

MDCAT Chemistry Chapter 14 Chemistry of Hydrocarbons Online Test

Sr	Questions	Answers Choice
1	Which of the following reactions does not involve formation of carbocation?	A. SN1 and E1 B. EI and E2 C. SN1 and SN2 D. E2 and SN2
2	To prepare ethane by Wurtz synthesis the suitable alkyl halide is	A. Ethyl iodide B. any alkyl iodide C. Ethyl chloride D. Methyl bromide
3	Reaction of ethyl bromide with ammonia	A. <div>Completes in a single step</div> <div>Completes in two steps</div> <div>Continues till N is left with no lone pair</div> <div>is reversible</div>
4	In beta elimination reaction	A. carbon number changes B. unsaturated compound is formed C. hybridization. of C remains same D. pi bonds are decreased
5	Which is an intermediate in SN1 reaction	A. Ethoxide ion B. Carbocation C. alkyl halide D. alkene
6	The reagent for alkaline hydrolysis of ethyl bromide to form ethyl alcohol is	A. water at room T B. Alcoholic KOH+heat C. Ethanol + heat D. dil. NaOH+ heat
7	Which pair gives same dehydrohalogenation product	A. <div>I-Chlorobutane, 2-Chlorobutane</div> <div>I-Chloropropane, 2-Chloropropane</div> <div>I-Bromopentane, 3-Bromopentane</div> <div>iso-butyl chloride, 2°- butyl chloride</div>
8	In an elimination reaction a more substituted alkene is formed due to the stability associated with	A. Free radical B. transition state C. Activated complex D. Carbocation
9	Dehydrohalogenation of secondary butyl bromide will give	A. Propene B. 1-Butene C. Butene D. 2-Butene
10	Which of the following reactants will be required to form ethene from ethyl chloride	A. _{Alcoholic KOH} B. Alkaline KMnO ₄ C. Aqueous KOH D. Aqueous NaOH
11	Which one among the following is not a good leaving group	A. HSO ₄ ⁻ B. Cl ⁻ C. OH ⁻ D. Br ⁻
12	In nucleophilic substitution bimolecular reaction the order of reaction with respect to substrate	A. 2 order B. 3 order C. 1st order D. Zero order
13	Which compound is obtained by the elimination reaction on bromoethane?	A. Butene B. Ethene C. Propene D. Propane
14	When 2-bromobutane reacts with alcoholic KOH, the reaction is called	A. Chlorination B. Halogenation C. Dehydrohalogenation D. Hydrogenation

15	Which of the following alkyl halides undergoes SN1 reaction fastest	A. Methyl chloride B. Isobutyl chloride C. Ethyl chloride D. Tertiary butyl chloride
16	A mixture of 1-chloropropane and 2-chloropropane when treated with alcoholic KOH, gives	A. Prop-2-ene B. Isopropylene C. Propene D. A mixture of prop-1-ene
17	In elimination reaction i.e., in the formation of alkene, the reactivity of alkyl halide is in the order:	A. $\text{Cl} > \text{Br} > \text{I}$ B. $\text{I} > \text{Br} > \text{Cl}$ C. $\text{Br} > \text{Cl} > \text{I}$ D. $\text{I} > \text{Cl} > \text{Br}$
18	The species which are produced by heterolytic bond breaking and can act as electron pair donor	A. Free radicals B. Cations C. Nucleophiles D. electrophile
19	Among the following, which one is nucleophile	A. H^+ B. Ca^{2+} C. OH^- D. Na^+
20	Which is an intermediate in S _N 1	A. Ethoxide ion B. Alkene C. Alkyl halide D. Carbocation