ECAT Chemistry Chapter 23 Aldehydes and Ketones Online Test

Sr	Questions	Answers Choice
1	Question Image	A. 2-chlorobutanal B. alfa-chlorobutanal C. 2-chlorobutyraldehyde D. alfa- chlorobutyraldehyde
2	Chromic acid used to oxidize	A. Aldehyde B. Ketone C. Both a and b D. None of these
3	Distillation of calcium salts of acetic acid and formic acids gives acetaldehyde. What compound would be obtained if only calcium salt of acetic acid is distilled	A. Formaldehyde B. Butyraldehyde C. Propionaldehyde D. Acetone
4	Question Image	A. Treatment with HCN followed by acid hydrolysis B. Oxidation of acetaldehyde followed by basic hydrolysis C. Treatment with HCN followed by reduction D. Treatment with HCN followed by oxidation
5	In Tolten's best, the end product is _____ formed	A. White ppts B. Red ppts C. Yellow ppts D. Silver mirror
6	Aldehyde and small methyl ketones form crystalline _____ ppts with saturated sodium bisulphate solution	A. White B. Red C. Yellow D. None of these
7	The colour of ppts formed by Fehling's test is	A. Brick red B. Red C. Yellow D. Orange
8	Aldehydes can be distinguished from ketones by	A. 2,4-DNPH test B. NaHSO₃test C. N₂H₄test D. Tollen's test
9	Ketones are reduced to	A. Primary alcohol B. Secondary alcohol C. Tertiary alcohol D. All of these
10	Which is used for the reduction of aldehydes and ketones	A. NaBH₄ B. Pt/Pd C. Ni D. All of these
11	The carbon atom of a carbonyl group is	A. Sp hybridized B. Sp²hybridized C. Sp³hybridized D. None of these
12	Which of the following is halo form	A. CHBr₃ B. CHCl₃ C. CHI₃ D. All of these
13	Which of the following will have the highest boiling point	A. Methanol B. Ethanol C. Propanal D. 2-hexanone
14	Ketones are prepared by the oxidation of	A. Primary alcohol B. Secondary alcohol C. Tertiary alcohol D. None of these
15	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

16	The catalytic prmoter used for the industrial preparation of acetaldehyde is	A. PdCl₂ B. CuCl₂ C. Pd + CaCl₂ D. None of these
17	Which of the following compounds will react with Tollen's reagent	
18	The color of ppts formed by Benedirct's test is	A. Brick red B. Wine red C. Yellow D. Orange
19	Aldelydes are the oxidation product of	A. P-alcohols B. s-alcohols C. ter-alcohols D. carboxylic acids
20	Which one of the following reagents will distinguish between C_6H_5CHO and $C_6H_5COCH_3$	A. Aqueous bromine B. Phosphorus pentachloride C. 2, 4 DNPH D. Tollen's reagent
21	On adding sodium nitroprusside ketones give	A. Red B. Wine red C. White D. Orange
22	For which one of the following pairs of compounds can the members be distinguished by means of Tollen's test	A. HCHO and CH₃CHO B. CH₃CHO and CH₃COCH C. CH₃COCH₃and C₆H₅COCH₃ D. CH₃COOH and CH₃COOCH₃
23	Aldehydes which do not have α-hydrogen undergo	A. Aldol combination B. Cannizzaro's reaction C. Substitution D. Elimination
24	The product of the reaction between propanone and HCN is hydrolysed under acidic conditions. What is the formula of the final product	A. CH₃CH(OH)COOH B. CH₃CH₂CH(OH)COOH C. (CH₃)₂C(OH)COOH D. CH₃CH₂CH₂COOH
25	An organic compound has the following properties ; It gives a positive tri-iodomethane test; it gives a yellow ppt, with 2, 4-DNP regent; it does not react with Tollen's reagent . Which compound would give these results	A. CH₃CHO B. CH₃CH₂OH C. CH₃CH₂COCH₃ D. CH₃CH₂CH₂CHO
