

# Carbon and its compound

## Mcqs Question for 2021

1. The substance not responsible for the hardness of water is

- (a) Sodium nitrate
- (b) calcium hydrogen carbonate
- (c) calcium carbonate
- (d) magnesium carbonate

Answer : (a)

2.  $C_3H_8$  belongs to the homologous series of

- (a) Alkynes
- (b) Alkenes
- (c) Alkanes
- (d) Cyclo alkanes

Answer : (c)

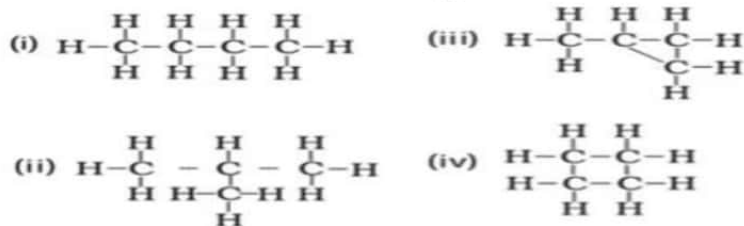
3.

The IUPAC name of  $CH_3 - \overset{\overset{CH_3}{|}}{\underset{\underset{CH_3}{|}}{C}} - CH_2 - CH_3$  is

- (a) 2-ethyl-2-methyl propane
- (b) 2, 2-dimethyl butane
- (c) 1,1,1-trimethyl propane
- (d) 2, 2-methyl butane

Answer : (b)

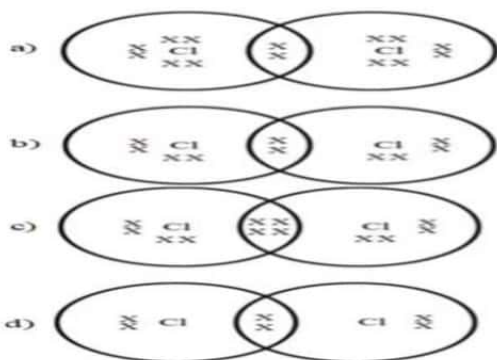
4. Which of the following are correct structural isomers of C<sub>4</sub>H<sub>10</sub>?



- (a) (i) and (iii)
- (b) (ii) and (iv)
- (c) (i) and (ii)
- (d) (iii) and (iv)

Answer : (c)

5. Which of the following structures correctly represents the electron dot structure of a chlorine molecule?



Answer : (a)

6. The property of self-linkage among identical atoms to form long chain compounds is known as:

- a) Catenation
- b) Isomerisation
- c) Superposition
- d) Halogenation

Answer : (a)

7. In the following reaction, alkaline  $\text{KMnO}_4$  acts as:



- (a) Reducing agent
- (b) Oxidising agent
- (c) Catalyst
- (d) Dehydrating agent

Answer : (b)

8 In which of the following compounds -OH is the functional group?

- (a) Butanone
- (b) Butanol
- (c) Butanoic
- (d) Butanal

Answer : (b)

9. How many number of carbon atoms are joined in a spherical molecule of buckminsterfullerene?

- a) 30
- b) 60
- c) 90
- d) 120

Answer : (b)

10. The isomeric pair is

- (a) ethane and propane
- (b) propane and butane
- (c) ethane and ethane
- (d) butane and 2-methyl propane

Answer : (d)

**11. Which of the following will undergo addition reactions?**

- (a) CH<sub>4</sub>
- (b) C<sub>3</sub>H<sub>8</sub>
- (c) C<sub>2</sub>H<sub>6</sub>
- (d) C<sub>2</sub>H<sub>4</sub>

Answer : (d)

**12. The heteroatoms present in CH<sub>3</sub> – CH<sub>2</sub> – O – CH<sub>2</sub> – CH<sub>2</sub>Cl are:**

- (i) Oxygen
  - (ii) Carbon
  - (iii) Hydrogen
  - (iv) Chlorine
- (a) (i) and (ii)
  - (b) (ii) and (iii)
  - (c) (iii) and (iv)
  - (d) (i) and (iv)

Answer : (d)

**13- Ethanoic acid reacts with absolute ethanol in the presence of an acid catalyst to give an**

- (A) ether
- (B) ester
- (C) ethene
- (D) none of the above

Answer : (B)

**14. Identify 'A' in the following reaction:  
CH<sub>3</sub>COOH + Na<sub>2</sub>CO<sub>3</sub> → A + CO<sub>2</sub> + H<sub>2</sub>O**

- (a) CH<sub>3</sub>COONa
- (b) CH<sub>2</sub>(Na)COOH
- (c) NaOH
- (d) NaHCO<sub>3</sub>

Answer : (a)

**15. Which of the following substance produces brisk effervescence with baking soda solution?**

**a) Ethanoic acid**

**b) Table salt**

**c) Vinegar**

**d) Sunflower oil**

Answer : (a)