



# ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

## WORKSHEET-51(CLASS-12)

### TOPIC- ALDEHYDE AND KETONE

#### SUBTOPIC- PREPARATION AND CHEMICAL REACTIONS

SUBJECT – CHEMISTRY

DURATION – 30 mins



F.M. - 15

DATE -15.08.20

1.1 For cannizaro reaction the criteria is-

a) Presence of alpha carbon b) absence 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 Aldehyde is more reactive than ketone, due to-

a) Resonance b) Steric effect c) Electronic effect d) both b & c

1.4 Which of the following is an unsymmetrical ketone-

a) 4-heptanone b) Acetone c) Butanone d) 2-Pentanone

1.5 Dry distillation of calcium formate 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 Tischenko reaction takes place through the transfer of \_\_\_\_\_ from complex anion.

a) Hydrogen ion b) Hydride ion c) Oxide ion d) None of these

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  $\text{CH}_3\text{MgBr}$  in Dry ether?

a)  $\text{HCHO}$  b)  $\text{CH}_3\text{CHO}$  c)  $\text{CH}_3\text{CH}_2\text{CHO}$  d) None of the above

1.10 On treating acetaldehyde with  $\text{I}_2$  and  $\text{NaOH}$ -

a) Iodoform is obtained b) Black coloured precipitate is formed c) Yellow coloured has is formed d) Methanoic acid is obtained

**1.11 Which of the following can undergo Tautomerism?**

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

**1.12 Aldehyde and ketone can be protected and deprotected by-**

a) Reaction with alcohol b) Reaction with water c) hydrolysis d) Reaction with alcohol and dry HCl

**1.13 Pinacol is a-**

a) Ketone b) Vicinal diol c) geminal diol 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 attack of carbonyl compounds depend on-**

a) Acid b) Base c) Both a and b d) Electrophilicity of the carbonyl carbon

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