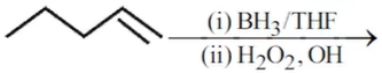
Lakshya NEET (2025)

Organic Chemistry

Alcohols, Phenols and Ethers

DPP: 2

Q1 The product of the following reaction is



(A) 2-pentanol (B) pentane
(C) pentan-2-one (D) 1-pentanol

Q2 The reaction of ethylmagnesium iodide with acetaldehyde gives after acidification
(A) 2-Butanol
(B) 1-Butanol
(C) 2-Methyl-2-propanol
(D) 2-Methylpropanol

Q3 To prepare 2-propanol from methyl magnesium bromide, the other chemical required is
(A) $HCHO$
(B) CH_3CHO
(C) C_2H_5OH
(D) CH_3COCH_3

Q4 In the reaction

$$(CH_3)_2 - CH - CH = CH - CH_3 \xrightarrow[(ii)\ NaBH_4]{(i)\ Hg(OAC)_2, THF, H_2O} x, \text{ x will be}$$

(A) $(CH_3)_2 - CH - CH_2 - CH(OH)CH_3$
(B) $(CH_3)_2 - CH - CH(OH) - CH_2 - CH_3$
(C) $(CH_3)_2 - C(OH) - CH_3CH_2CH_3$
(D) $CH_3 - CH(OH) - (CH_2)_3CH_3$

Q5 In the reaction

$$(CH_3)_2 - CHCH = CH_2 \xrightarrow[(ii)H_2O_2/\ OH^-]{(i)\ BH_3\ /\ THF}$$

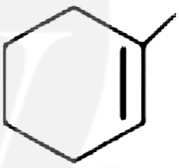
(A) $(CH_3)_2 - CH - CH_2 - CH_2OH$
(B) $(CH_3)_2 - CH - CH(OH) - CH_3$
(C) $(CH_3)_2 - C(OH) - CH_2 - CH_3$
(D) $CH_3 - CH(OH) - (CH_2)_2 - CH_3$

Q6 Which of the following alkenes to give same product in HBO, Oxymercuration- demercuration and acid catalysed hydration?

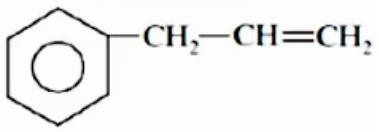
(A) 

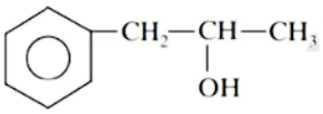
(B) 

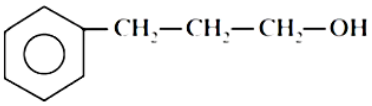
(C) 

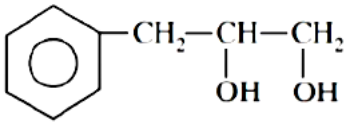
(D) 

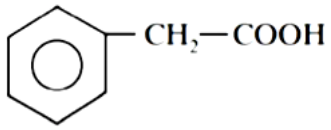
Q7 The following compound on mercuration-demercuration produces the major product



(A) 

(B) 

(C) 

(D) 

Q8 Which set of reagents is used for the purpose of adding water to an alkene in a Markovnikov addition without rearrangement?

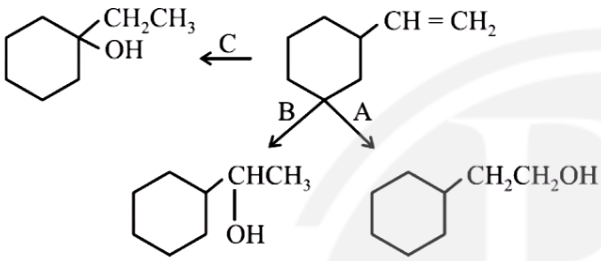
(A) BH_3, THF followed by $H_2O_2, NaOH, H_2O$

(B) H_2O, H_2SO_4

(C) Br_2, H_2O

(D) $Hg(OAc)_2, H_2O$ followed by $NaBH_4$

Q9 Select schemes A, B, C out of



I. Acid catalyzed hydration

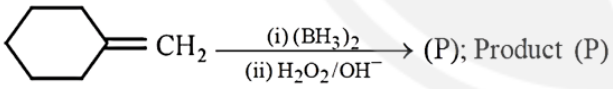
II. HBO

III. Oxymercuration-demercuration

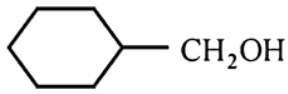
(A) I in all cases (B) I, II, III

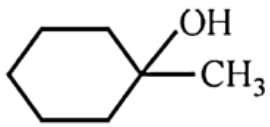
(C) II, III, I (D) III, I, II

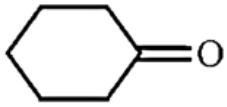
Q10

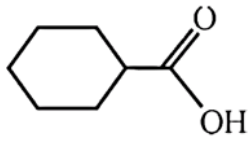


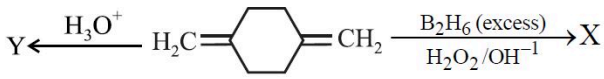
in the reaction is

(A) 

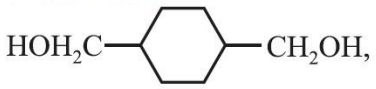
(B) 

(C) 

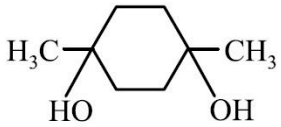
(D) 

Q11 

X and Y are :



(I)



(II)

(A) X is I and Y is II

(B) X is II and Y is I

(C) I in both case

(D) II in both case

Q12 Propene on hydroboration oxidation produces

(A) Propan-1-ol

(B) Propan-2-ol

(C) Propane-1, 3-diol

(D) Propane-1, 2-diol

Q13 Consider the following reaction:

$$\text{Ethanol} \xrightarrow{PBr_3} X \xrightarrow{\text{Alc.KOH}} Y \xrightarrow[\text{(ii) } H_2O,\Delta]{\text{(i) } H_2SO_4} \text{is}$$

(A) $CH_3CH_2OCH_2CH_2$

(B) $CH_3CH_2O-SO_3H$

(C) CH_3CH_2OH

(D) $CH_2=CH_2$

Answer Key

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