M.M. : 27 **DPP # 03** **TIME : 30 Min.**

1. **Statement 1 :** Phenol is a heterocyclic compound. **[3]**

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

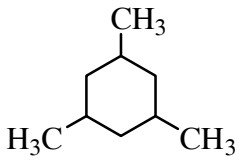
(A) Statement-1 is true, statement-2 is true and statement-2 is correct explanation for statement-1.

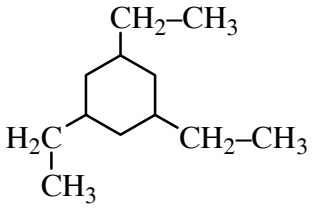
(B) Statement-1 is true, statement-2 is true and statement-2 is NOT the correct explanation for statement-1.

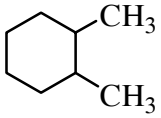
(C) Statement-1 is true, statement-2 is false.

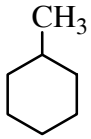
(D) Statement-1 is false, statement-2 is true.

2. In which compound 1°C : 2ºC : 3°C (carbon) = 1 : 1 : 1.? **[3]**

(A) 

(B) 

(C) 

(D) 

3. All the members of homologous series have same : **[3]**

(A) molecular mass (B) functional group

(C) empirical formula (D) general molecular formula

4. Compound having molecular formula $C_nH_{2n-4}O_3$ can have functional group. **[3]**

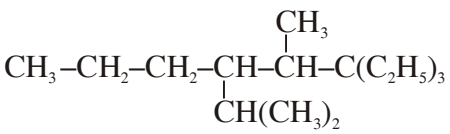
(A) 3-Aldehyde group

(B) 1-Carboxylic acid & 2-Aldehyde

(C) 1-Carboxylic acid anhydride & 1-alcohol

(D) 1-Carboxylic acid & 1-alcohol

5. The correct IUPAC name of the compound is : **[3]**



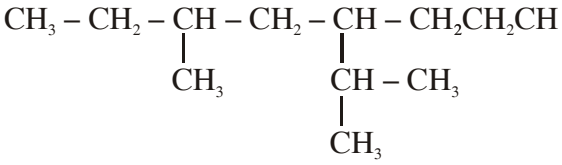
(A) 3,3-Diethyl-4-methyl 5-(1-methyl ethyl) octane

(B) 6,6-Diethyl-4-methyl-5-isopropyloctane

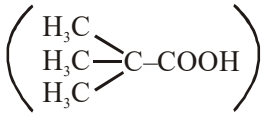
(C) 6,6-Diethyl-3-methyl 5-(1-methylethyl) octane

(D) 6,6-Diethyl-4-isopropyl-5-methyloctane

6. IUPAC name of the compound **[3]**



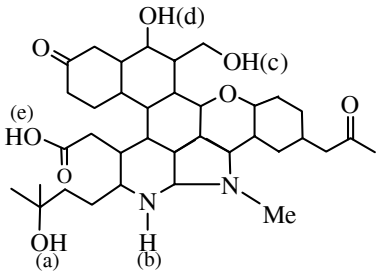
(A) 4-Isopropyl-6-methyloctane
(B) 3-Methyl-5-(1-methylethyl) octane
(C) 3-Methyl-5-isopropyloctane
(D) 6-Methyl-4-(1-methylethyl) octane

7. IUPAC name of pivalic acid  is : **[3]**

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

Paragraph for Question 08 and 09

Observe following compound and answer questions given below :



8. Total number of different types of functional gorups in this compound are **[3]**

(A) 5 (B) 6 (C) 7 (D) 8

9. Degree of unsaturation of this compound is **[3]**

(A) 8 (B) 9 (C) 10 (D) 11