

MDCAT Chemistry Chapter 15 Alkyl Halides Online Test

Sr	Questions	Answers Choice
1	Which of the following undergoes easy dehydration?	A. 3-Methylbutan-2-ol B. Ethanol C. 2-Methylpropan-2-ol D. Methanol
2	2,4,6-Trinitrophenol is commonly called as	A. Phthalic acid B. Tartaric acid C. Malonic acid D. Picric acid
3	Tertiary alcohols produce with acidified KMnO_4 ,	A. Ketones B. Aldehydes C. Malonic acid D. Alkene
4	Ethyl alcohol reacts with PCl_5 and produces:	A. Haloalkane B. Alkyl halide & H_3PO_3 , C. Alkyl halide & POCl_3 D. Alkyl halides & H_3PO_4 .
5	A compound 'z' decolorizes bromine water and produces white ppt. The compound 'z' is	A. Alkane B. Alcohol C. Phenol D. Benzene
6	Which alcohol is most reactive towards sodium metal?	A. Ter Butyl alcohol B. n-Propyl alcohol C. Isopropyl alcohol D. Have same reactivity
7	Which is most acidic?	A. H_2O B. $\text{C}_2\text{H}_5\text{OH}$ C. $\text{C}_4\text{H}_9\text{OH}$ D. $\text{CH}_3\text{-CH}_2\text{-CH}_2\text{OH}$
8	Alcohols of low molecular weight are:	A. Soluble in water B. Insoluble in water C. Soluble in water on heating D. Insoluble in all solvents
9	Which of the following is more reactive where O-H bonds break	A. P° alcohol B. T° alcohol C. S° alcohol D. Cannot be predicted
10	Ethanol reacts with sodium metal to liberate	A. CO_2 gas B. CO gas C. H_2 gas D. Steam
11	The starting substance for the preparation of iodoform is any of the following, except	A. $\text{CH}_3\text{CH}(\text{OH})\text{CH}_3$ B. $\text{CH}_3\text{CH}_2\text{OH}$ C. CH_3CHO D. CH_3COCH_3
12	Which of the following alcohols is least reactive with respect to O-H bond	A. CH_3OH B. $\text{CH}_3\text{CH}_2\text{OH}$ C. $(\text{CH}_3)_2\text{CH-OH}$ D. $(\text{CH}_3)_3\text{COH}$
13	Which of the substance is not going to react the sodium metal:	A. Acetic acid B. Methanol C. Di methyl ether D. Ethanol
14	Phenol can be distinguished from ethyl alcohol by all of the following reagents except	A. Iodoform test B. Na C. $\text{Br}_2 / \text{H}_2\text{O}$ D. NaOH
15	Phenol is colourless, crystalline and solid	A. Hygroscopic B. Deliquescent C. Moistening D. Odourless

16	Phenol is completely soluble in water above	A. 25°C B. 62.3°C C. 68.5°C D. 66.50°C
17	Which of the following alcohol is more soluble in H ₂ O	A. Propanol B. Butanol C. Pentanol D. Hexanol
18	Temperature required for the dehydration of ethanol into ethene in the presence of H ₂ SO ₄ is	A. 130°C B. 170°C C. 175°C D. 180°C
19	Which one of the following is more acidic	A. Phenol B. Carboxylic acid C. Alcohols D. Amines
20	Which of the following is soluble in water?	A. CH ₃ OH B. CCl ₄ C. CHCl ₃ D. CS ₂
21	In ethyl alcohol, the bond that undergoes heterolytic cleavage most readily is	A. C-C B. C-O C. C-H D. O-H
22	Relative acidic strength of alcohol, phenol, water and carboxylic acid is	A. Carboxylic acid > Alcohol > Phenol > Water B. Carboxylic acid > Phenol > Water > Alcohol C. Water > Alcohol > Phenol > Carboxylic acid D. Phenol > Carboxylic acid > Alcohol > Water
23	The dehydration of ethyl alcohol with concentrated H ₂ SO ₄ at 140°C gives	A. Ethene B. Alcohol C. Diethyl ether D. Carboxylic acid
24	Primary, secondary and tertiary alcohols can be identified and distinguished by	A. Lucas test B. Iodoform test C. Baeyer's test D. Silver mirror test
25	Which one of the following alcohol is indicated by formation of yellow crystals in Iodoform test?	A. Methanol B. Ethanol C. Butanol D. Propanol
26	Which one of the following groups is indicated when HCl is formed by reaction of ethanol with phosphorous pentachloride?	A. Amino group B. Halide group C. Hydroxyl group D. Hydride group
27	Which one of the following is an appropriate indication of positive iodoform test?	A. Formation of H ₂ O B. Brick red precipitate C. Release of H ₂ gas D. Yellow precipitate
28	Reaction of alcohol with hydrogen chloride, in the presence of Zinc chloride yields	A. Ketone B. Carboxylic C. Alkyl halide D. Ester
29	The acidity of phenol is due to its	A. Nature of Benzene B. Double bond in benzene ring C. Nature of phenoxide ion D. Hydroxyl group
30	During esterification, the alcohol molecule acts as:	A. Oxidizing agent B. Electrophile C. Reducing agent D. Nucleophile
31	One of the following can produce greater number of moles of ethyl chloride on reacting with excess of ethanol	A. PCl ₅ B. PCl ₃ C. HCl/ZnCl ₂ D. SOCl ₂
32	The strongest conjugate base is	A. OH ⁻ B. CH ₃ O ⁻ C. C ₆ H ₅ O ⁻ D. CH ₃ COO ⁻