26	The color of ppts formed by Fehling's test is	A. Brick red B. Red C. Yellow D. Orange
27	Which one of the following is a product of the reaction between $C_6H_5CH_2OH$ and CH_3COCl	A. C₆H₅OCOCH₃ B. C₆H₅CH₂Cl C. C₆H₅CH₂OCOCH₃ D. C₆H₅CH₂COCl
28	A food chemist wants to create the odour of pineapples for a product. An ester with this odour has the formula $C_3H_7COOC_2H_5$.Which pair of reagents would produce this ester	A. C₂H₅Cl and C₃H₇COOH B. C₂H₅OH and C₃H₇CONH₂ C. C₂H₅OH and C₃H₇COOH D. C₃H₇OH and C₂H₅COCl
29	Formaldehyde is used to make	A. Plastics B. Medicine C. Antiseptic D. All of these
30	Formaline Contains _____% alcohol	A. 80 B. 37 C. 8 D. 52
31	Ketons are prepared by the oxidation of	A. Primary alcohol B. Secondary alcohol C. Tertiary alcohol D. None of these
32	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

		D. Nucleophilic substitution
33	The base used in Cannizzaro's reaction is	A. NaOH B. KOH C. CHl₃ D. All of these
34	Cannizzaro's reaction in not given by	A. Formaldehyde B. Acetaldehyde C. Benzaldyhyde D. Trimethylacetaldehyde
35	Silver mirror test is applied for	A. Aldehydes B. Alcohols C. Acids D. Esters
36	In aldol condensation reaction, a double bond is formed between _____ and _____ carbon atoms	A. αandβ B. αandα C. αand Y D. None of these
37	Aldehydes is distinguished from ketones by using	A. Tollen's reagent B. Benedict reagent C. Fehling solution D. All of the above
38	Aldol condensation is actually	A. Electrophilic addition of carbonation B. Electrophilic addition of carbonium ion C. Nucleophilic addition of carbonation D. Nuclephilic addition of carbonium ion
39	Which one of the following statement is wrong regarding differences between aldehydes and ketones	A. Aldehydes undergo reduction to form primary alcohols while ketones undergo reduction to form secondary alcohols B. Aldehydes undergo oxidation to form acids having less number of carbon atoms while ketones undergo oxidation to form acids having same number of carbon atoms C. Aldehydes give positive silver mirror test while ketones give negative - mirror test D. Aldehydes can undergo polymerization while ketones cannot undergo polymerizarion
40	During the mechanism of aldol condensation a/an _____ is formed	A. Oxide B. Alkali C. Alkoxide ion D. None of these
41	Which reagent will distinguish a ketone from an aldehyde	A. Br₂ B. 2, 4-dinitrophenylhydrazine C. NaBH₄ D. Tollen's reagent
42	Acetaldehyde is used to make	A. Rubbber B. Antiseptics C. Phenolic resin D. All of these
43	Which isomer of $C_5H_{11}OH$ gives, one dehydration, the greastest number of different alkenes	
44	Question Image	A. Br_{2(aq)} B. 2, 4-dinitrophenylhydrazine C. NaBH D. Tollen's reagent
45	Which reagent could be used to distinguish between $CH_3CH(OH)CH_2CHO$ and $CH_3COCH_2CH_2OH$	A. Acidified potassium dichromate B. Dilute sulphuric acid C. 2,4-dinitrophenylydrazine D. Fehling's reagent
46	Compounds X, Y and Z, all react with $PCl_5$to release hydrogen chloride, but only one of them reacts eith 2,4-dinitrophenylhydrazine reagent. Which one of the following combinations could be X, Y and Z	
