

ECAT Chemistry Chapter 22 Alcohols, Phenols and Ethers Online Test

Sr	Questions	Answers Choice
1	Ethanol can be converted into ethanoic acid by	A. Hydrogenation B. Hydration C. oxidation D. Frmentation
2	Alcohol fermentation is brought about by the action of	A. CO ₂ B. O ₂ C. Invertase D. Yeast
3	Alcohols reacts with Grignard reagent to form	A. Alkanes B. Alkenes C. Alkynes D. All
4	Oxidation of ter-alcohol gives:	A. Aldehyde B. Formaldehyde C. Ketone D. Alkens
5	The reaction of sodium with ethanol gives	A. CH ₃ OH B. NaH C. H ₂ O D. H ₂
6	Which of the following is the most suitable method for removing the traces of water from ethanol?	A. Reacting with Na metal B. Passing dry HCl through it C. Distilling it D. Reacting with Mg
7	3 moles of ethanol react with one mole of phosphorus tribromide to from 3 moles of bromoethane and on mole of X. Which of the following is X?	A. H ₃ PO ₄ B. H ₃ PO ₂ C. HPO ₃ D. H ₃ PO ₃
8	Propanone is the product obtained by dehydrogenation of	A. 2-Propanol B. 1-Propanol C. Isobutyl alcohol D. Propanethoil
9	Which one of the following correctly describes the acid properties of phenol	A. Stronger than HCI B. Stronger than carboxylic acid C. An acid stronger than carbonic acid D. An acid weaker than carboxylic acid
10	Diethyl ether is obtained by Williamsons synthesis using	A. Ethanol + Na + C ₂ H ₅ Br B. Ethanol + Mg + C ₂ H ₅ Br C. Methanol + Na + CH ₃ Br D. Methanol + Mg + CH ₃ Br
11	Which isomers of $C_5H_{11}OH$ gives, on dehydration, the greatest number of different alkenes	
12	Dehydration of an alcohol at 180°	A. Alkene B. Ether C. Ester D. An hydride
13	In Lucas test primary alcohol make as oily layer	A. Immediately B. In 10 mins C. On heating D. Not
14	The hydroxyl derivatives of aromatic hydrocarbons which have the -OH group directly bonded to the ring C-atom are called	A. Alcohols B. Ketones C. Esters D. Phenols
15	Isopropyl alcohol on oxidation gives	A. Acetone B. Ether C. Ethylene D. Acetaldehyde
		A. Benzene

16	When phenol is distilled with zinc dust. It is reduced to	B. Benzaldehyde C. Toluene D. Hexanol
17	Phenol was discovered by:	A. Hofmann B. Runge C. Henderson D. Bakelite
18	A compound is soluble in conc. H ₂ SO ₄ , it does not decolourise bromine in carbon tetrachloride but is oxidized by chromic anhydride in aqueous sulphuric acid within two seconds, turning orange solution to blue, green and then opaque. The original compound is	A. Primary alcohol B. Tertiary alcohol C. alkene D. ether
19	Ethanol is prepared in Pakistan form fermentation of:	A. Starch B. Sugar C. Glucose D. Molasses
20	denaturing of alcohol is done by adding methanol in ethanol:	A. 10% B. 20% C. 30% D. 40%
21	Picric acid is	A. 2, 4, 6-Trinitrotoluene B. 2, 4, 6-Tribomoethanol C. 2, 4,6-Trinitrophenol D. Para-Nitrophenol
22	Which compound is more soluble in water	A. C ₂ H ₅ OH B. Benzene C. CH ₃ OCH ₃ D. Hexane
23	Which the increase in carbon number of solubility of an alcohol	A. Increases B. Decreases C. Remains unaffected D. None of these
24	Scientific study of fermentation was first made by	A. Buchner B. Liebig C. Biot D. Pasteur
25	Grignard reagent on reaction with a ketone forms	A. Tertiary alcohol B. Secondary alcohol C. Primary alcohol D. Carboxylic acid
26	Which one is primary alcohol?	A. Buten-2-ol B. Propan-2-ol C. Butaon-1-ol D. 2,3-Dimethylhexane-4-ol
27	Ethyl alcohol is industrially prepared from ethylene by	A. permanganate oxidation B. Catalytic reduction C. Absorbing in H ₂ SO ₄ followed by hydrolysis D. Fermentation
28	Phenol is also known as	A. Acetic acid B. Carbolic acid C. Tararic acid D. Trichloroacetic acid
29	Williamson's synthesis is used to prepare	A. Diethylether B. Phenolphthalein C. Hydrogenation D. Bakelite
30	According to Lewis concept ethers behave as:	A. Acid B. Base C. Acid as well as a base D. None of them
31	When phenol is reduced in the presence of Zn dust, we get	A. Cyclohexene B. Cyclohexane C. Benzene D. Benzyne
32	The test used for the detection of ethanol in the mouth of a drunk driver is that the drunk driver is asked to blow air from mouth into a solution of K ₂ Cr ₂ O ₇ and H ₂ SO ₄ . The colour changes, if the driver is drunk	A. From orange to green B. From pink to green C. From orange to colorless D. From pink to colorless
33	Which of the following will not give iodoform test?	A. Ethanol B. Ethanal C. Isopropyl alcohol D. Benzyl alcohol

