MDCAT Chemistry Chapter 14 Chemistry of Hydrocarbons Online Test

Sr	Questions	Answers Choice
1	Which one of the following is NOT a nucleophile	A. NH2+ B. BF3 C. H2O D. CH3-
2	The order of reactivitv of alksl halides towards nucleophile is	A. Rl>RBr RF>RCl B. RF>RCl>RBr>Rl C. Rl>RBr> RCl>RE D. RF>RBr>RCl>Rl
3	The alkaline hydrolysis of bromoethane shown below gives alcohol as the product: H3C-CH2-Br-------H3C-CH2-OH The reagent and the condition used in this reaction may be:	A. H20 at room temperature B. KOH in alcohol C. Ethanol. heat D. Dilute NaOH(aq) warm
4	When purely alcoholic solution of sodium/potassiumhydroxide and halogenoalkanes are reacted an alkene is formed, what is the mechanism of reaction?	A. Elimination B. Debromination C. Dehydration D. Reduction
5	Correct order for the reactivity ofalkyl halide in S, reactions	A. R-l>R-F>R-Cl B. R-F>R-Cl>R-l C. R-l>R-Cl>R-F D. R-Cl>R-l>R-F
6	Correct statement about Nucleophilic substitution bimolecular is	A. Transition state is formed B. Inversion take place C. It is two step reacticn D. Both a &c
7	The reaction C2H5Cl + aqueous KOH---------C2H5OH+ KCl is	A. Electrophilic addition B. Nucleophilic addition C. Electrophilic substitution D. Nucleophilic substitution
8	An alkyl halide reacts with NH3 to give	A. Amide B. Cyanide C. Amine D. Aniline
9	Out of monochloro, monobromo and mongiodo derivatives of ethane, the mos reactive compound towards nucleophilic substitution will be	A. C2H5Br B. C2H5Cl C. C2H5I D. All are equally reactive
10	Elimination unimolecular reactions involve	A. Second order kinetics B. First order kinetics C. Third order kinetics D. Zero order kinetics
11	Which of the following is primary alkyl halide	A. Isopropyl halide B. Sec-butyl halide C. Tert-buryi halide D. Neo-pentyl halide
12	Which isomer of C4H9Br will produce 2-methyl propane-2-ol on treatment with aqueous KOH	A. n-butyl bromide B. Sec-butyl bromide C. Isobutyl halide D. Tertiary butyl chloride
13	Which one of the following is not associated with SN2 mechanism	A. 100 % inversion of configuration B. Tertiar alkyl halides C. 2nd order kinetics D. Change of hy bridization from sp^3 to sp^2 in transition state
14	Which of the following factors does not affect the SN1 rate is	A. Nucleophilicity of the attacking nucleophile B. Stability of the carbonium ion C. Solvent system D. The nature of leaving group
15	In the transition state of S2 mechanism reaction with alkyl halides, which of the following	A. sp^3 B. sp

	orbital hybridization is involved	C. sp^2 D. dsp^3
16	Which of the following decides the reactivity of alkyl halides?	A. C-C bond strength B. C-H bond strength C. C-X bond strength D. Electronegativity difference
17	Chloroform (CHCl3) is?	A. Primary alkyl halide B. Secondary alkyl halide C. Tertiary alkyl halide D. a liquid
18	Which is a good nucleophile as well as a good leaving group?	A. F- B. Cl- C. Br- D. I-
19	An amine is produced in the following reaction C2H5I+2NH3-------C2H5NH2 +NH4I. What is mechanism?	A. Electrophilic addition B. Electrophilic substitution C. Nucleophilic addition D. Nucleophilic substitution
20	The SI mechanism for the hydrolysis of an alkyl halide to an alcohol involves the formation of	A. Carbocation B. Carbanion C. Pentavalent carbon in the transition state D. Free radical