47	In 1903 Arthur Lapeworth became the first chemist to investigate a reaction mechanism. The reaction he investigated was that of hydrogen cyanide with propanone. What do we now call the mechanism of this reaction	A. Electrophilic addition B. Electrophilic substitution C. Nucleophilic addition D. Nucleophilic substitution

48	What is formed when propanone is refluxed with an anhydrous solution of $NaBH_4$	A. Propanal B. Propan-1-ol C. Propan-2-ol D. Propane
49	Which alcohol may be oxidised to a product which react with 2,4-dinitorphenylhydrazine reagent but not with Fehling's reagent	A. Butan-1-ol B. Butan-2-ol C. 2-methylpropan-1-ol D. 2-methylpropan-2-ol
50	Question Image	
51	Aldehydes and ketones are carbonyl compounds. Which of them react both with $NaBH_4$and with Tollen's reagent	A. Both aldehydes and ketones B. Aldehydes only C. Ketones only D. Neither aldehydes nor ketones
52	Which compound on reaction with hydrogen cyanide produces a compound with a chiral centre	A. Ch₃CHO B. CH₃CH₂COCH₂CH₃ C. CH₃CO₂CH₃ D. HCHO
53	A compound R has all of the following properties. It is neutral; It gives an orange precipitate with 2,4-dinitrophenythydrazine; it evolves hydrogen chloride when treated with PCl_5in the cold What could R be	
54	Ethanal may be converted into a three-carbon acid in a two-step process. Which compound is the intermediate	A. CH₃CO₂H B. CH₃CN C. CH₃CH₂CN D. CH₃CH(OH)CN
55	Which compound would undergo nucleophilic addition	A. Ethene, C₂H₄ B. Bromoethane, C₂H₅Br C. Ethanal, CH₃CHO D. Ethane, C₂H₆
56	Question Image	A. Q and R Q and R B. R only Q and R C. Q and R R only D. Q only R only
57	Question Image	A. With H₂/Ni CH₃(CH₂)₅CH₂OH B. With H₂/Ni CH₃(CH₂)₅CH₃ C. With NaBH₄ CH₃(CH₂)₅CH₂OH D. With NaBH₄ CH₃(CH₂)₅CHO
58	Which of these reactions is shown by buranone, $CH_3COCH_2CH_3$	A. On warming with acidified potassium dichromative (IV) the solution turns green B. On heating with Fehling's reagent a red precipitate is formed C. With 2,4-dinitrophenlhydrazine reagent an orange precipitate is formed D. With hydrogen cyanide an aldehyde is formed
59	A common industrial solvent is a mixture of propanone; CH_3COCH_3, and pentyl ethanoate $CH_3CO_2(CH_2)_4CH_3$. Which reagent would have no effect on this solvent	A. Na_(s) B. NaBH₄ C. NaOH_(aq) D. 2,4-dinitrophenylhydrazine reagent
60	Isopropyl alcohol on oxidation forms	A. Acetone B. Ether C. Ethylene D. Acetaldehyde
61	Calcium acetate when dry distilled gives	A. Formaldehyde B. Acetaldehyde C. Acetone D. Acetic anhydride
62	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
63	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
64	Tollen's reagent is	A. Ammonical cuprous chloride B. Ammonical cuprous oxide C. Ammonical silver bromide D. Ammonical silver nitrate

		D. Ammonical silver nitrate
65	Propyne on hydrolysis in presence of $H_2SO_4$and $HgSO_4$gives	A. Acetaldehyde B. Acetone C. Formaldehyde D. None
66	Aldehydes are produce in atmosphere by	A. Oxidation of secondary alcohols B. Reduction of alkenes C. Reaction of oxygen atoms with hydrocarbons D. Reaction of oxygen atoms with ozone
67	On heating acetaldehyde with ammonical silver nitrate solution, we get	A. CH₃OH B. Silver acetate C. HCHO D. Silver mirror
68	Cannizzaro reaction is not given by	A. Trimethyl acetaldehyde B. Acetaldehyde C. Benzaldehyde D. Formaldehyde
69	At room temperature formaldehyde is	A. Gas B. Liquid C. Solid D. None of the above
