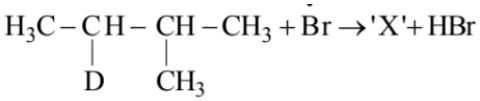
Lakshya NEET (2025)

Organic Chemistry

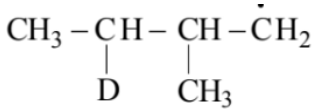
Haloalkanes and Haloarenes

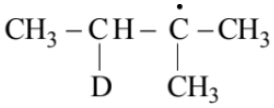
DPP: 5

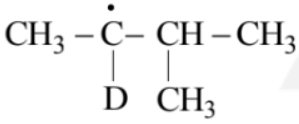
Q1 Consider the following reaction

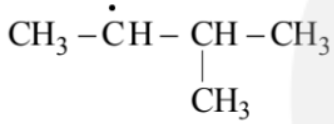


Identify the structure of the major product X

(A) 

(B) 

(C) 

(D) 

Q2 The order of reactivity of halogens in aliphatic substitution reaction is

(A) $Br_2 > Cl_2 > F_2$

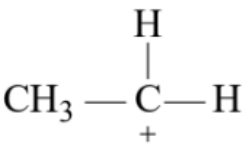
(B) $Cl_2 > Br_2 > F_2$

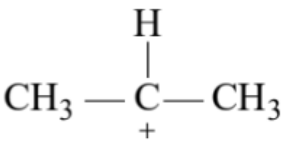
(C) $F_2 > Cl_2 > Br_2$

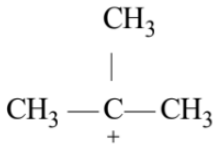
(D) $F_2 > Br_2 > Cl_2$

Q3 Which of the following has maximum stability

(A) 

(B) 

(C) 

(D) 

Q4 Which of the following is not formed by the reaction of Cl_2 on CH_4 in sunlight

(A) $CHCl_3$

(B) CH_3Cl

(C) CH_3CH_3

(D) $CH_3CH_2CH_3$

Q5 Halogenation of alkanes is an example of

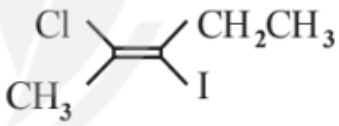
(A) Electrophilic substitution

(B) Nucleophilic substitution

(C) Free-radical substitution

(D) Oxidation

Q6 The IUPAC name of the following compound is



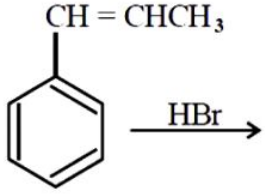
(A) trans-2-chloro-3-iodo-2-pentene

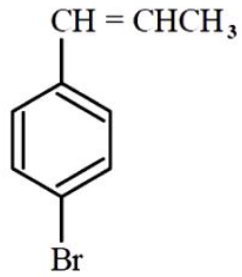
(B) cis-3-iodo-4-chloro-3-pentene

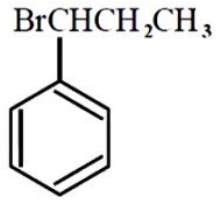
(C) trans-3-iodo-4-chloro-3-pentene

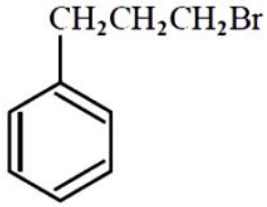
(D) cis-2-chloro-3-iodo-2-pentene

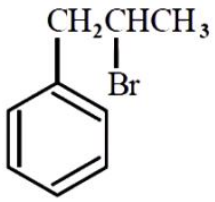
Q7 The major product of the following reaction is



(A) 

(B) 

(C) 

(D) 

Q8 3-Phenylpropene reacts with HBr in the presence of peroxide, the major product formed is

