Lakshya NEET (2025)

Organic Chemistry

Haloalkanes and Haloarenes

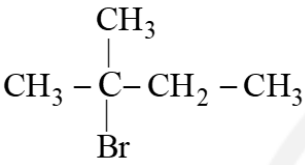
DPP: 8

Q1 The unimolecular elimination involves the formation of

(A) A free radical (B) A carbanion

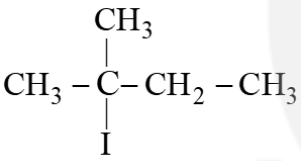
(C) A carbocation (D) Biradical

Q2 Which one of the following compounds undergoes E_1 reaction readily?

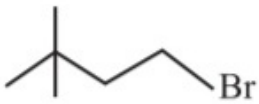
(A) 

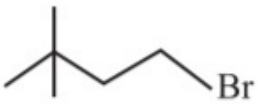
(B) $CH_3-CH_2-CH_2-Br$

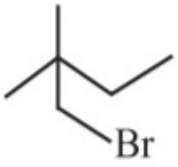
(C) $CH_3-CH_2-CH_2-I$

(D) 

Q3 Which of the following cannot undergo E2 reaction?

(A) 

(B) 

(C) 

(D) None of these

Q4 2- Bromopentane is heated with potassium ethoxide in ethanol. The major product obtained is

(A) 2-Ethoxypentane

(B) Pent-1-ene

(C) Cis-pent-2-ene

(D) Trans-pent-2-ene

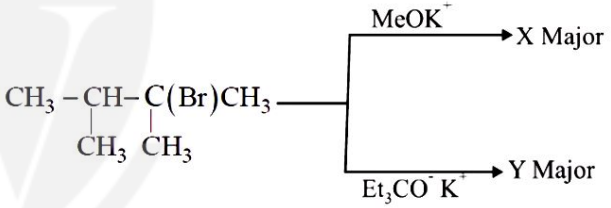
Q5 The reactivity of alkyl halides in $E2$ reaction follows the order

(A) R-I < R-Br < R-Cl < R-F

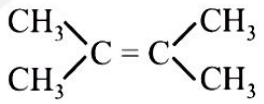
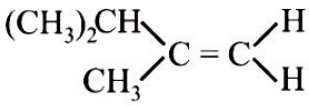
(B) R-F < R-Cl < R-Br < R-I

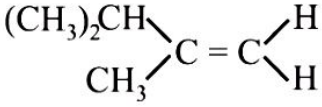
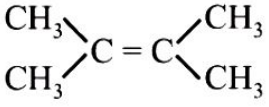
(C) R-I > R-Cl > R-Br < R-F

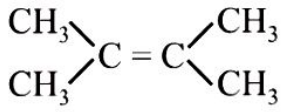
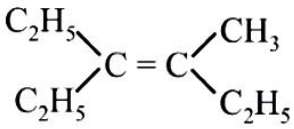
(D) R-I < R-Br < R-F < R-Cl

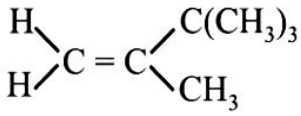
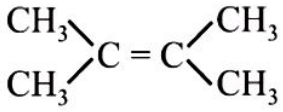
Q6 

X and Y are respectively:

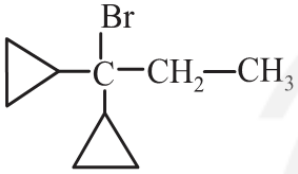
(A)  and 

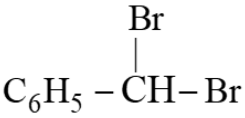
(B)  and 

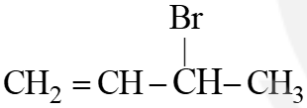
(C)  and 

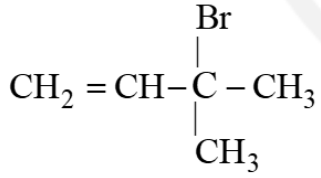
(D)  and 

Q7 Which of the following will be most reactive for E_1 reaction?

