

**DPP - 02**

- 1.** **Statement 1:** If number of  $\pi$  bonds in the compound is 3 then its degree of unsaturation must be 3

**Because**

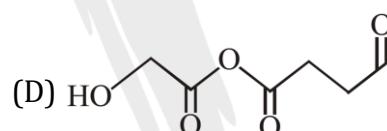
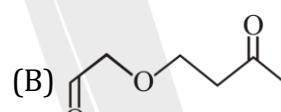
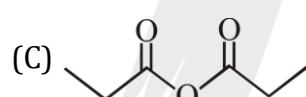
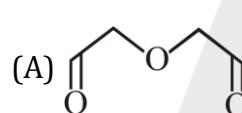
**Statement 2:** For one  $\pi$  bond degree of unsaturation is equal to 1

- (A) Statement- 1 is true, statement- 2 is true and statement- 2 is correct explanation for statement- 1.
- (B) Statement- 1 is true, statement-2 is true and statement-2 is NOT the correct explanation for statement-1.
- (C) Statement-1 is true, statement- 2 is false.
- (D) Statement-1 is false, statement- 2 is true.

- 2.** Isooctane contains

- (A) five ( $1^\circ$  – C), one ( $2^\circ$  – C), two ( $3^\circ$  – C) atoms
- (B) four ( $1^\circ$  – C), two ( $2^\circ$  – C), one ( $3^\circ$  – C) and one ( $4^\circ$  – C) atoms
- (C) four ( $1^\circ$  – C), two ( $2^\circ$  – C) and one ( $3^\circ$  – C) atoms
- (D) five ( $1^\circ$  – C), one ( $2^\circ$  – C), one ( $3^\circ$  – C) and one ( $4^\circ$  – C) atoms

- 3.** Compound having only three different functional group is :



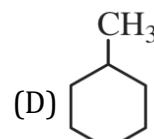
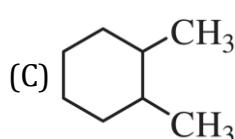
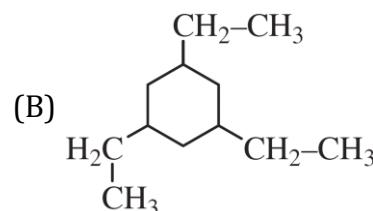
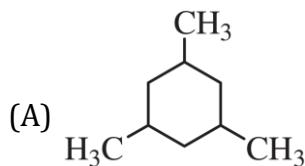
- 4.** **Statement 1:** Phenol is a heterocyclic compound.

**Statement 2 :** In heterocyclic compound different atoms like O, N, S etc. are present in the ring.

- (A) Statement- 1 is true, statement- 2 is true and statement- 2 is correct explanation for statement-1.
- (B) Statement-1 is true, statement-2 is true and statement-2 is NOT the correct explanation for statement-1.
- (C) Statement- 1 is true, statement- 2 is false.
- (D) Statement- 1 is false, statement- 2 is true.

## (Organic Chemistry)

5. In which compound  $1^{\circ}\text{C} : 2^{\circ}\text{C} : 3^{\circ}\text{C}$  (carbon) = 1: 1: 1.?



6. All the members of homologous series have same:

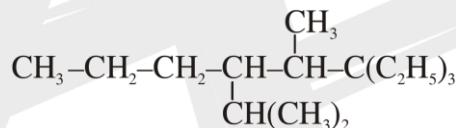
- (A) molecular mass  
(C) empirical formula

- (B) functional group  
(D) general molecular formula

7. Compound having molecular formula  $\text{C}_n\text{H}_{2n-4}\text{O}_3$  can have functional group.

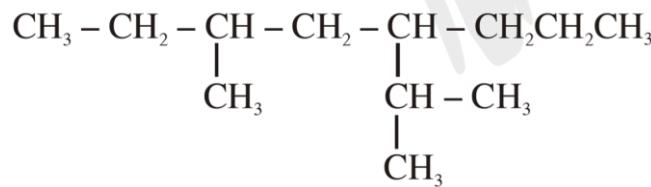
- (A) 3-Aldehyde group  
(C) 1-Carboxylic acid anhydride & 1-alcohol  
(D) 1-Carboxylic acid & 1-alcohol

8. The correct IUPAC name of the compound is:



- (A) 3,3-Diethyl-4-methyl 5-(1-methyl ethyl) octane  
(B) 6,6-Diethyl-4-methyl-5-isopropyloctane  
(C) 6,6-Diethyl-3-methyl 5-(1-methylethyl) octane  
(D) 6,6-Diethyl-4-isopropyl-5-methyloctane

9. IUPAC name of the compound



- (A) 4-Isopropyl-6-methyloctane  
(B) 3-Methyl-5-(1-methylethyl) octane  
(C) 3-Methyl-5-isopropyloctane  
(D) 6-Methyl-4-(1-methylethyl) octane

10. IUPAC name of pivalic acid  $\left( \begin{array}{c} \text{H}_3\text{C} \\ > \\ \text{H}_3\text{C} \\ > \\ \text{H}_3\text{C} \end{array} \right) \text{C}-\text{COOH}$  is:

- (A) Isobutylic acid  
(C) 2,2-dimethyl propanoic acid  
(B) 2-carboxy-2-methyl propane  
(D) 2,2,2 trimethylethanoic acid



**ANSWER KEY**

1. D    2. D    3. BD    4. D    5. A    6. BD    7. A  
8. A    9. BC    10. C

