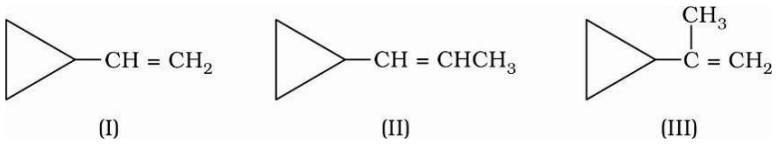
| Date Planned : __ / __ / __ | Daily Tutorial Sheet-6 | Expected Duration : 30 Min |
|---|---|---|
| Actual Date of Attempt : __ / __ / __ | Level-2 | Exact Duration :_____ |

**76.** Rate of hydration of




will be in order :

**(A)** I < II < III **(B)** I < III < II **(C)** II < I < III **(D)** III < II < I

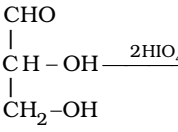
***77.** 3-Methyl-3-hexanol can be prepared by :

**(A)** $CH_3MgI$ and 3-Hexanone, followed by hydrolysis

**(B)** $C_2H_5MgI$ and 2-Pentanone, followed by hydrolysis

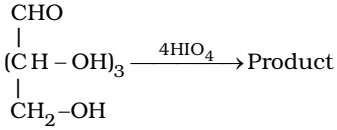
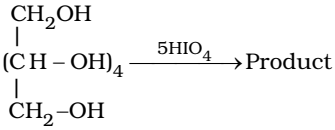
**(C)** n-Pr-MgI and 2-Butanone, followed by hydrolysis

**(D)** n-Bu-MgI and Propanone, followed by hydrolysis

**78.**  $\xrightarrow{2HIO_4}$ Products obtained in the reaction are :

**(A)** $HCHO, HCO_2H$ **(B)** $HCHO, 2HCO_2H$

**(C)** $CO_2, 2HCO_2H$ **(D)** $CO_2, HCHO, HCO_2H$

**79.** **(i)**  **(ii)** 

Ratio of moles of formic acid obtained in reaction (i) and reaction (ii) is :

**(A)** 3/4 **(B)** 4/5 **(C)** 1 **(D)** 5/4

**80.** Cyclobutylethene is treated with dil. $H_2SO_4$ and boiled with water to form :

**(A)** 2-Cyclobutylethanol **(B)** 1-Cyclobutyl-2-ethanol

**(C)** 2-Methylcyclopentanol **(D)** 1-Methylcyclopentanol

***81.** In the reaction sequence, $CaC_2 \xrightarrow{H_2O} A \xrightarrow[HgSO_4]{\text{dil. } H_2SO_4} B \xrightarrow[Ni]{H_2} C.$

True statement about the product C is :

**(A)** Give yellow ppt. with NaOI **(B)** Its oxidation product is carbonyl compound

**(C)** Its oxidation product is $CO_2$ and $H_2O$ **(D)** Its oxidation product is $CH_3COOH$

***82.** Which of the following alcohol(s) can be oxidised by $KMnO_4 / H^+$ ?

**(A)** Ethanol **(B)** Tert-butylalcohol

**(C)** Isopropyl alcohol **(D)** Allyl alcohol

***83.** Which of the following compound(s) gives alcohol on reaction with $LiAlH_4$ / $H_2O$ ?

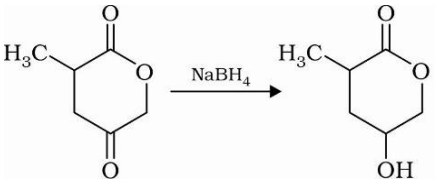
**(A)** $Me-\underset{\underset{O}{\|}}{C}-Cl$ **(B)** $Me-\underset{\underset{O}{\|}}{C}-NH_2$ **(C)** $Me-CH-CH_2$ (O) **(D)** $Me-\underset{\underset{O}{\|}}{C}-O-\underset{\underset{O}{\|}}{C}-Me$

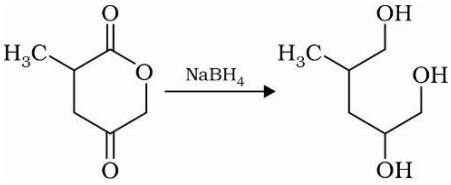
***84.** End-product of which of following reactions gives positive Iodoform test ?

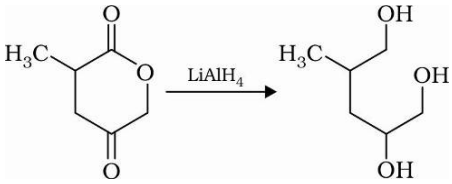
**(A)** $H-\underset{\underset{O}{\|}}{C}-Cl \xrightarrow[(ii)\ H^{\oplus}]{(i)\ CH_3MgBr\ (excess)}$ **(B)** $Ph-\underset{\underset{O}{\|}}{C}-O-Et \xrightarrow[(ii)\ H^{\oplus}]{(i)\ CH_3MgBr\ (excess)}$

**(C)** $H-\underset{\underset{O}{\|}}{C}-O-Et \xrightarrow[(ii)\ H^{\oplus}]{(i)\ CH_3MgBr\ (excess)}$ **(D)** $CH_3-\underset{\underset{O}{\|}}{C}-H \xrightarrow[(ii)\ H^{\oplus}]{(i)\ CH_3MgBr\ (excess)}$

***85.** Which of the following reactions represents the correct product ?

**(A)** 


**(B)** 


**(C)** 


**(D)**