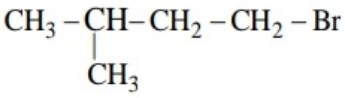
(A) 

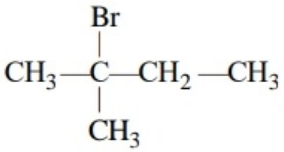
(B) 

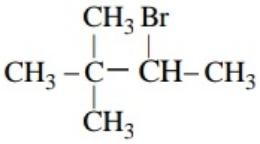
(C) 

(D) 

Q8 Arrange the following A, B and C in order of their reactivity towards E2 elimination

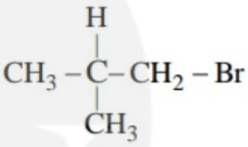
(A) 

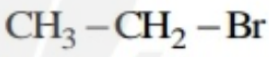
(B) 

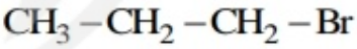
(C) 

(A) $A > B > C$
(B) $B > A > C$
(C) $B > C > A$
(D) $C > B > A$

Q9 Arrange the following alkyl halides in decreasing order of the rate of elimination reaction with alcoholic KOH.

(1) 

(2) 

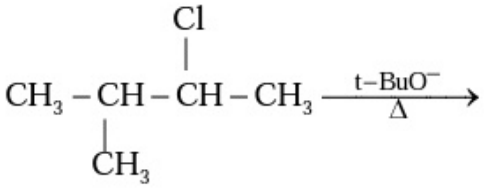
(3) 

(A) $1 > 2 > 3$
(B) $3 > 2 > 1$
(C) $2 > 3 > 1$
(D) $1 > 3 > 2$

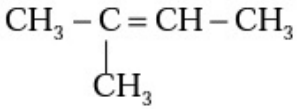
Q10 2-Chlorobutane on treatment with alcoholic KOH/Δ gives mainly:

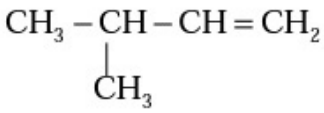
(A) 2-butene (B) 1-butene
(C) 2-butanol (D) 1-butyne

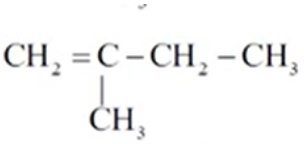
Q11

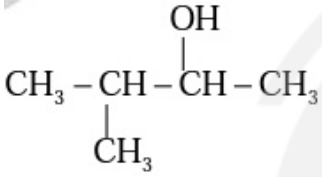


Major product is:

(A) 

(B) 

(C) 

(D) 

Q12 In the reaction $CH_3CH_2I \xrightarrow{\text{Alc. KOH}} X \xrightarrow{Br_2} Y \xrightarrow{KCN} Z$, Z is:

(A) CH_3CH_2CN

(B) $CNCH_2CH_2CN$

(C) $BrCH_2CH_2CN$

(D) $BrCH = CHCN$

Q13 Elimination reaction generally occurs with the formation of

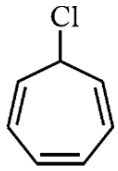
(A) One sigma bond

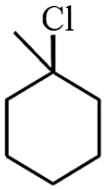
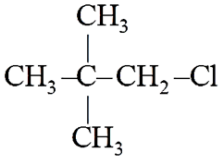
(B) one pi bond

(C) one sigma and one pi bond

(D) None of the above

Q14 Arrange the following compounds in decreasing order of reactivity in S_N1 reaction

(a) $Ph - CH_2 - Cl$ (b) 

(c)  (d) 

(A) a > c > b > d

(B) c > d > b > a

(C) $a > b > c > d$

(D) b > a > c > d

Answer Key

Q1	(C)
Q2	(D)
Q3	(C)
Q4	(D)
Q5	(B)
Q6	(A)
Q7	(A)
Q8	(B)
Q9	(D)
Q10	(A)
Q11	(B)
Q12	(B)
Q13	(C)
Q14	(D)