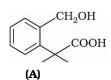


Date Planned ://	Daily Tutorial Sheet-9	Expected Duration : 30 Min
Actual Date of Attempt : / /	Level-2	Exact Duration :

106.

$$\begin{array}{c} \text{CHO} \\ \hline \\ \text{CHO} \\ \hline \begin{array}{c} 1. \text{ NaOH} \\ \hline 2. \text{ H}^+ \\ 3. \text{ H}_2\text{SO}_4 \end{array} \end{array} X$$

Product X is:





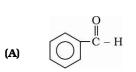




- *107. Which of the following is(are) true for Pentan-2, 4-dione?
 - (A) It forms a cyclic imine with hydrazine
 - **(B)** Its enol form is highly stable
 - **(C)** It responds positively to Tollen's reagent test
 - **(D)** It has an active methylene group
- *108. Which of the following statements is correct for the nucleophilic addition of sodium bisulphite on aldehyde and ketones?
 - (A) This addition reaction is very sensitive to steric crowding; as the crowding increases ease of addition decreases. Therefore, most aldehyde and some ketones respond to this reaction significantly.
 - **(B)** Bisulphite addition reaction can be used to separate the aldehydes & ketones from a mixture containing some other compounds because the addition products are often crystalline salts.
 - **(C)** Bisulphite addition reaction is a reversible reaction. Therefore, bisulphite addition products can be decomposed to regenerate the corresponding aldehydes and ketone, on treatment with acid or base.
 - (D) Acetophenone form more rapidly addition product with sodium bisulphite than acetone.

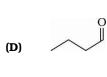
(C)

*109. Which of the following compounds show acid base reaction with NaOH?









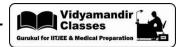
*110. Pick out the selective reagent for the following transformation :

(A) 1% alkaline KMnO₄

(B) H_2CrO_4

(C) Ammoniacal AgNO₃

(D) Fehling solution



$ext{*111.}$ Consider the following sequence of reactions:

- *112. Which of the following compound will give intramolecular Cannizzaro's reaction?
 - (A) (B) (B) (CHO) (CHO
- *113. Which compounds will be oxidised by HIO_4 ?

 ${
m *114.}$ Select correct options for the given reaction :

$$(CHO + [X] \xrightarrow{CH_3COONa} MeO \xrightarrow{KMnO_4/NaOH} Y + Z$$

(A) $X = CH_3COOH$

(B) $X = (CH_3CO)_2O$

(C) $Z = (COONa)_2$

- **(D)** $Y = p MeO C_6H_4 COONa$
- 115. $CH_3 C-CH_2 C-CHO \xrightarrow{KOH, H_2O} (A)$; product A is : $CH_3 C+CH_2 C+CHO \xrightarrow{CH_3} (A)$







