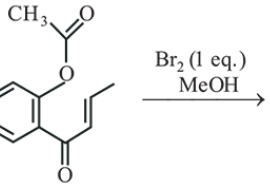
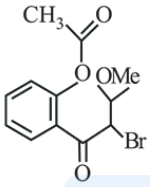
JEE Mains 2019 Chapter wise Question Bank

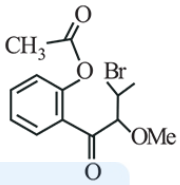
Hydrocarbons - Questions

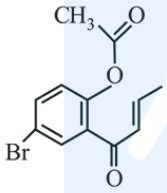
Q1

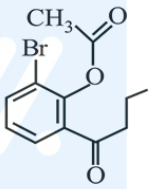
The major product obtained in the following conversion is:



(1) 

(2) 

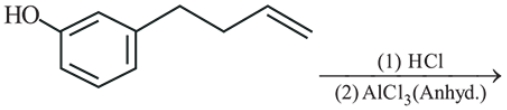
(3) 

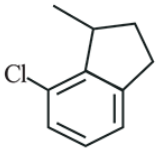
(4) 

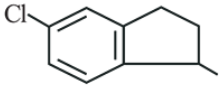
11 Jan Evening

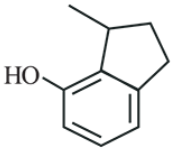
Q2

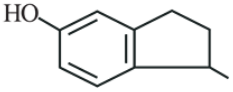
The major product of the following reaction is :



(1) 

(2) 

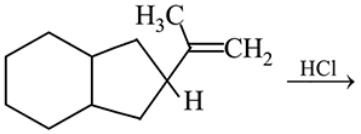
(3) 

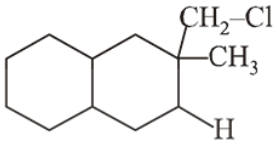
(4) 

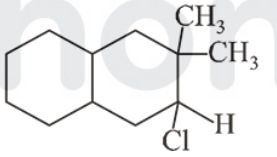
11 Jan Evening

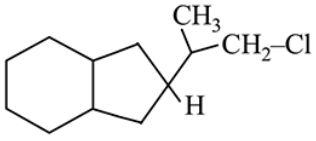
Q3

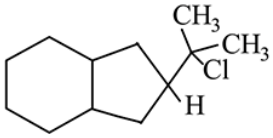
The major product of the following reaction is :



(1) 

(2) 

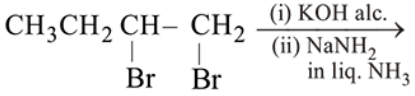
(3) 

(4) 

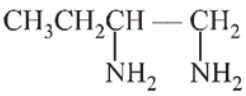
12 Jan Evening

Q4

The major product of the following reaction is :



(1) $CH_3CH=C=CH_2$

(2) 

(3) $CH_3CH=CHCH_2NH_2$

(4) $CH_3CH_2C\equiv CH$

12 Jan Evening

Q5

Which one of the following alkenes when treated with HCl yields majorly an anti Markovnikov product ?

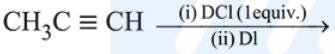
(1) $CH_3O-CH=CH_2$ (2) $Cl-CH=CH_2$

(3) $H_2N-CH=CH_2$ (4) $F_3C-CH=CH_2$

8 April Evening

Q6

The major product of the following reaction is:



(1) $CH_3CD(I)CHD(Cl)$

(2) $CH_3CD(Cl)CHD(I)$

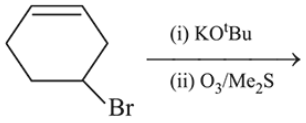
(3) $CH_3CD_2CH(Cl)(I)$

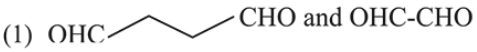
(4) $CH_3C(I)(Cl)CHD_2$

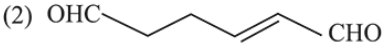
9 April Morning

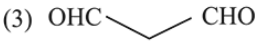
Q7

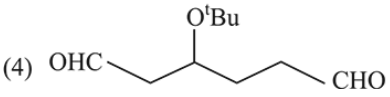
The major product(s) obtained in the following reaction is/ are :



(1) 

(2) 

