



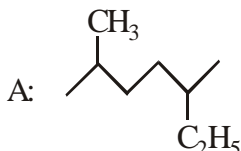
NSEC 11th 2026

ORGANIC CHEMISTRY

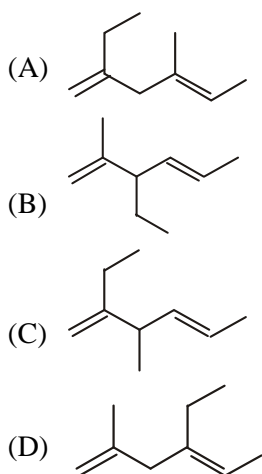
DPP-04

IUPAC Nomenclature

1. IUPAC name of the hydrocarbon (A) is:



- (A) 2-Ethyl-5methylhexane
 (B) 5-Ethyl-2methylhexane
 (C) 2, 5-Dimethylheptane
 (D) 5-Ethyl-2, 5-dimethylpentane
2. The correct structure of 2-Ethyl-3-methylhexa-1, 4-diene.



3. What is the correct IUPAC name of the following compound.



- (A) Pent-1-en-4-yne
 (B) Pent-4-ene-1-yne
 (C) Pent-1-yn-4-ene
 (D) 1-Ethenyl-prop-1-yne

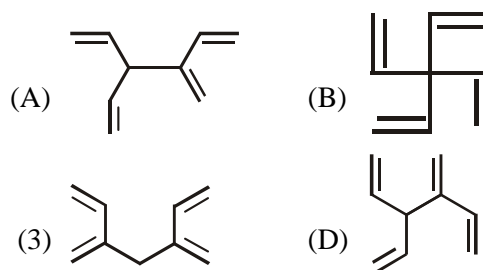
4. Give IUPAC name

- (A) 3,3-Diethenyl pent-1-ene
 (B) 3,3-Diethenyl pent-4-ene
 (C) 3-Ethenyl-3-ethyl penta-1,4-diene
 (D) 3,3,3 Triethenyl propane

5. IUPAC name of $\text{CH}_3-\text{C}=\text{C}=\text{C}-\text{C}\equiv\text{CH}$ is:

- (A) 2-Hexen-4-yne
 (B) Hexa-2, 3-dien-1-yne
 (C) Hexa-3, 4-dien-1-yne
 (D) None of these

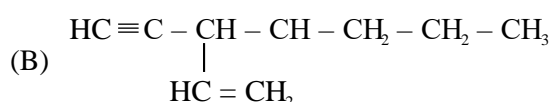
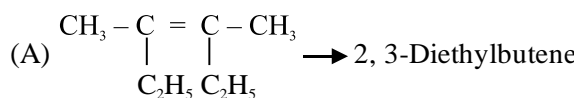
6. 3, 3-Diethenyl penta-1,4-diene is:



7.
$$\begin{array}{c} \text{CH}_3-\text{C}\equiv\text{C}-\text{CH}-\text{CH}=\text{CH}-\text{CH}-\text{C}\equiv\text{C}-\text{CH}_3 \\ | \qquad \qquad | \\ \text{CH}_3-\text{CH}=\text{CH} \qquad \qquad \text{CH}=\text{CH}-\text{CH}_3 \end{array}$$

- (A) Parent Carbon Chain contains three double bonds.
 (B) Parent Carbon Chain contains one double bond and two triple bonds.
 (C) Parent Carbon Chain contains two double bonds and one triple bond.
 (D) Parent Carbon Chain contains two double bonds and two triple bonds.

8. Which IUPAC name is **correct**:

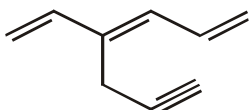


\rightarrow 3-Ethynylpenta-1,4-diene

- (C) $\text{HC}\equiv\text{C}-\text{CH}=\text{CH}_2 \rightarrow$ But-1-en-3-yne
 (D) $\text{CH}_3-\text{CH}=\text{CH}-\text{C}\equiv\text{CH} \rightarrow$ Pent-1-yne-3-ene



9. IUPAC name of the following compound is



- (A) 3-(Prop-2-ynyl) hexa-1, 3, 5-triene
- (B) 4-Ethenylhepta-1, 3-dien-6-yne
- (C) 4-Ethenylhexa-4, 6-dien-1-yne
- (D) 4-(Prop-2-ynyl) hexa-1, 3, 5-triene

10. **Statement-1:** IUPAC name of $\text{H}_2\text{C}=\text{CH}-\text{CH}_2-\text{C}\equiv\text{CH}$ is Pent-4-en-1-yne.

Statement-2: Alkene is preferred over alkyne when they are placed at same position.

- (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.



Answer Key

- | | | | |
|----|-----|-----|-----|
| 1. | (C) | 6. | (B) |
| 2. | (C) | 7. | (A) |
| 3. | (A) | 8. | (C) |
| 4. | (C) | 9. | (B) |
| 5. | (C) | 10. | (D) |