33	The number of resonating structures of phenoxide ion are	A. 3 B. 5 C. 6 D. 4
34	The synthesis of ethene from ethyl alcohol is a reaction	A. Dehydration B. Polymerization C. Addition D. Substitution
35	$\text{CH}_3\text{CH}_2\text{CH}_2\text{OH}$ -----A-----B Here B is	A. Propyne B. Propanal C. Propene D. Propane
36	1, 3, 5-Pentanetriol has secondary carbon	A. 3 B. 1 C. 2 D. Zero
37	Tertiary alcohols have alpha hydrogens	A. 1 B. Zero C. 2 D. 3
38	The alcohol that does not form carbonyl compound on oxidation	A. Ethanol B. iso-butyl alcohol C. ter-butyl alcohol D. neo pentyl alcohol
39	Esterification of CH_3COOH is reaction	A. Acid base B. Electrophilic C. Redox D. Nucleophilic
40	The compound that reacts the slowest in Lucas test	A. 1-Pentanol B. sec-butyl alcohol C. 3-Pentanol D. ter- butyl alcoho
41	Which reactant does not liberate water on reaction with alcohol	A. NH_3 B. $\text{K}_2\text{Cr}_2\text{O}_7/\text{H}_2\text{SO}_4$ C. HCl D. PCl_3
42	What is true about an alcohol and phenol	A. Both are more acidic than water B. Both react with NaOH C. Both produce CO_2 with Na_2CO_3 D. Both, produce H_2 with Na
43	An electron withdrawing group attached to ortho-position in phenol	A. makes it basic B. Stabilises the phenoxide ion C. decreases its basicity D. allows it to precipitate in aqueous solution
44	Formation of Picric acid from phenol needs heating, one possible reason for it is	A. acidity of phenol B. electron donating nature of -OH C. acidity of picric acid D. electron withdrawing effect of -NO₂
45	Alcohol is less acidic than phenol due to	A. higher K_a value B. Instability of alkoxide ion C. stability of carbocation D. Stability of phenol
46	Which will not react with phenol	A. NaOH B. Br_2 C. $\text{KMnO}_4/\text{OH}^-$ D. Na
47	What forces operate between ethyl group of ethyl alcohol and oxygen of water	A. H-bonding B. attractive forces C. repulsive forces D. dipole forces
48	Which of the following will undergo nucleophilic addition reaction more easily?	A. Aldehyde B. Alkene C. Aldehyde and ketone equally D. Neither aldehyde nor alkenes
49	Formalin contains-----% alcohol.	A. 37 B. 80 C. 8 D. 52

A. Tartaric acid

50	Acetaldehyde cyanohydrin upon hydrolysis produces	B. Malonic acid C. Formic acid D. Lactic acid
51	Acetone reacts with HCN to form a cyanohydrin. It is an example of	A. Nucleophilic addition B. Electrophilic substitution C. Electrophilic addition D. Nucleophilic substitution
52	Which one of the followings is resistant to oxidation under normal conditions	A. Methyl alcohol B. Acetaldehyde C. Ethyl alcohol D. Acetone
53	Formalin is used as:	A. Fungicide B. Germicide C. Sterilizing of surgical instruments D. All three
54	C=O and C=C bonds are differentiated by	A. Hybridization of C-atom B. Bond angles C. Ammonical AgNO ₃ D. conc.="" hno<sub="" style="font-size: 11.0pt; line-height: 115%; font-family: 'Calibri'","sans-serif"; mso-fareast-font-family: SimSun; mso-bidi-font-family: 'Times New Roman'"; mso-ansi-language: EN-US; mso-fareast-language: ZH-CN; mso-bidi-language: AR-SA">3
55	Reactivity of carbonyl compounds is due to	A. Electrophilic carbon B. Less steric hindrance C. Unsaturation of C=O D. Polarity of bond
56	Which of the following is not a symmetrical ketone	A. 4-heptanone B. Butanone C. Propanone D. 3-pentanone
57	The red brown ppt. of Fehling solution and Benedict solution tests are of	A. Ag B. Cu ₂ O C. CuO D. AgBr
58	Which of the following tests is not given by aldehyde	A. 2, 4-DNP test B. NaHSO ₃ test C. Tollen's test D. Sodium nitroprusside test
59	Which of the following compounds is least reactive	A. HCHO B. CH ₃ CHO C. CH ₃ COCH ₃ D. C ₆ H ₅ CHO
60	Which of the following does not give yellow precipitate with I ₂ + NaOH	A. Acetone B. Benzaldehyde C. Acetaldehyde D. Acetophenone
61	Which of the following does not give brick red precipitate with Fehling's solution	A. Acetaldehyde B. Formalin C. Propionaldehyde D. Acetone
62	Which of the following gives silver mirror with ammoniacal AgNO ₃	A. Benzyl alcohol B. Benzene C. Benzoic acid D. Benzaldehyde
63	In which of the following types of reactions are the carbonyl compounds and alkenes similar in behaviour	A. Nucleophilic addition B. Electrophilic addition C. Nucleophilic substitution D. Catalytic hydrogenation
64	Which of the following ketones will not give iodoform test	A. Methyl isopropyl ketone B. Dimethyl ketone C. Ethyl isopropyl ketone D. 2-hexanone
65	Which of the following alcohols cannot be produced by treatment of aldehydes or ketones with NaBH ₄	A. 1-propanol B. 2-Methyl-2-propanol C. 2-propanol D. Ethanol