70	Which of the following does not turn Schiff's reagent to pink?	A. Formaldehyde B. Bezaldehyde C. Aceton D. Methyl chloride
71	Aromatic aldehydes undergo disproportionation in presence of sodium or potassium hydroxide to give corresponding alcohol and acid. The reaction is known as	A. Wurtz reaction B. Cannizzaro reaction C. Friedel Craft reaction D. Claisen reaction
72	Aldehydes can be distinguished from ketones by using	A. Schiff's reagent B. Conc. H₂SO₄ C. Anhy. ZnCl₂ D. Resorcinol
73	Which of the following gives iodoform on heating with a solution of I_2containing Na_2CO_3?	A. Ethyl alcohol B. Acetone C. Ethyl alcohol as well as acetone D. Methyl alcohol
74	Wacker method involves the conversion of alkene using $PdCl_2$into corresponding	A. Alcohol B. Ketone C. Aldehyde D. Ether
75	Which of the following is hypnotic?	A. Acetaldehyde B. Metaldehyde C. Paraldehyde D. None
76	When vapours of isopropyl alcohol are passed over heated copper, the major product obtained is	A. Propane B. Propylene C. Acetaldehyde D. Acetone
77	A nucleophilic reagent will readily Attack	A. Ethylene B. Ethanal C. Ethanol D. Ethylamine
78	Which of the following does not react with phenyl hydrazine?	A. Ethanol B. Ethanal C. Acetone D. Acetophenone
79	Self condensation of acetaldehyde in the presence of dilute alkalies gives	A. An acetal B. An aldol C. Mesitylene D. Propionaldehyde
80	A compound A has a molecular formula C_2Cl_3OH. It reduces Fehling solution and on oxidation produces a monocarboxylic acid B.A can also be obtained by the action of Cl_2on Ethanol. A is	A. Chloral hydrate B. CHCl₃ C. CH₃Cl D. Chloroacetic acid
81	Acetone is prepared by	A. Oxidation of n-propyl alcohol B. Oxidation of acetaldehyde C. Pyrolysis of calcium acetate D. Pyrolysis of calcium acetate as well as acetic acid
82	Formalin is an aqueous solution of	A. Furfural B. Fluorescein

82	Formalin is an aqueous solution of	C. Formaldehyde D. Formic acid
83	A compound possessingα-hydrogen atom, in the presence of dilute alkali formsβ-hydroxy aldehyde. This product on heating with dilute acid forms an unsaturated crotonaldehyde. The compound is	A. CH₃CHO B. CH₃CH₂CHO C. CH₂= CH - CHO D. HC = C - CHO
84	Reduction of aldehydes with HI and P gives	A. Primary alcohols B. Secondary alcohols C. Alkanes D. Tertiary alcohols
85	Which reaction yields Bakelite?	A. Urea with HCHO B. Tetramethyl glycol with Hezamethylene diisocyanate C. Phenol and HCHO D. Ethylene glycol and Dimethylterephthalate
86	Cyanohydrin of which of the following forms lactic acid	A. HCHO B. CH₃COCH₃ C. CH₃CHO D. CH₃CH₂CH₂CHO
87	Which of the following compounds does not react with $NaHSO_3$?	A. C₆H₅CHO B. Acetophenone C. Acetone D. Acetaldehyde
88	Acetal is produced by reacting alcohol in the presence of dry HCl with	A. Acetaldehyde B. Ketone C. Ether D. Carboxylic acid
89	Which of the following compounds gives a ketone with Grignard's reagent?	A. Formaldehyde B. Ethanenitrile C. Ethyl alcohol D. Methyl iodide
90	Acetone is oxidized with	A. Tollen's reagent B. Fehling solution C. Acidic dichromate solution D. Benedicts solution
91	Reduction with aluminium isopropoxide in excess of Isopropyl alcohol is called Meerwein Ponndroff-Verley reduction (MPV). What will be the final product when cyclohex-2-enone is selectively reduces in MPV reaction?	A. Cyclohexanol B. Cyclohex-2-enol C. Cyclohexanone D. Benzene
