

MDCAT Chemistry Chapter 15 Alkyl Halides Online Test

Sr	Questions	Answers Choice
1	The reaction of formaldehyde with HCN is	A. Nucleophilic substitution B. Electrophilic substitution C. Nucleophilic addition D. Free radical addition
2	Which of the following compound is least reactive	A. HCHO B. CH ₃ CHO C. CH ₃ COCH ₃ D. C ₆ H ₅ CHO
3	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
4	The alcohol that does not form carbonyl compound on oxidation	A. iso-butyl alcohol B. neo pentyl alcohol C. Ethanol D. ter-butyl alcohol
5	The red brown ppt. of Fehling solution and benedict solution tests are of	A. Ag B. Cu ₂ O C. CuO D. AgBr
6	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
7	Tertiary alcohols have alpha hydrogens	A. 1 B. Zero C. 2 D. 3
8	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
9	Which of the following gives positive haloform test and positive Fehling solution	A. Acetone B. Ethanol C. Acetaldehyde D. Formaldehyde
10	In aldehydes and ketones carbon of carbonyl group is;	A. sp ³ hybridized B. sp ² hybridized C. sp hybridized D. un hybridized
11	Acetaldehyde and ketone form addition product with	A. Phenyl hydrazine B. Hydroxylamine C. Hydrazine D. hydrogen cyanide
12	Which of the following alcohol is more soluble in H ₂ O	A. Propanol B. Butanol C. Pentanol D. Hexanol
13	Which one of the followings is resistant to oxidation under normal conditions	A. Methyl alcohol B. Acetaldehyde C. Ethyl alcohol D. Acetone
14	An electron withdrawing group attached to o-position in phenol	A. makes it basic B. Stabilises the phenoxide ion C. decreases its basicity D. allows it to precipitate in aqueous solution

15	Which of the following gives silver mirror with ammonia & AgNO ₃	A. Benzyl alcohol B. Benzene C. Benzoic acid D. Benzaldehyde
16	Which will not react with phenol	A. NaOH B. Br ₂ C. KMnO ₄ /OH ⁻ D. Na
17	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
18	The conversion of tertiary alcohols into alkenes in the presence of K ₂ Cr ₂ O ₇ + H ₂ SO ₄ is	A. Addition reaction B. C-H bond cleavage C. Elimination reaction D. Combustion reaction
19	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
20	Which reagent is responsible for the conversion of ketone to secondary alcohol	A. NaAlH ₄ B. NaBH ₄ C. Al D. Red P
21	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
22	Reactivity of carbonyl compounds is due to	A. Electrophilic carbon B. Less steric hindrance C. Unsaturation of C=O D. Polarity of bond
23	Reaction of alcohol with hydrogen chloride, in the presence of Zinc chloride yields	A. Ketone B. Carboxylic C. Alkyl halide D. Ester
24	Formalin is used as:	A. Fungicide B. Germicide C. Sterilizing of surgical instruments D. All three
25	Tertiary alcohols are oxidized with acidified KMnO ₄ to	A. Ketones B. Aldehydes C. Malonic acid D. Alkene
26	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
27	Which of the following test is not given by aldehyde	A. 2, 4-DNP test B. NaHSO ₃ test C. Tollen's test D. Sodium nitroprusside test
28	Which of the following ketone will not give iodoform test	A. Methyl isopropyl ketone B. Dimethyl ketone C. Ethyl isopropyl ketone D. 2-hexanone
29	Formalin contains _____% alcohol.	A. 37 B. 80 C. 8 D. 52
30	A compound 'x' decolorizes bromine water and produces white ppt. The compound 'x' is	A. Alkane B. Alcohol C. Phenol D. Benzene
31	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
32	Esterification of CH ₃ COOH is a reaction	A. Acid base B. Electrophilic C. Redox

