic hydrocarbons
- B. unsaturated aliphatic hydrocarbons
- C. unsaturated aromatic hydrocarbons
- D. cyclic hydrocarbons

**Sol. B.**