



1.1 Which of following factors affect the reaction between ammonia derivative and aldehyde/ketone?

- a) pH b) Temperature c) pressure d) catalyst

Ans.d

1.2 Which of the following compound gives cannizaro reaction?

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

Ans. d

1.3 Which of the following is an product in the reaction of acetaldehyde with dilute NaOH?

- a) Carbanion b) Enol c) Enolate d) Aldol

Ans. d

1.4 Compound which doesn't give stereoisomers on treatment with hydroxylamine is-

- a) Benzaldehyde b) Acetophenone c) Benzophenone d) 2-Butanone

Ans. c

1.5 Hydrazene reacts with aldehyde or ketone to form-

- a) Imine b) Hydrazone c) Amide d) Oxime

Ans. b

1.6 Reaction of ethanoic anhydride with limited supply of $\text{C}_2\text{H}_5\text{MgI}$, in presence of dry ether followed by hydrolysis gives-

- a) Acetone b) an alcohol c) Acetaldehyde d) Alkyl halide

Ans. b

1.7 Aldehyde can be chemical distinguished from ketone by-

- a) Tollens reagent b) Sodium bisulphite addition c) Brady's reagent d) All of these

Ans. a

1.8 Secondary alcohol on treatment with Copper at 573K forms-

a) Carboxylic acid b) Ketone c) Alkene d) alkyne

Ans. b

1.9 Ba(OH)₂ is used for Aldol condensation of-

a) Amine b) Both c and d c) Acetaldehyde d) Acetone

Ans. d

1.10 Benzoin condensation is shown by-

a) Acetaldehyde b) Benzaldehyde c) Chloral d) Formaldehyde

Ans. b

1.11 Nitroethane forms stable geminal-di-ol, due to-

a) Intra molecular H-bond formation b) Due to release in angle strain c) Inductive effect d) Hyperconjugation

Ans. a

1.12 A C₅H₁₂O compound is optically active, and is oxidized by PCC in CH₂Cl₂ to an optically active C₅H₁₀O product, which is racemised in acid or base. Which of the following best fits these facts-

a) 2-pentanol b) 2-methoxy butane c) 2-methyl-1-butanol d) 3-methyl-1-butanol

Ans.

1.13 2,4-dinitrophenyl hydrazine on treatment with Aldehyde forms-

a) 2,4-DNPH b) Oxime c) Semicarbazone d) Phenyl hydrazone

Ans. a

1.14 Aldehyde and ketone both undergo the type of chemical reaction/reactions-

a) Condensation b) rearrangement c) addition d) all of these

Ans. d

1.15 Which of the following compounds would not be a possible product from the mixed aldol reaction of chloral and formaldehyde-

a) 3-hydroxybutanal b) 2-ethyl-3-hydroxybutanal c) No reaction takes place d) 3-hydroxyhexanal

Ans. C

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