		C. Nucleophilic D. Nucleophilic
33	Which of the following does not give brick red precipitate with Fehling's solution	A. Acetaldehyde B. Formalin C. propionaldehyde D. Acetone
34	Phenol can be distinguished from ethyl alcohol by all of the following reagents except	A. Iodoform test B. Na C. Br ₂ /H ₂ O D. NaOH
35	2-propanol on oxidation yields	A. Propionaldehyde B. Propanone C. Propanal D. Butanal
36	Consider the following reaction $R-CHO + 2Ag(NH_3)_2OH + R-COONH_4 + 2Ag + 2NH_3 + H_2O$ This reaction represents	A. Fehling test B. Ninhydrin test C. Benedict test D. Tollen's test
37	Formation of Picric acid from phenol needs heating, one possible reason for it is	A. acidity of phenol B. e- donating nature of -OH C. acidity of picric acid D. e- withdrawing effect of -NO ₂
38	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
39	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
40	Which of the following undergoes easy dehydration?	A. 3-Methylbutan-2-ol B. Ethanol C. 2-Methylpropan-2-ol D. Methanol
41	2-propanol on oxidation gives	A. Aldehyde B. Carboxylic Acid C. Ketone D. Alcohol
42	2,4,6-Trinitrophenol is commonly called as	A. Phthalic acid B. Tartaric acid C. Malonic acid D. Picric acid
43	Which is most acidic?	A. H ₂ O B. C ₂ H ₅ OH C. C ₄ H ₉ OH D. CH ₃ -CH ₂ -CH ₂ OH
44	Which of the following alcohols is least reactive with respect to O-H bond	A. CH ₃ OH B. CH ₃ -CH ₂ -OH C. (CH ₃) ₂ -CH-OH D. (CH ₃) ₃ COH
45	During esterification, the alcohol molecule acts as:	A. Oxidizing agent B. Electrophile C. Reducing agent D. Nucleophile
46	1, 3, 5-Pentanetriol has secondary carbon	A. 3 B. 1 C. 2 D. Zero
47	Identify the compound, which gives iodoform test	A. Methanol B. 3-Hexanol C. Methyl ketone D. Propionaldehyde
48	Phenol is completely soluble in water above	A. 25°C B. 62.3°C C. 68.5°C D. 66.50°C
49	Acetaldehyde cyanohydrin upon hydrolysis produces	A. Tartaric acid B. Malonic acid C. Formic acid D. Lactic acid
		A. Methanol

50	Which one of the following alcohol is indicated by formation of yellow crystals in Iodoform test?	B. Ethanol C. Butanol D. Propanol
51	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 ₂ CO ₃ D. Both, produce H ₂ with Na
52	Which of the following is soluble in water?	A. CH ₃ OH B. CCl ₄ C. CHCl ₃ D. CS ₂
53	An alcohol is converted to an aldehyde with same number of carbon atoms as that of alcohol in the presence of K ₂ Cr ₂ O ₇ /H ₂ SO ₄ the alcohol is	A. CH ₃ C(CH ₃) ₂ OH B. (CH ₃) ₃ COH C. $\text{CH}_3\text{CH}_2\text{CH}_2\text{OH}$ D. (CH ₃) ₂ CHOH
54	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
55	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
56	Which one of the following is more acidic	A. Phenol B. Carboxylic acid C. Alcohols D. Amines
57	In which of the following types of reactions are the carbonyl compounds and alkene are similar in behaviour	A. Nucleophilic addition B. Electrophilic addition C. Nucleophilic substitution D. Catalytic hydrogenation
58	CH ₃ CH ₂ CH ₂ OH-----A-----B Here B is	A. Propyne B. Propanal C. Propene D. Propane
59	Propanone does not undergo	A. Oxime formation B. Reduction of Fehling solution C. Hydrazone formation with hydrazine D. Reaction with HCN
60	C=O and C=C bonds are differentiated by	A. Hybridization of C-atom B. Bond angles C. Ammonical AgNO ₃ D. Conc. HNO_3
61	In ethyl alcohol, the bond that undergoes heterolytic cleavage most readily is	A. C-C B. C-O C. C-H D. O-H
62	Which of the following is more reactive where O-H bonds break	A. 1° alcohol B. 2° alcohol C. 3° alcohol D. Cannot be predicted
63	The reagent used to distinguish between ethanol and propanal is	A. I ₂ / NaOH B. Benedict's reagent C. LiAlH ₄ D. sodium nitroprusside
64	Which reactant does not liberate water on reaction with alcohol	A. NH ₃ B. K ₂ Cr ₂ O ₇ /H ₂ O C. HCl D. PCl ₃
65	Which of the following is not a symmetrical ketone	A. 4-heptanone B. Butanone C. Propanone D. 3-pentanone

