

ECAT Chemistry Chapter 23 Aldehydes and Ketones

Sr	Questions	Answers Choice
1	Acetone reacts with HCN to form a cyanohydrin. It is an example of:	A. Nucleophilic substitution B. Nucleophilic addition C. Electrophilic addition D. Electrophilic substitution
2	Reductive ozonolysis of benzene produces	A. Acetone B. Maleic anhydride C. Phthalic acid D. Glyoxal
3	The color of ppts formed by Benedict's test is	A. Brick red B. Wine red C. Yellow D. Orange
4	The catalytic promoter used for the industrial preparation of acetaldehyde is	A. PdCl_2 B. CuCl_2 C. $\text{Pd} + \text{CaCl}_2$ D. None of these
5	Which of the following alcohols cannot be produced by treatment of aldehydes or ketones with NaBH_4 or LiAlH_4 ?	A. 1-propanol B. 2-propanol C. 2-Methyl-2-propanol D. Ethanol
6	Clemensen's reduction of ketones is carried out in	A. H_2 with Pd catalyst B. Glycol with KOH C. LiAlH_4 in water D. Zn-Hg with conc. HCl
7	Question Image	A. 2-chlorobutanal B. alfa-chlorobutanal C. 2-chlorobutyraldehyde D. alfa- chlorobutyraldehyde
8	Which of the following is halo form	A. CHBr_3 B. CHCl_3 C. CHI_3 D. All of these
9	A common industrial solvent is a mixture of propanone; CH_3COCH_3 , and pentyl ethanoate $\text{CH}_3\text{CO}_2(\text{CH}_2)_4\text{CH}_3$. Which reagent would have no effect on this solvent	A. Na(s) B. NaBH_4 C. NaOH(aq) D. 2,4-dinitrophenylhydrazine reagent
10	Reaction of Grignard's reagent with formaldehyde gives:	A. pri-alcohol B. sec-alcohol C. ter-alcohol D. carboxylic
11	Which of these reactions is shown by buranone, $\text{CH}_3\text{COCH}_2\text{CH}_3$	A. On warming with acidified potassium dichromate (IV) the solution turns green B. On heating with Fehling's reagent a red precipitate is formed C. With 2,4-dinitrophenylhydrazine reagent an orange precipitate is formed D. With hydrogen cyanide an aldehyde is formed
12	Which of the following is a method of converting a unsaturated ketone into unsaturated hydrocarbon?	A. Aldol condensation B. Reimer Tiemann reaction C. Cannizzaro's reaction D. Wolf-kishner reduction
13	Cannizzaro's reaction is not given by:	A. Formaldehyde B. Acetaldehyde C. Benzaldehyde D. Trimethyl
14	Hydroxyl amine is a derivative of::	A. Alcohol B. Aldehyde C. Ammonia D. Ketone
		A. CH_3CHO

15	An organic compound has the following properties ; It gives a positive tri-iodomethane 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	B. $\text{CH}_{\text{sub}3}\text{CH}_{\text{sub}2}\text{OH}$ C. CH ₃ CH ₂ COCH ₃ D. CH ₃ CH ₂ CH ₂ CH ₂ CHO
16	Aldol condensation is actually	A. Electrophilic addition of carbonation B. Electrophilic addition of carbonium ion C. Nucleophilic addition of carbonation D. Nucleophilic addition of carbonium ion
17	Acetone reacts with HCN to form a cyanohydrin. It is an example of	A. Electrophilic addition B. Electrophilic substitution C. Nucleophilic addition D. Nucleophilic substitution
18	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. $\text{C}_{\text{sub}2}\text{H}_{\text{sub}5}\text{Cl}$ and $\text{C}_{\text{sub}3}\text{H}_{\text{sub}7}\text{COOH}$ B. $\text{C}_{\text{sub}2}\text{H}_{\text{sub}5}\text{OH}$ and $\text{C}_{\text{sub}3}\text{H}_{\text{sub}7}\text{CONH}_{\text{sub}2}\text{COOH}$ C. $\text{C}_{\text{sub}2}\text{H}_{\text{sub}5}\text{OH}$ and $\text{C}_{\text{sub}3}\text{H}_{\text{sub}7}\text{COOH}$ D. $\text{C}_{\text{sub}3}\text{H}_{\text{sub}7}\text{OH}$ and $\text{C}_{\text{sub}2}\text{H}_{\text{sub}5}\text{COCl}$
19	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
20	Ketones are prepared by the oxidation of	A. Primary alcohol B. Secondary alcohol C. Tertiary alcohol D. None of these