ORGANIC CHEMISTRY

DPP

DAILY PRACTICE PROBLEMS

DPP No. 3

Total Marks : 32

Max. Time : 35 min.

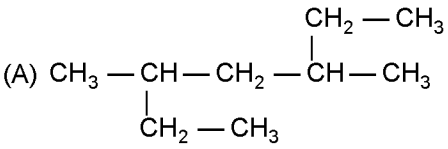
Topic : IUPAC Nomenclature & Isomerism

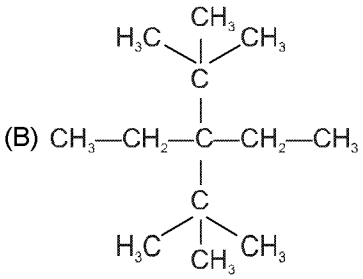
Type of Questions		M.M., Min.
Single choice Objective ('–1' negative marking) Q.1 to Q.4	(3 marks, 3 min.)	[12, 12]
Multiple choice objective ('–1' negative marking) Q.5 to Q.6	(4 marks, 4 min.)	[8, 8]
Subjective Questions ('–1' negative marking) Q.7	(4 marks, 5 min.)	[4, 5]
Match the Following (no negative marking) Q. 8	(8 marks, 10 min.)	[8, 10]

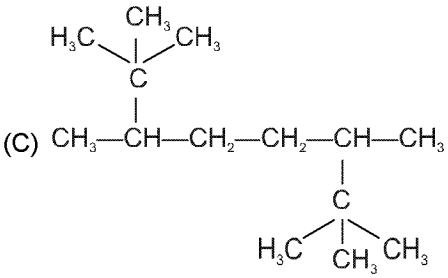
1. Which of the following alkanes contains primary, secondary, tertiary and quaternary carbon atoms together.

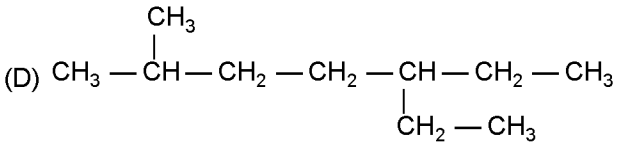
(A) $(CH_3)_3CH$ (B) $(C_2H_5)_3CH$ (C) $(CH_3)_3CCH_2CH(CH_3)_2$ (D) $(CH_3)_4C$

2. Which of the following has longest chain of carbon :

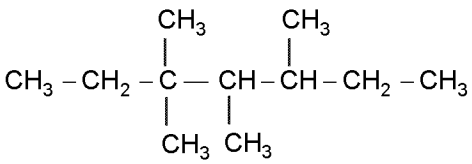
(A) 

(B) 

(C) 

(D) 

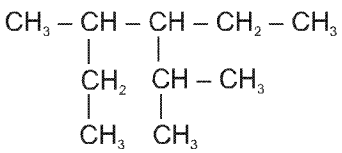
3. In following compound -



The correct lowest set of locants are

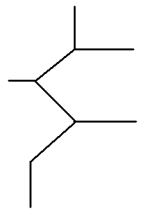
(A) 3,3,4,5 (B) 3,4,5,5 (C) 4,5,3,3 (D) 5,5,4,3

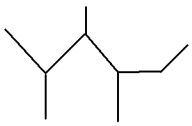
4. The correct IUPAC name of the following compound is

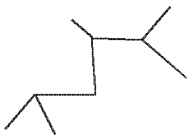


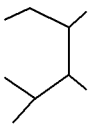
(A) 4–Ethyl–3,5–dimethylhexane
(B) 2,4–Dimethyl–3–ethylhexane
(C) 3–Isopropyl–4–methyhexane
(D) 3–Ethyl–2,4–dimethylhexane

5.* The correct structure of 2,3,4-Trimethylhexane is :

(A) 

(B) 

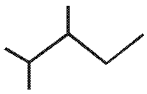
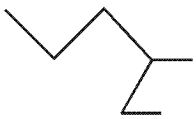
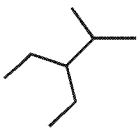
(C) 

(D) 

6.* Choose the correct option's according to given IUPAC name :
(A) Neohexane is 2,2-Dimethylbutane.
(B) Isobutane is 2-Methylpropane.
(C) Isopentane is 2-Methylbutane.
(D) Neopentane is Dimethylpropane.

7. Calculate the molecular weight of the lowest hydrcarbon which contains sp & sp^2 hybridised carbon atoms only.

8. **Match the following :**

Column-I	**Column-II**
(A) 	(p) 3-Ethyl-2-methylpentane
(B) 	(q) 3-Methylhexane
(C) 	(r) 2,3–Dimethylbutane
(D) 	(s) 2,3–Dimethylpentane

Answer Key

DPP No. # 3

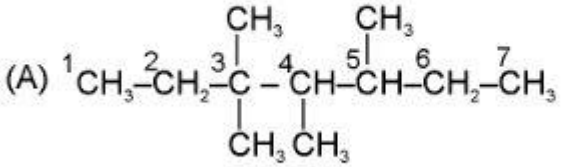
1.	(C)	**2.**	(C)	**3.**	(A)	**4.**	(D)
5.*	(A,B,D)	**6.***	(A,B,C,D)				

7. $H_2C = C = CH_2$
M. W. = 40.

8. [A – s] ; [B – q] ; [C – p] ; [D – r]

Hints & Solutions

DPP No. # 3

3. (A) 

Lowest set of Locant (3, 3, 4, 5)