D. Doney, alconol CH₃CH₂CH₂OH In its reaction with Na, 1 mol of X gives 1 mol of $H_{2(q)}$. What B. (CH₃)₃COH 34 is X CH₃CH₂CH₂H D. CH₃CH(OH)CO₂H A. ethyl alcohol The only alcohol that can be prepared by the indirect B. propyl alcohol 35 C. isobutyl alcohol hydration of alkene is D. methyl alcohol A. Oxalic acid When ethylene glycol is heated with acidified potassium B. Glyoxal 36 permanganate, the main organic compound obtained is C. Formic acid D. Ethanol A. Aldehydes and ketones respectilvely B. ketones and aldehydes respectively Primary and secondary alcohols on action of red hot copper 37 C. Only aldehydes D. Only ketones A. Phenol and ethanol B. Phenol and methanol 38 Baukelite is a polymer obtained from two monomers Phenol and methanal D. Phenol and acetone A. Oxalic acid B. Acetone Ethylene reacts will 1% cold alkaline KMnO₄to give 39 C. Ethylene glycol D. Formaldehyde A. Ester B. Ethers 40 Dow's process is used for the preparation of C. Alcohols D. Phenols A. Aldehyde B. Ketone 41 Dehydration of ethyl alcohol yields C. Acid D. Alkene A. Very weak hydogen bonding B. High b.p 42 Which is not property in ether: C. Slightly soluble D. Inflammable An organic compound A reacts with methyl magnesium A. Acetaldehyde, tertiary butyl alcohol iodide to form an addition product which on hydrolysis forms B. Acetaldehyde, ethyl alcohol 43 the compound B . Compound B gives blue colour salt in Acetaldehyde, isopropyl alcohol Victor Meyer's test. The compounds A and B are D. Acetone, isopropyl alcohol respectively A. 12% B. 14% 44 Concentration of rectified spirit is: C. 90% D. 95% A. R - OH B. R - CH₂OH 45 The formula of secondary alcohol is R₂Cl D. R₃COH A. Methyl alcohol B. Formic acid On heating glycerol with conc. Sulphuric acid a compound 46 with unpleasant odour is obtained. The compound is D. Glycerol sulphate A. CH₃OH Which compound does not show hydrogen bonding with B. C₂H₅OH 47 ₃- O - CH₃ water D. C₆H₅OH A. Water Either, an organic compound has close resemblance in B. Oxides of lithium 48 structure and thus a derivative of: C. Oxides of magnisium D. Oxides of aluminium A. Butan-1-ol Which alcohol gives only one oxidation product when B. Butan-2-ol 49 wormed with dil acidified K2Cr2O7 C. 2-methyl propan-1-ol D. 2-methyl propan-2-ol A. C₂H₅OH Which one is used as a fuel for internal combustion engines B. CH₃OH 50 in many European countries and Brazil C. CH₃COOH

D. C₂H₂

51	Which compound will not dissolve in H ₂ O	A. C ₆ H ₆ B. C ₂ H ₅ OH C. CH ₃ CH ₂ CH ₂ OH D. CH ₃ - OH
52	Which of the following compound is obtained on passing ethanol vapours on heated Al ₂ O ₃ ?	A. Ethylether B. Acetone C. Ethane D. Ethanol
53	which enzyme is not involved in the fermentation of starch?	A. Diastase B. Zymase C. Urease D. Invertase
54	Methanol is prepared from CO and H _{2 using catalyst:}	A. ZnO B. Cr ₂ O ₃ C. Pt D. Ni
55	An alcohol with molecular formula C _n H _{2n+1} OH has a chiral carbon atom but does not react with MnO ⁻ ₄ /H ⁺ what is the least number of carbon atoms such an alcohol could possess	A. 5 B. 6 C. 7 D. 8
56	An organic compound will decolorise dill acidified (aq) KMnO ₄ on warming, but will not decolorise bromine water. What is the compound	A. KMnO ₄ B. Ethanol C. Ethane D. CH ₃ CH ₂ Cl
57	Ethyl alcohol prepared during fermentation is pure:	A. 20% B. 10% C. 11% D. 12%
58	The boiling point of glycerol is more than propanal because of	A. Hybridisation B. H-bonding C. Resonance D. All these factors
59	How many secondary alcoholic groups are present in the structure of glucose OHC CHOH CHOHCH OH CHOH CH2OH	A. 1 B. 2 C. 3 D. 4
60	Which compound shows hydrogen bonding	A. C ₂ H ₆ B. C ₂ H ₅ Cl C. CH ₃ - O - CH ₃ D. C ₂ H ₅ OH
61	Alcohol can be denaturated by adding:	A. Acetone B. Methanol C. Pyridine D. All
62	Phenol is more readily soluble in	A. Dil. HCl B. Both NaOH and HCl C. NaOH sol D. Sodium bicarbonate solution
63	Which of the following statements is correct?	A. Phenol is less acidic than ethyl alcohol B. Phenol is more acidic than ethanol C. Phenol is more acidic than carbonic acid D. Phenol is more acidic than CH ₃ COOH
64	Rectified spirit contains alcohol about	A. 80% B. 85% C. 90% D. 95%
65	Salol is prepared from	A. Salicylic acid and phenol B. Salicylic acid and methyl alcohol C. Both D. None
66	Carbolic acid is the other name for	A. Methanol B. Ethanol C. Propanol D. Phenol
67	The reaction of aromatic acyl chloride and phenol in the presence of a base NaOH or pyridine is called	A. Kolbe's reaction B. Perkin's reaction C. Sandmeyer's reaction D. Schotten Baumann reaction
		A O 11

