

Hydrocarbons

Sr	Questions	Answers Choice
1	Which of the following represents a position isomer of $\text{CH}_3\text{CH}_2\text{CH}=\text{CH}_2$	A. C_2H_2 B. $\text{CH}_3-\text{CH}=\text{CH}-\text{CH}_3$ C. CH_4 D. $\text{C}_2\text{H}_5\text{OH}$
2	The test for unsaturation in a hydrocarbon that disappears the colour is.	A. Reaction with KMnO_4 B. Reaction with NaOH C. Decolorization of Br_2 Water D. Precipitate with AgNO_3
3	The number of possible isomers of C_4H_{10} is	A. 1 B. 2 C. 3 D. 4
4	What is the first step in the free radical mechanism.	A. Termination B. Propagation C. Initiation D. Elimination
5	Free radical reactions typically occur in	A. Aromatic hydrocarbons B. Saturated alkanes C. Unsaturated alkenes D. Alcohols
6	Vulcanization of rubber increases its.	A. Conductivity B. Reactivity C. Hardness and elasticity D. Transparency
7	Chain isomerism occurs due to differences in	A. Functional group B. Double bond position C. Carbon chain branching D. Molecular formula
8	Structural isomers differ in	A. Only the boiling point B. Only the melting point C. Arrangement of atoms D. Number of atoms
9	Which of the following is an addition polymer.	A. Nylon B. Bakelite C. Polyethylene D. Terylene
10	Which of the following shows position isomerism.	A. But-1-ene and but-2-ene B. Ethene and ethyne C. Propane and propene D. Cyclohexane and benzene
11	The bond angle in ethene is approximately	A. 109.5° B. 180.5° C. 120° D. 90°
12	What is the first step in the electrophilic addition reaction of alkenes.	A. Formation of a carbocation B. Attack by nucleophile C. Attack by an electrophile on the double bond D. Formation of a free radical
13	Which of the following has a branched chain structure.	A. n-butane B. 2-methylpropane C. Ethane D. Propene
14	Halogenation of alkanes is an example of.	A. Electrophilic substitution B. Nucleophilic substitution C. Free radical substitution D. Oxidation
15	Which compound is a cycloalkane.	A. Butene B. Cyclopentane C. Benzene D. Ethane

16	The structure of methane contains how many sigma bonds.	A. 1 B. 3 C. 4 D. 2
17	Markovnikov's rule is used to predict	A. Major product in addition of HX to alkene B. Stability of alkenes C. Ptofuvy og gtrr tsfivsl hslohrnsyion D. Hydrolysis of esters
18	The product formed when ethene reacts with H ₂ in the presence of Ni is.	A. Ethanol B. Ethane C. Acetylene D. Butane
19	The most stable carbonium ion among the following is.	A. (CH ₃) ₃ C ⁺ B. CH ₃ ⁺ C. CH ₃ CH ₂ ⁺ D. (CH ₃) ₂ CH ⁺
20	In the electrophilic addition of HBr to propene, the major product is.	A. 1- bromopropane B. 2- bromopropane C. 3- bromopropane D. Isopropanol