92	Reductive ozonolysis of benzene produces	A. Acetone B. Maleic anhydride C. Phthalic acid D. Glyoxal
93	Wolf-kishner reduction is used for the reduction of	A. Nitro compounds B. Carboxylic acids C. Carbonyl compounds D. Olefins
94	Which of the following is a method of converting a unsaturated ketone into unsaturated hydrocarbon?	A. Aldol condensation B. Reimer Tiemann reaction C. Cannizaaor's reaction D. Wolf-kishner reduction
95	Give IUPAC name fo Acetone	A. Ethanal B. Propanone C. Butanone D. Propanal
96	In which reaction, aromatic aldehyde is treated with acid anhydride in the presence of corresponding salt of the acid to give unsaturated aromatic acid?	A. Friedel-Crafts reaction B. Perkin's reaction C. Wurtz reaction D. None of these
97	C_2H_5CHO and $(CH_3)_2CO$ can be distunguished by testing with	A. Phenyl hydrazine B. Hydroxylamine C. Fehling solution D. Sodium bisulphate
98	In formadaldehyde and KOH are heated then we get	A. Acetylene B. Methane C. Methyl alcohol D. Ethyl formate
99	Clemensen's reduction of ketones is carried out in	A. H₂with Pd catalyst B. Glycol with KOH C. LiAlH₄in water D. Zn-Hg with conc. HCl
		A. Methanol

100	Which of the following organic compounds exhibits positive Fehling test as well as iodoform test?	A. Methanal B. Ethanol C. Propanone D. Ethanal
101	Chromyl chloride and toluene react to produce	A. p-chlorotoluene B. Benzaldehyde C. Benzyl chloride D. Bezoic acid
102	The addition of HCN to carbonyl compounds is an example of	A. Nucleopihlic substituion B. Electrophilic addition C. Nueleophilic addition D. Electrophilic substitution
103	From which of the following tertiary butyl alcohol is obtained by the action of methyl magnesium iodide?	A. HCHO B. CH₃CHO C. CH₃COCH₃ D. CO₂
104	Benzophenone can be converted into benzene using	A. Fused alkali B. Anhydrous AlCl₃ C. Sodium amalgam in water D. Acidfied dichromate
105	Which of the following in incorrect?	A. FeICl₃is used in the detection of phenols B. Fehling solution is used in the detection of glucose C. Tollen's reagent is used in detection of unsaturation D. NaHSO₃is used in the detection of carbonyl compounds
106	Which of the following react with NaOH to produce an acid and an alcohol?	A. NCHO B. CH₃COOH C. CH₃CH₂COOH D. C₆H₅COOH
107	Which of the following reagents is used to distinguish acetone and acetophenone	A. NaHSO₃ B. Grinard reagent C. Na₂SO₄ D. NH₄Cl
108	An organic compound 'A' has the molecular formula C_3H_6O, it undergoes iodoform test. When saturated with HCl it gives 'B' of molecular formula $C_9H_{14}O$. A and B, respectively are	A. Propanal and mesitylene B. Propanone and mesityl oxide C. Propanone and 2, 6-dimethyl-2,5-heptadien-4-one D. Propanone and mesitylene oxide
109	Which is not true about acetophenone?	A. Reacts to form 2,4-dintrophenyl hydrazine B. Reacts with Tollen's reagent to form silver mirror C. Reacts with I₂/NaOH to form iodoform D. On oxidation with alkaline KMnO₄followed by hydrolysis gives benzoic acid
110	The IUPAC name fo $CH_3COCH(CH_3)_2$is	A. 4-Methylisopropyl ketone B. 3-Methyl-2 butanone C. Isopropylmethyl ketone D. 2 - Methyl- 2 butanone
111	Aniline reacts with which of these to form Schiff base?	A. Acetic acid B. Bezaldehyde C. Acetone D. NH₃