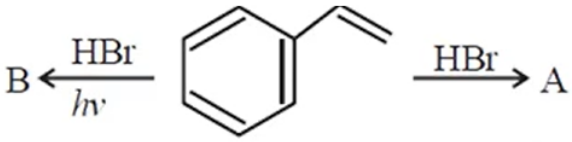
(A) 2-bromo-1-phenylpropane

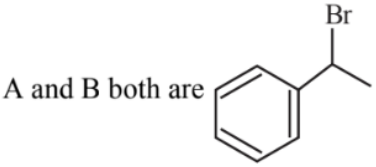
(B) 1, 2-dibromo-3-phenylpropane

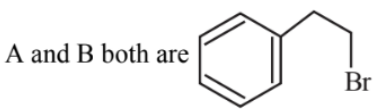
(C) 3-(o-bromophenyl) propene

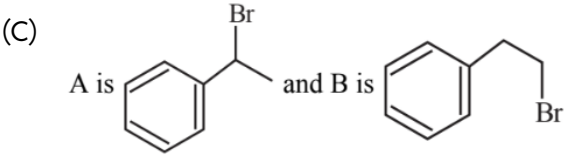
(D) 1-bromo-3-phenylpropane

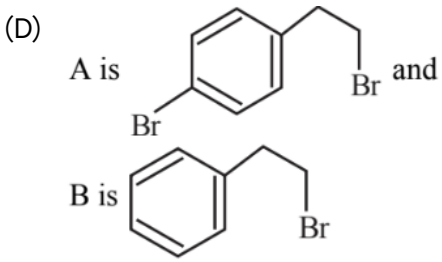
Q9 Observe the following reactions and predict the nature of A and B.



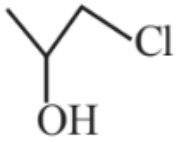
(A) 

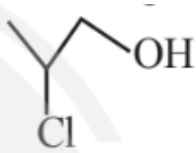
(B) 

(C) 

(D) 

Q10 Propene on reaction with chlorine water gives

(A) 

(B) 

(C) 

(D) 

Q11 $CH_3\,CH_2 - CH = CH_2 + HBr \xrightarrow{ROOR} \underset{\text{Major}}{[X]}$

$+ \underset{\text{Minor}}{[Y]}$

$[X]$ and $[Y]$ respectively are

(A) $BrCH_2\,CH_2CH = CH_2$ and $C_2H_5 - CHBr - CH_3$

(B) $C_2H_5 - CH_2CH_2 - Br$ and $Br - CH_2CH_2 - CH = CH_2$

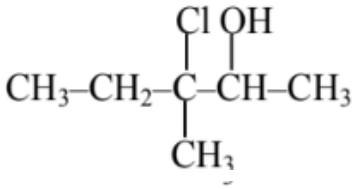
(C) $C_2H_5 - CH_2 - CH_2Br$ and $C_2H_5 - CHBr - CH_3$

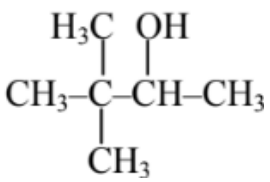
(D) $C_2H_5\,CHBr - CH_3$ and $C_2H_5 - CH_2 - CH_2Br$

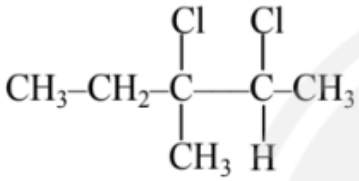
Q12 Reactivity of alkenes towards HX increases in the order

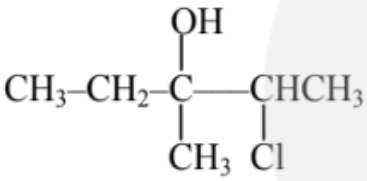
(A) But-2-ene > Propene > Ethene
(B) But-2-ene > Ethene > Propene
(C) Ethene > Propene > But-2-ene
(D) None of these

Q13 3-Methyl-2-pentene on reaction with $HOCl$ gives

(A) 

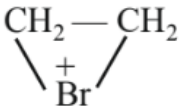
(B) 

(C) 

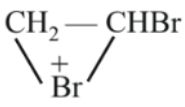
(D) 

Q14 Ethylene reacts with Br_2 to give 1, 2-dibromoethane. The anti-addition takes place due to the formation of the intermediate

(A) $CH_2CH_2Br + CH_2^+$

(B) 

(C) $BrCH = CH^+$

(D) 

Answer Key

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