

ECAT Chemistry Chapter 23 Aldehydes and Ketones

| Sr | Questions | Answers Choice |
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| 1 | Which is used for the reduction of aldehydes and ketones | A. NaBH_4 B. Pt/Pd C. Ni D. All of these |
| 2 | Formalin is: | A. 10% solution of formaldehyde in water B. 20% solution of formaldehyde in water C. 40% solution of formaldehyde in water D. 60% solution of formaldehyde in water |
| 3 | From which of the following tertiary butyl alcohol is obtained by the action of methyl magnesium iodide? | A. HCHO B. CH_3CHO C. CH_3COCH_3 D. CO_2 |
| 4 | The carbon of a carbonyl group is: | A. sp hybridized B. sp^2 hybridized C. sp^3 hybridized D. None of these |
| 5 | During the mechanism of aldol condensation a/an _____ is formed | A. Oxide B. Alkali C. Alkoxide ion D. None of these |
| 6 | Hydrogenation of benzoyl chloride in presence of Pd on BaSO_4 gives | A. Benzyl alcohol B. Benzaldehyde C. Benzoic acid D. Phenol |
| 7 | Cannizzaro's reaction is not given by: | A. Formaldehyde B. Acetaldehyde C. Benzaldehyde D. Trimethyl |
| 8 | Which is not true about acetophenone? | A. Reacts to form 2,4-dinitrophenyl hydrazine B. Reacts with Tollen's reagent to form silver mirror C. Reacts with I_2/NaOH to form iodoform D. On oxidation with alkaline KMnO_4 followed by hydrolysis gives benzoic acid |
| 9 | Which reagent will distinguish a ketone from an aldehyde | A. Br_2 B. 2, 4-dinitrophenylhydrazine C. NaBH_4 D. Tollen's reagent |
| 10 | Which of the following reactions is used for detecting presence of carbonyl group? | A. Reaction with hydroxylamine B. Reaction with hydrazine C. Reaction with phenyl hydrazine D. All |
| 11 | In Tollen's test, the end product is _____ formed | A. White ppt B. Red ppt C. Yellow ppt D. Silver mirror |
| 12 | An organic compound has the following properties ; It gives a positive triiodomethane test; it gives a yellow ppt, with 2, 4-DNP reagent; it does not react with Tollen's reagent . Which compound would give these results | A. CH_3CHO B. $\text{CH}_3\text{CH}_2\text{OH}$ C. $\text{CH}_3\text{CH}_2\text{COCH}_3$ D. $\text{CH}_3\text{CH}_2\text{CH}_2\text{CHO}$ |
| 13 | Reaction of Grignard's reagent with formaldehyde gives: | A. pri-alcohol B. sec-alcohol C. ter-alcohol D. carboxylic |
| 14 | The addition of HCN to carbonyl compounds is an example of | A. Nucleophilic substitution B. Electrophilic addition C. Nucleophilic addition D. Electrophilic substitution |
| 15 | The color of ppt formed by Fehling's test is | A. Brick red B. Red C. Yellow D. - |

D. Orange

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| 16 | The product of the reaction between propanone and HCN is hydrolysed under acidic conditions. What is the formula of the final product | A. $\text{CH}_3\text{CH}(\text{OH})\text{COOH}$ B. $\text{CH}_3\text{CH}_2\text{CH}(\text{OH})\text{COOH}$ C. $(\text{CH}_3)_2\text{C}(\text{OH})\text{COOH}$ D. $\text{CH}_3\text{CH}_2\text{CH}_2\text{COOH}$ |
| 17 | A food chemist wants to create the odour of pineapples for a product. An ester with this odour has the formula $\text{C}_3\text{H}_7\text{COOC}_2\text{H}_5$. Which pair of reagents would produce this ester | A. $\text{C}_2\text{H}_5\text{Cl}$ and $\text{C}_3\text{H}_7\text{COOH}$ B. $\text{C}_2\text{H}_5\text{OH}$ and $\text{C}_3\text{H}_7\text{CONH}_2$ C. $\text{C}_2\text{H}_5\text{OH}$ and $\text{C}_3\text{H}_7\text{COOH}$ D. $\text{C}_3\text{H}_7\text{OH}$ and $\text{C}_2\text{H}_5\text{COCl}$ |
| 18 | Aldehydes ketones can be prepared from alcohols by their: | A. Reduction B. Oxidation C. Decomposition D. Synthesis |
| 19 | Which of the following is hypnotic? | A. Acetaldehyde B. Metaldehyde C. Paraldehyde D. None |
| 20 | Which isomer of $\text{C}_5\text{H}_{11}\text{OH}$ gives, on dehydration, the greatest number of different alkenes | |