112	Hydrogenation of bezoyl chloride in presence of Pd on $BaSO_4$gives	A. Benzyl alcohol B. Benzaldehyde C. Benzoic acid D. Phenol
113	The carbon of a carbonyl group is:	A. sp hybridized B. sp²hybridized C. sp³Hybidized D. None of these
114	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
115	Which of the following will have the highest boiling point?	A. Methanal B. Ethanal C. Propanal D. 2-Hexanone
116	Ketones are prepared by the oxidation of:	A. Primary alcohol B. Secondary alcohol C. Tertiary alcohol D. None of these
117	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

		D. Electrophilic substitution
118	Which of the following compounds will not give iodoform test on treatment with I_2/ NaOH?	A. Acetaldehyde B. Acetone C. Butane D. 3-pentanone
119	Which of the following compounds will react with reagent ?	A. CH₃ CO H B. CH₃ CO CH₃ C. CH_{3 COOH} D. CH₃CO CH₂CH₃
120	Cannizzzaro's reaction is not given by:	A. Formaldehyde B. Acetaldehyde C. Benzaldehyde D. Trimethyl
121	Which of the following reagent will react with both aldehyde and ketones?	A. Grinard's reagent B. Tollen's reagent C. Fehling's reagent D. Benedict's reagent
122	Aldehydes are oxidizes are to give:	A. Primary alcohol B. Sec-alcohol C. Ter-alcohol D. Carboxylic acid
123	Carboxyl compounds have functional group:	A. R-C-X B. R-CH=O C. RCOR D. All
124	The homologous series of aldehydes and ketones have general formula:	A. C_nH_{2n}O B. C_nH_nO C. C_nH_{2n-1}O D. C_nH_nO_n
125	Formula of acetone is:	A. HCHO B. CH₃CHO C. CH₃OCH₃ D. CH₃OC₂H₅
126	Reaction of Grignard's reagent with formaldehyde gives:	A. pri-alcohol B. sec-alcohol C. ter-alcohol D. carboxylic
127	Reaction of Grignard's reagent eith aldehyds other formaldehyde gives: Reaction of Grignard's reagent with formaldehyde gives:	A. Pri-alcohol B. Sec-alcohol C. Ter-alcohol D. Carboxylic
128	Reaction of Grignard's reagent with ketones gives: Reaction of Grignard's reagent with formaldehyde gives:	A. Pri-alcohol B. Sec-Alcohol C. Ter-alcohol D. Carboxylic
129	Iodoform test is given by:	A. Formaldehyde and Higher ketones B. Formaldehyde C. Acetaldehyde and methyl ketones D. Acetaldehyde
130	Aledehydes ketones can be prepared form alcohols by their:	A. Reduction B. Oxidation C. Decomposition D. Synthesis
131	Common names of aldehydes are given by corresponding:	A. Ketone B. Alcohol C. Carboxylic acid D. ester
132	Cannizzaro's reaction is type of reaction:	A. Self oxidation-reduction reaction B. Disproportion reaction C. Addition D. A and B
133	Which reaction is of condensation or addition elimination reaction?	A. Ketol B. Aldol C. Cannizzaro D. All of these
134	Hydroxyl amine is a derivative of::	A. Alcohol B. Aldehyde C. Ammonia D. Ketone
135	Aldehydes are reduced to :	A. Pri-alcohol B. Sec-alcohol C. Ter-alcohol

		C. Tert-alcohol D. All of these
136	Which is mild oxidizing agent ?	A. Tollen's reagent B. KMnO₄ / H₂SO₄ C. K₂Cr₂O₇ / H₂SO₄ D. HNO₃
137	Condensation of aldeydes withα-hydrogen gives:	A. Acetal B. Ketal C. Aldol D. Cannizzaro product
138	Aldehydes give reactions :	A. Oxidation and reduction B. Base-catalysed nucleophilic C. Acid catalysed nucleophilic D. All of these
139	Dehydration of allcohol gives:	A. Alkane B. Alkene C. Aldehyde D. ketone
140	In carboxyl group the bond between C and oxygen is:	A. Sigma bond B. Single bond C. Double Bond D. Triple bond