



# ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

## WORKSHEET-50(CLASS-12)

TOPIC- ALDEHYDE AND KETONE

SUBTOPIC- PREPARATION AND CHEMICAL REACTIONS

SUBJECT – CHEMISTRY

DURATION – 30 mins



F.M. - 15

DATE -10.08.20

1.1 For aldol condensation the conditions necessary-

- a) Presence of alpha carbon b) presence of alpha hydrogen c) dilute base d) all of these

1.2 Aldehydes are reduced to-

- a) Primary alcohol b) Secondary alcohol c) Tertiary alcohol d) Not possible

1.3 Tetrahydroborate ion is the source of-

- a) Proton b)  $H^+$  d) Both a and b d)  $H^-$

1.4 Which of the following is a symmetrical ketone-

- a) 3-hexanone b) Acetone c) Butanone d) 2-Pentanone

1.5 Dry distillation of calcium acetate results in the formation of-

- a) Formaldehyde b) Acetaldehyde c) Methane d) Acetone

1.6 In base catalyzed reaction of carbonyl compound the catalyst-

- a) Increases the nucleophilic character of reagent b) Increases the electrophilic character of carbonyl compound c) Acidic character of reagent d) both a and b

1.7 Cannizzaro's reaction takes place through the transfer of \_\_\_\_\_ from complex anion.

- a) Hydrogen ion b) Hydride ion c) Oxide ion d) Methoxide ion

1.8 Iodoform test can be used to distinguish between-

- a) Ethanol and methanol b) Acetaldehyde and methanol c) Acetone and diethyl ketone d) All of the above

1.9 Which of the following will not give addition reaction with  $NaHSO_3$ -

- a)  $HCHO$  b)  $CH_3CHO$  c)  $CH_3CH_2CHO$  d) None of the above

1.10 On heating aldehydes, with Fehling's solution, we get a precipitate whose colour is-

- a) Pink b) Black c) Yellow d) Brick red

**1.11 Which of the following compounds has the empirical formula  $\text{CH}_2\text{O}$  and reacts with sodium hydroxide?**

a) Carbonic acid b) Ethanol c) Acetic acid d) Methanoic acid

**1.12 Aldehyde and ketone have same general formula for homologous series-**

a)  $\text{C}_n\text{H}_{2n}\text{O}_{2n}$  b)  $\text{C}_n\text{H}_{2n}$  c)  $\text{C}_n\text{H}_{2n}\text{O}$  d)  $\text{C}_n\text{H}_{2n}\text{O}_{n+1}$

**1.13 Oxidation of primary alcohol gives –**

a) Ketone b) Aldehyde c) Alkene then –  $\text{COOH}$  d) Ester

**1.14 Ethanal is prepared industrially by air oxidation of ethylene using palladium chloride as a catalyst and \_\_\_\_\_ as a promoter.**

a)  $\text{PdCl}_2$  b)  $\text{Cu}_2\text{Cl}_2$  c)  $\text{CuCl}_2$  d)  $\text{PbCl}_2$

**1.15 Nucleophilic addition reactions are catalyzed by-**

a) Acid b) Base c) Both a and b d) None of these

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