66	Which alcohol is most reactive towards sodium metal?	A. Ter Butyl alcohol B. n-Propyl alcohol C. Isopropyl alcohol D. Have same reactivity
67	The oxidation of 1 - propanol in the presence of H ₂ SO ₄ , +K ₂ Cr ₂ O ₇ produces final product	A. Acetaldehyde B. Propanal C. Acetone D. Propanoic acid
68	Oxidation of secondary alcohol produces	A. Aldehyde B. Ketone C. Alkyl halide D. Ester
69	Ethanol reacts with sodium metal to liberate	A. CO ₂ gas B. CO gas C. H ₂ gas D. Steam
70	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
71	The synthesis of ethene from ethyl alcohol is a reaction	A. Dehydration B. Polymerization C. Addition D. Substitution
72	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
73	Which of the substance is not going to react the sodium metal:	A. Acetic acid B. Methanol C. Di methyl ether D. Ethanol
74	Ethyl alcohol reacts with PCl and produces:	A. Haloalkane B. Alkyl halide & H ₃ PO ₃ , C. Alkyl halide & POCl ₃ D. Alkyl halides & H ₃ PO ₄ .
75	Which of the following reagents react in same manner with HCHO, CH ₃ CHO and CH ₃ COCH ₃	A. HCN B. Cu ₂ (OH) ₂ / NaOH C. Ammonical AgNO ₃ D. Cu(OH) ₂ only
76	The compound that reacts the slowest in Lucas test	A. 1-Pentanol B. sec-butyl alcohol C. 3-Pentanol D. ter- butyl alcohol
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 of the following does not give yellow precipitate with I ₂ + NaOH	A. Acetone B. Benzaldehyde C. Acetaldehyde D. Acetophenone
79	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
80	The strongest conjugate base is	A. OH- B. CH ₃ O- C. C ₆ H ₅ O- D. CH ₃ COO-
81	The number of resonating structures of phenoxide ion are	A. 3 B. 5 C. 6 D. 4
82	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
83	Phenol is colourless, crystalline and solid	A. Hygroscopic B. Deliquescent C. Moistening D. Odourless

84	The starting substance for the preparation of iodoform is any of the following, except	<div>A. $\text{CH}_3\text{CH}(\text{OH})\text{CH}_3$</div> <div>B. $\text{CH}_3\text{CH}_2\text{OH}$</div> <div>C. HCH_2OH</div> <div>D. CH_3COCH_3</div>
85	Which of the following alcohol cannot be produced by treatment of aldehydes or ketones with NaBH_4	<div>A. I-propanol</div> <div>B. 2-Methyl-2-propanol</div> <div>C. 2-propanol</div> <div>D. Ethanol</div>
86	Alcohols of low molecular weight are:	<div>A. Soluble in water</div> <div>B. Insoluble in water</div> <div>C. Soluble in water on heating</div> <div>D. Insoluble in all solvents</div>
87	The dehydration of ethyl alcohol with concentrated H_2SO_4 at 140°C gives	<div>A. Ethene</div> <div>B. Alcohol</div> <div>C. Diethyl ether</div> <div>D. Carboxylic acid</div>