A. HCN

66	Which of the following reagents react in same manner with HCHO, CH ₃ CHO and CH ₃ COCH ₃	B. Cu ₂ (OH) ₂ / NaOH C. Ammonical AgNO ₃ D. Cu(OH) ₂ only
67	Propanone does not undergo	A. Oxime formation B. Reduction of Fehling solution C. Hydrazone formation with hydrazine D. Reaction with HCN
68	The reaction of formaldehyde with HCN is	A. Nucleophilic substitution B. Electrophilic substitution C. Nucleophilic addition D. Free radical addition
69	The addition compound obtained by reacting acetaldehyde and HCN, when hydrolyzed gives	A. Ethyl alcohol B. Methyl cyanide C. 2-Hydroxy propanoic acid D. Ethyl cyanide
70	The reagent used to distinguish between ethanol and propanal is	A. I ₂ / NaOH B. Benedict's reagent C. LiAlH D. sodium nitroprusside
71	Which of the following gives positive haloform test and positive Fehling solution	A. Acetone B. Ethanol C. Acetaldehyde D. Formaldehyde
72	When calcium formate and calcium acetate are dry heated they form	A. HCOOH B. C ₂ H ₅ OH C. CH ₃ CHO D. HCHO
73	In aldehydes and ketones carbon of carbonyl group is;	A. sp ³ hybridized B. sp ² hybridized C. sp hybridized D. un hybridized
74	Acetaldehyde and ketone form addition product with	A. Phenyl hydrazine B. Hydroxylamine C. Hydrazine D. hydrogen cyanide
75	Consider the following reaction R-CHO + 2Ag(NH ₃) ₂ OH + R-COONH ₄ + 2Ag + 2NH ₃ + H ₂ O This reaction represents	A. Fehling test B. Ninhydrin test C. Benedict test D. Tollen's test
76	A student mixed ethyl alcohol with small amount of sodium dichromate and added it to the hot solution of dilute sulphuric acid. A vigorous reaction took place. He distilled the product formed immediately. What was the product?	A. Acetone B. Dimethyl ether C. Acetic acid D. Acetaldehyde
77	.Both aldehydes and ketones are planar to the neighborhoods of carbonyl (C=O) group. Which one of the following bonds is distorted towards the oxygen atoms?	A. pi-bond of C and O B. Sigma bond of C and O C. Sigma bond of C and H D. Sigma bond of C and C
78	Which reagent is responsible for the conversion of ketone to secondary alcohol	A. NaAlH B. NaBH ₄ C. Al D. Red P
79	To distinguish aldehyde from ketone which solution is used	A. Alkaline solution B. Fehling's solution C. A solution containing K ₂ Cr ₂ O ₇ D. A solution containing acid only
80	Identify the compound, which give iodoform test	A. Methanol B. 3- Hexanol C. Methyl ketone D. Propionaldehyde
81	2-propanol on oxidation yield	A. Propionaldehyde B. Propanone C. Propanal D. Butanal
82	Oxidation of secondary alcohol produces	A. Aldehyde B. Ketone C. Alkyl halide D. Ester
83	When wine is put in air, it becomes sour due to	A. Oxidation of C ₂ H ₅ OH B. Formation of C ₂ H ₅ NH ₂ C. Reduction of C ₂ H ₅ OH D. Dissolution of CO ₂

84	The conversion of tertiary alcohols into alkenes in the presence of $K_2Cr_2O_7 + H_2SO_4$ is	A. Addition reaction B. C-H bond cleavage C. Elimination reaction D. Combustion reaction
85	The oxidation of 1 - propanol in the presence of H_2SO_4 , $+K_2Cr_2O_7$ produces final product	A. Acetaldehyde B. Propanal C. Acetone D. Propanoic acid
86	An alcohol is converted to an aldehyde with same number of carbon atoms as that of alcohol in the presence of $K_2Cr_2O_7/H_2SO_4$ the alcohol is	A. $CH_3C(CH_3)_2OH$ B. $(CH_3)_3COH$ C. $CH_3CH_2CH_2OH$ D. $(CH_3)_2CHOH$
87	2-propanol on Oxidation gives	A. Aldehyde B. Carboxylic Acid C. Ketone D. Alcohol