

ST. LAWRENCE HIGH SCHOOL A JESUIT CHRISTIAN MINORITY INSTITUTION

SOLUTION-50(CLASS-12)

TOPIC- ALDEHYDE AND KETONE

SUBTOPIC-PREPARATION AND CHEMICAL REACTIONS



F.M. - 15 DATE -10.08.20

DURATION – 30 mins

SUBJECT – CHEMISTRY

- 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

Ans. d

- 1.2 Aldehydes are reduced to-
- a) Primary alcoholb) Secondary alcohol c) Tertiary alcohold) Not possible

Ans. a

- 1.3 Tetrahydroborate ion is the source of-
- a) Protonb) H+d) Both a and bd) H-

Ans.d

- 1.4 Which of the following is a symmetrical ketone-
- a) 3-hexanoneb) Acetonec) Butanoned) 2-Pentanone

Ans. b

- 1.5 Dry distillation of calcium acetate results in the formation of-
- a) Formaldehydeb) Acetaldehydec) Methaned) Acetone

Ans. d

1.6In base catalyzed reaction of carbonyl compound the catalyst-

a) Increases the nucleophilic character of reagentb) Increases the electrophilic character of carbonyl compoundc) Acidic character of reagent d) both a and b

Ans. a

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

a) Hydrogen ion b) Hydride Ionc) Oxide ion d) Methoxide ion

Ans. b

1.8 lodoform test can be used to distinguish between-

a) Ethanol and methanolb) Acetaldehyde and methanolc) Acetone and diethyl ketoned) All of the above

Ans. d

1.9 Which of the following will not give addition reaction with NaHSO₃-

a) HCHOb) CH₃CHOc) CH₃CH₂CHOd) None of the above

Ans. c

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

a) Pinkb) Blackc) Yellowd) Brick red

Ans. d

1.11 Which of the following compounds has the empirical formula CH2O and reacts with sodium hydroxide?

a) Carbonic acidb) Ethanolc) Acetic acidd) Methanoic acid

Ans. c

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1.12Aldehyde and ketone have same general formula for homologous series-
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a) $C_nH_{2n}O_{2n}$ b) $C_nH_{2n}c$) $C_nH_{2n}Od$) $C_nH_{2n}O_{n+1}$

Ans. c

1.13Oxidation of primary alcohol gives -

a)Ketoneb) Aldehydec) Alkene then - COOH d) Ester

Ans. b

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

a) PdCl₂b) Cu₂Cl₂c) CuCl₂d) PbCl₂

Ans. c

1.15 Nucleophilic addition reactions are catalyzed by-

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

Ans. c

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