

1.  $C_3H_8$  belongs to the homologous series of

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

2. The number of isomers of pentane is

- (a) 2 (b) 3  
(c) 4 (d) 5

3. Which of the following will undergo addition reactions?

- (a)  $CH_4$  (b)  $C_3H_8$   
(c)  $C_2H_6$  (d)  $C_2H_4$

4. Ethanol on complete oxidation gives

- (a) acetic acid/ethanoic acid (b)  $CO_2$  and water  
(c) ethanol (d) acetone/ethanone

5. Name the functional group present in  $CH_3COCH_3$ .

- (a) Alcohol (b) Carboxylic acid  
(c) Ketone (d) Aldehyde

6. Which of the following belongs to homologous series of alkynes?

$C_6H_6$ ,  $C_2H_6$ ,  $C_2H_4$ ,  $C_3H_4$ .

- (a)  $C_6H_6$  (b)  $C_2H_4$   
(c)  $C_2H_6$  (d)  $C_3H_4$

7. A soap molecule has a

- (a) hydrophobic head and hydrophobic tail (b) hydrophobic head and hydrophilic tail  
(c) hydrophilic head and hydrophilic tail (d) hydrophilic head and hydrophobic tail

8. While cooking, if the bottom of the vessel is getting blackened on the outside, it means that:

- a) The food is not cooked completely (b) The fuel is not burning completely  
c) The fuel is wet (d) The fuel is burning completely

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

- a) Catenation (b) Isomerisation  
c) Substitution (d) Halogenations

10. Which of the following is the molecular formula of cyclobutane?

- a)  $C_4H_{10}$  (b)  $C_4H_6$   
c)  $C_4H_8$  (d)  $C_4H_4$

11. Covalent compounds

- A. Have high melting and boiling point  
B. Are mostly soluble in water  
C. Are formed between atoms of metals and non-metals  
D. Are formed by the sharing of electrons in the bonding atoms

12. The name of the compound,  $CH_3 - CH_2 - CHO$  is:

- A. Propanal (b) Propanone  
C. Ethanol (d) Ethanal

**13. Detergents can be used for washing of clothes**

- (a) only in hard water  
(b) only in soft water  
(c) both in soft and hard water  
(d) None of the above

**14. Pentane has the molecular formula  $C_5H_{12}$ . It has**

- (a) 5 covalent bonds  
(b) 12 covalent bonds  
(c) 16 covalent bonds  
(d) 17 covalent bonds

**15. The first member of the alkynes homologous series is**

- (a) propyne  
(b) ethyne  
(c) methane  
(d) ethane

**16. Which of the following undergoes substitution reaction?**

- (a) Methane  
(b) ethene  
(c) Propene  
(d) ethyne