

Date Planned ://	Daily Tutorial Sheet-6	Expected Duration : 90 Min
Actual Date of Attempt ://	Level-2	Exact Duration :

- **76.** The acid catalysed dehydration to form  $\alpha$ ,  $\beta$ -unsaturated acid takes place in :
  - (A) lactic acid

- (B) glycolic acid
- (C) 3-hydroxy propanoic acid
- **(D)** 4-Hydroxy butanoic acid

77. 
$$CH_3 - C - C_2H_5 \xrightarrow{C_6H_5CO_3H} A \xleftarrow{\text{Tischenko}} B$$

A and B are:

- (A)  $CH_3COOC_2H_5$ ,  $CH_3CHO$
- **(B)**  $CH_3COOC_2H_5$ ,  $CH_3CH_2CHO$
- (C) CH<sub>3</sub>CH<sub>2</sub>COOCH<sub>3</sub>, CH<sub>3</sub>CH<sub>2</sub>CHO
- **(D)** None is correct

78. 
$$B \stackrel{\text{NaBH}_4}{\longleftarrow} O \stackrel{\text{LiAlH}_4}{\longleftarrow} A$$
, A and B are

(A) in both case

- OH in both case
- (C) OH and OH
- **(D)** Formation of A and B is not possible
- **79.** Which of the following can be reduced as well as oxidized?
  - I. HCOOH
- II. CH<sub>3</sub>COOH
- III.  $CH_3CH_2COOH$

(C)

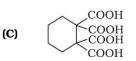
- (A) Only I
- **(B)** Both I and II
- I, II and III
- (D) None of these

80. 
$$CN \xrightarrow{CN} \xrightarrow{1. H_3 O^+} (P)$$
; Product (P) will be:



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3)





- **81.** What is the major product of the following reaction?
  - $\begin{array}{ccc} & O & O \\ \parallel & \parallel & \\ CH_3CH_2 & COCH_3 + H & COCH_3 & \xrightarrow{\phantom{C} 1. \ NaOCH_2CH_3 \phantom{C} \\ \phantom{C} 2. \ H^+ \end{array} \rightarrow Product$

(B) HCOCHCOCH<sub>3</sub>

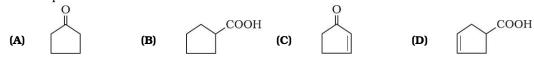
(C) HOCH<sub>2</sub>CH C OCH<sub>3</sub>
CH<sub>3</sub>

(D)  $\begin{array}{c} O & O \\ \parallel & \parallel \\ H C C H C O C H_3 \\ C H_3 \end{array}$ 





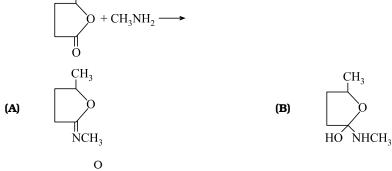
The compound B is:



- 83. Peroxyacetic acid  $(CH_3CO_3H)$  is a weaker acid than acetic acid  $(CH_3CO_2H)$  since :
  - (A) negative charge in  ${\rm CH_3\,COO^-}$  can't be delocalised into the carbonyl group
  - **(B)**  $CH_3$  group in  $CH_3CO_3H$  shows +I effect
  - (C) Both are correct (D) None is correct
- 84.  $Cl \xrightarrow{O} \xrightarrow{H_2/Pd} \xrightarrow{\text{LiAlH}_4/\text{Me}_2\text{O}} (X)$

The structure of product (X):

**85.** Give the structure of the expected product of the following reaction.



(C) 
$$CH_3NHCCH_2CH_2CHCH_3$$
 (D) None of these OH

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