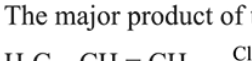
(3) 

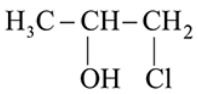
(4) 

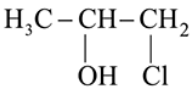
12 April Morning

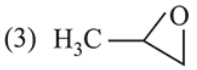
Q8

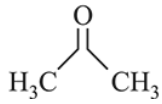
The major product of the following addition reaction is



(1) 

(2) 

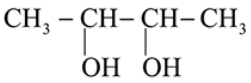
(3) 

(4) 

12 April Morning

Q9

But 2-ene on reaction with alkaline $KMnO_4$ at elevated temperature followed by acidification will give :

(1) 

(2) one molecule of CH_3CHO and one molecule of CH_3COOH

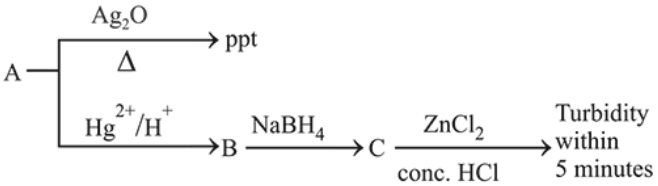
(3) 2 molecules of CH_3COOH

(4) 2 molecules of CH_3CHO

12 April Morning

Q10

Consider the following reaction :



'A' is:

(1) $CH\equiv CH$ (2) $CH_3-C\equiv C-CH_3$

(3) $CH_3-C\equiv CH$ (4) $CH_2=CH_2$

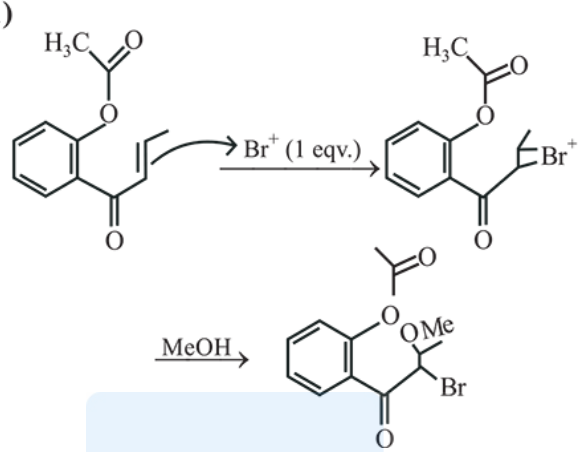
12 April Evening

JEE Mains 2019 Chapter wise Question Bank

Hydrocarbons - Questions

Q1

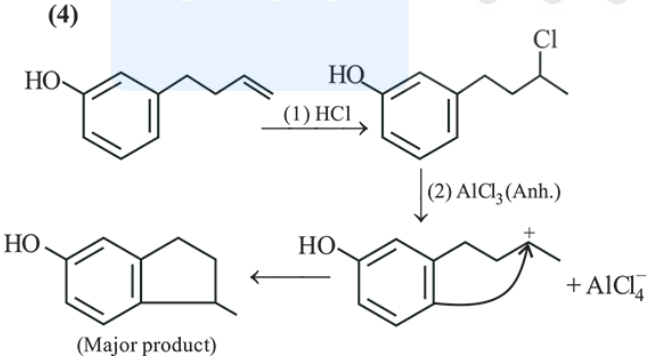
(1)



11 Jan Evening

Q2

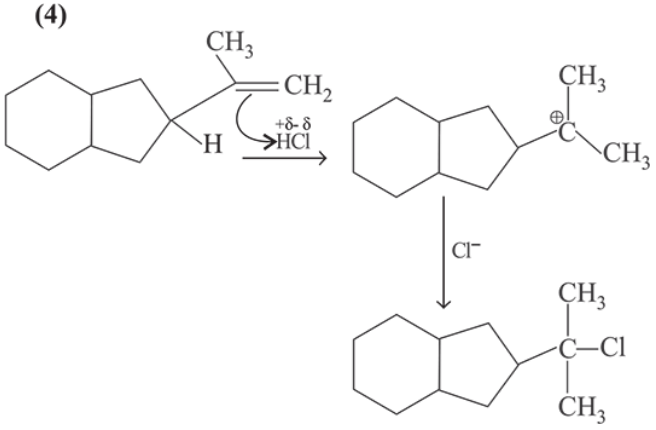
(4)



