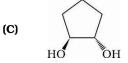


| Date Planned :// | Daily Tutorial Sheet-10 | Expected Duration : 30 Min |
|----------------------------|-------------------------|----------------------------|
| Actual Date of Attempt :// | Level-2 | Exact Duration : |

- **116.** Which can be cleaved by HIO_4 ?
 - (A) $CH_3CH_2CCH_2CCH_3$

HO O | || (B) CH₃ CHC CH₂CH₃



(**D**) CH₃ C CH₂ CHCH₂ CCH₃

CH₂—OH C = O $CH_{-}OH$ $CH_{-}OH$ CH_{2} CH_{2} CH_{2} CH_{2} CH_{3} CH_{4} CH_{2} CH_{2} CH_{2} CH_{3} CH_{4} CH_{2} CH_{3} CH_{4} CH_{2} CH_{3} CH_{4} CH_{2} CH_{3} CH_{4} CH_{5} CH_{5}

- (A) x = 3 (B) x = 2 (C) x = 4 (D) x = 1
- 118. Which of the following compound gives HCHO, CO_2 and three moles of HCO_2H when oxidized by periodic acid?

 CHO

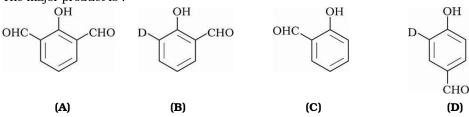
 CHO

 CHO
 - CHO C = OC = OC = O(A) (CH-OH)2 **(B)** (CHOH)₃ (C) (CH-OH)₂ **(D)** СН—ОН CH₂—OH ĊH₂OH ĊH₂—OH CH₂—OH
- 119. OH OH
 - (1) (i) CH_3MgBr (ii) H_3O^+ (2) $KMnO_4$ (cold dil.)
 - (3) CrO_3 (4) H^+/Δ

For the above conversion the correct order of reagents used is :

- (A) $1 \to 2 \to 3 \to 4$ (B) $1 \to 4 \to 3 \to 2$ (C) $1 \to 4 \to 2 \to 3$ (D) $2 \to 3 \to 4 \to 1$
- *120. Which of the following are cleaved by HIO_4 ?
 - (A) Glycerol (B) Glycol (C) 1, 3-Propenediol (D) THF OH
- 121. $\begin{array}{c|c}
 \hline
 1. KOH \\
 \hline
 2. CHCIBrI/KOH/\Delta
 \end{array}$ Product

The major product is:





*122. Which of the following is correct about the given reaction:

$$\begin{array}{c|c} O & C_6H_5 \\ O & O \\ \hline \\ O & CH_3 \end{array} \xrightarrow{\text{LialH}_4} \begin{array}{c} C_6H_5 \\ \hline \\ CH_3 \end{array}$$

- (A) Reactant has four functional groups
- (B) Product is tetrahydroxy compound
- **(C)** Product has three primary alcohol groups
- **(D)** Product can't be oxidised by MnO₂

*124. Which method is useful synthesis of ether?

(A)
$$Br + Na^+O^-$$

(B)
$$H_3C$$
 $O^-Na^+ + (CH_3)_2SO_4$ ---

(C)
$$C = 0$$
 $SO_2C_6H_4CH_3 + H_3$

(D)
$$(CH_3)_3CBr + CH_3CH_2ONa$$

125. Match the following:

Column I Column II (A) CH_3 **(p)** Reduction by LiAlH₄ **(B)** OCH₃ Reduction by NaBH₄ (q) (C) Positive Iodoform (r) **(D)** (s) Reacts with Na to evolve H_2 gas