

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

- \*76. Which of the following reagent reacts in different ways with CH<sub>3</sub>CHO and C<sub>6</sub>H<sub>5</sub>CHO?
  - (A) Fehling solution

**(B)** 2, 4-DNP hydrazine

(C) Diethyl amine

**(D)** KCN in ethanol

- \*77. Tollen's reagent can distinguish between:
  - (A) CH<sub>3</sub>CHO and HCHO

**(B)**  $CH_3CHO$  and  $C_6H_5CHO$ 

(C) CH<sub>3</sub>COOH and HCOOH

**(D)**  $CH_3COCH_3$  and  $C_6H_5CHO$ 

- \*78. A  $\beta$ -hydroxy carbonyl compound can be obtained by the action of NaOH on :
  - (A) Me<sub>3</sub>C CHO
- (B) PhCH<sub>2</sub>CHO
- (C) CH<sub>3</sub>CHO
- (D) HCHO
- **79.** Suggest suitable oxidising reagents for following conversions :
  - I.  $CH_3CH_2CH = CH CH_2OH \longrightarrow CH_3CH_2CH = CH CHO$

- (A)  $MnO_2$  in I and  $CrO_3$  (in glacial acetic acid) in II
- **(B)**  $CrO_3$  in I and  $MnO_2$  in II
- **(C)** Both are correct
- **(D)** Both are incorrect
- **80.**  $2(CH_3)_2CO \xrightarrow{OH^-} A \xrightarrow{1. I_2/NaOH} B \xrightarrow{KMnO_4/H^+} \text{product(s)}$

The products may include:

I.  $(CH_3)_2C = CHCOOH$ 

II.  $(CH_3)_2CO$ 

**III.**  $(COOH)_2$ 

**IV.** HCOOH

The correct choice is:

- (A) I and II
- (B) II and III
- (C) I, II and IV
- (**D**) I and IV

**81.** Which of the following is correct?

$$\text{CHCl}_3 \xrightarrow{\quad \text{O}_2 \quad } \text{N} \xrightarrow{\quad \text{C}_2\text{H}_5\text{OH} \quad } \text{Y} \xrightarrow{\quad \text{2CH}_3\text{MgBr} \quad } \text{Z}$$

- I. Z give iodoform test
- **II.** Y is diethylcarbonate
- ${f III.}$  X reacts which excess of benzene and  ${\hbox{AlCl}}_3$  form benzophenone.

The correct choice is:

(A) I and II only

(B) II and III only

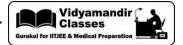
(C) I, II and III

(D) I and III only

\*82. Cannizzaro reaction will be given by:



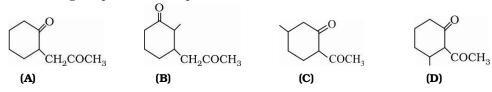
- (A) CHO
- **(B)**
- СНО
  - (C)
- СНО
- **(D)** Cl<sub>3</sub>C CHO



**\*83.** In the given reaction sequence :

$$A \xrightarrow{1. \text{ NaOI}} [B] \xrightarrow{\text{heat}}$$

The starting compound A corresponds to:



- **84.** Which of the following do(es) not react with sodium bisulphite?
  - I. HCHO II.  $CH_3COC_2H_5$  III. V
  - (A) III and IV

(B) only II

(C) II and III

- (D) II, III and IV
- \*85.  $3CH_3 C CH_3 \xrightarrow{\text{conc. } H_2SO_4} A$ . Which is (are) correct statement(s) about A:
  - (A) It is an aromatic compound
  - **(B)** It can be oxidised to carboxylic acid
  - (C) It can undergoes free radical as well as electrophilic substitution reaction
  - **(D)** It contains two carbonyl group