11 Jan Evening

Q3

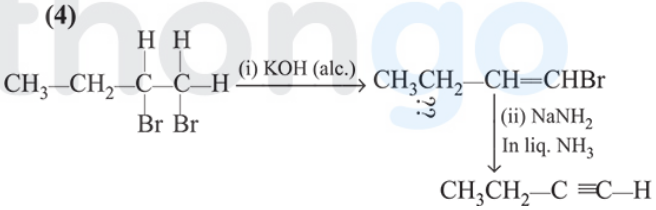
(4)



12 Jan Evening

Q4

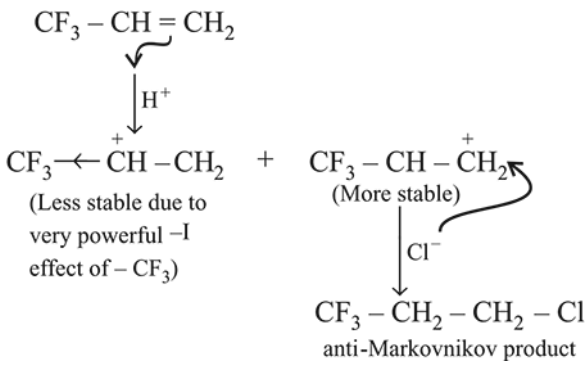
(4)



12 Jan Evening

Q5

(4)



8 April Evening

Q6

(4) $CH_3 - C \equiv C - H \xrightarrow[1\ eq]{DCl} CH_3 - \underset{Cl}{\overset{|}{C}} = \underset{D}{\overset{|}{CH}}$

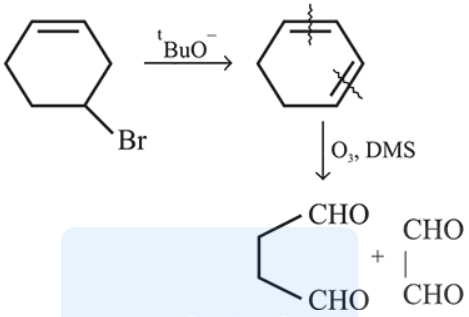
$\downarrow DI$

$CH_3 - \underset{Cl}{\overset{I}{\overset{|}{C}}} - \underset{D}{\overset{D}{\overset{|}{CH}}}$

Both additions follow Markovnikov's rule.

9 April Morning

Q7

(1) 

12 April Morning

Q8

(2) $CH_3 - CH = CH_2 \xrightarrow[H_2O]{Cl_2} CH_3 - \underset{\overset{+}{Cl}}{CH} - CH_2$

$\longrightarrow \underset{\text{(more stable)}}{CH_3 - \overset{+}{CH} - CH_2Cl} \xrightarrow{H_2O} CH_3 - \underset{OH}{CH} - \underset{Cl}{CH_2}$

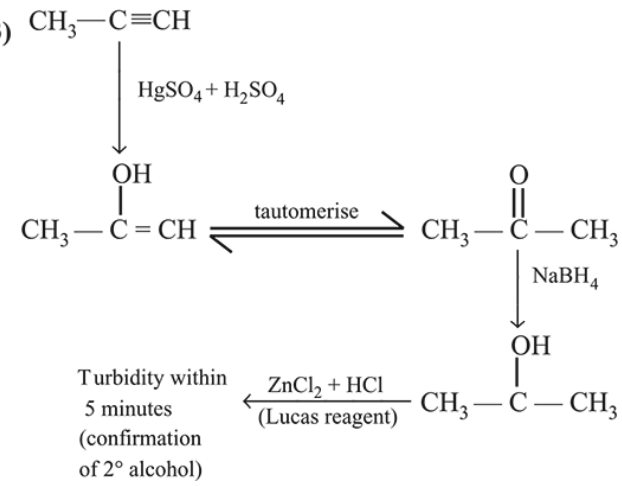
12 April Morning

Q9

(3) $CH_3 - CH \overset{\sim}{=} CH - CH_3 \xrightarrow[OH^-, \Delta]{KMnO_4} 2CH_3COOH$

12 April Morning

Q10

(3) 

12 April Evening