

Hydrocarbons

| Sr | Questions | Answers Choice |
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| 1 | Markovnikov's rule is used to predict | A. Major product in addition of HX to alkene B. Stability of alkenes C. Ptofuvg og gtrr tsfivsl hslohrnsyion D. Hydrolysis of esters |
| 2 | Which of the following is an aromatic hydrocarbon | A. Ethene B. Benzene C. Methane D. Cyclohexane |
| 3 | In the electrophilic addition of HBr to propene, the major product is. | A. 1- bromopropane B. 2- bromopropane C. 3- bromopropane D. Isopropanol |
| 4 | What is the first step in the free radical mechanism. | A. Termination B. Propagation C. Initiation D. Elimination |
| 5 | The most stable carbonium ion among the following is. | A. $(CH_3)_3C^+$ B. CH_3^+ C. $CH_3CH_2^+$ D. $(CH_3)_2CH^+$ |
| 6 | The termination step in a radical chain reaction involves. | A. Chain breaking B. Light absorption C. Chain initiation D. Hydrogen abstraction |
| 7 | 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 $AgNO_3$ |
| 8 | Which of the following is an addition polymer. | A. Nylon B. Bakelite C. Polyethylene D. Terylene |
| 9 | The enhanced stability of conjugated dienes compared to isolated dienes is primarily attributed to | A. Inductive effects the double bonds B. Increases s-character of the hybridized orbitals C. Delocalisation of electrons across the conjugated system D. Steric hindrance between the double bonds |
| 10 | What type of bond cleavage occurs in the initiation step | A. Homolytic B. Ionic C. Heterolytic D. Covalent |
| 11 | Isomers are compounds with | A. Same molecular formula, same structure B. Different molecular formula, same structure C. Same molecular formula, different structure D. Same boiling points |
| 12 | Geometrical isomerism is due to. | A. rotation around single bond B. Restricted rotation around double bond C. Electronegativity difference D. Difference in functional groups |
| 13 | Which of the following is most stable. | A. Tertiary radical B. Primary radical C. Secondary radical D. Methyl radical |

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| 14 | Which of the followign is a copolymer. | A. SBR Rubber B. Polyethene C. PVC D. Polypropylene |
| 15 | The structure of methane contains how many sigma bonds. | A. 1 B. 3 C. 4 D. 2 |
| 16 | The numer of possible isomers of C ₄ H ₁₀ is | A. 1 B. 2 C. 3 D. 4 |
| 17 | Anti-Markovnikov's additio occurs in the presence of | A. HBr only B. Organic peroxide C. Water D. KMnO ₄ |
| 18 | Which compound is a cycloalkane. | A. Butene B. Cyclopentane C. Benzene D. Cyclopentane |
| 19 | Which of the following is not a property of polymers. | A. High melting point B. Flexibility C. isolubility in water D. Low molecular mass |
| 20 | What intermediate is formed duirng the electrophilic additionof HBr TO AN ALKENE. | A. Carbonation B. Carbanion C. Radical D. Epoxide |