68	If an electrophile attacks then bond breaks first	C. C - O D. None of these
69	Which compound is called a universal solvent?	A. H ₂ O B. CH ₃ OH C. C ₂ H ₅ OH D. CH ₃ OCH ₃
70	Which of the following process is employed to convert alkyl halide into alcohol?	A. Addition B. Substitution C. Dehydrohalogenation D. Molecular rearrangement
71	Mild oxidation of glycerol with H ₂ O ₂ /FeSO ₄ gives	A. Glyceraldehyde B. Dihydroxy acetone C. Glycerose D. None
72	Compound X has molecular formula $C_{10}H_{14}O$ and is unreactive towards mild oxidising agents. What is the structure of the compound formed by dehydration of X	
73	Which of the following is known as wood spirit	A. Ethyl alcohol B. Propyl alcohol C. Methyl alcohol D. Butyl alcohol
74	How many alcohol (including both structural isomers and stereoisomers) can have the molecular formula $C_4H_{10}O$	A. 3 B. 4 C. 5 D. 6
75	Which of the following cannot be produced by acidic dehydration of alcohols?	A. Ethers B. Aldehyde C. Alkyl Hydrogen sulphate D. Alkene
76	Ethanol can be converted into ethanoic acid by	A. Hydrogenation B. Hydration C. Oxidation D. Fermentation
77	Nitration of phenol gives	A. o-nitrophenol B. p-nitrophenol C. m-nitrophenol D. Both o and p-nitrophenol
78	Which compound is more soluble in water	A. C ₂ H ₅ OH B. C ₆ H ₅ OH C. CH ₃ OCH ₃ D. n-hexanol
79	Which is used as an antifreeze?	A. Glycol B. Ethyl alcohol C. Water D. Methanol
80	Maximum number of active hydrogens are present in	A. Acetic acid B. Glycerol C. Methane D. Methanol
81	Methyl alcohol is not used	A. As a solvent B. A an anti-freezing agent C. As a substitute for petrol D. For denaturing of ethyl alcohol
82	Alcohols react with carboxylic acid to produce the class of compounds known as	A. Grignard's reagent B. Esters C. Amides D. None of these
83	Dehydration of glycerol give	A. Propane B. Propene C. Acrolein D. Benzene
84	Phenol is heated with CCl4and alkaline KOH when salicylic acid is produced. The reaction is known as	A. Frledel-Craft reaction B. Riemer-Tiemann's reaction C. Rosenmund's reaction D. Sommelet reaction
85	The organic compound, alcohols are much closer to, in structure and hence is also called its derivative:	A. Water B. Oxidizes of lithium oxides C. Oxidizes of magnesium D. Oxidizes of aluminium
		A As a substitution for petrol

86	Methyl alcohol is not used:	B. As an anti-freezing agent C. For denating of ethyle alcohal D. As a solvent
87	Which enzyme is not involved in fermentation of strach	A. Diastase B. Zymase C. Urease D. Invertase
88	Phenol gives Colour with neutral FeCl ₃ solution	A. Violet B. Green C. Red D. Blue
89	Alcohols are named by replacing 'e' of alkane with:	A. al B. ene C. ol D. one
90	C ₂ H ₅ OH can be differentiated from CH ₃ OH by	A. Reaction with HCl B. Reaction with NH ₃ C. lodoform test D. Solubility in water
91	Which statement in not correct about alcohol?	A. Ethyl alcohol is heavier than water B. Ethyl alcohol ecaporates more quickly C. Alcohol with less number of carbon atoms is more soluble in water than alcohol with more number of carbons atoms D. Alcohol produces H ₂ by reaction with sodium metal
92	The malt-sugar in the presence of yeast or invertase gives	A. Fructose B. Glucose C. Lignin D. Alcohol
93	Which more acidic?	A. o-cresol B. p-nitrophenol C. phenol D. m-cresol
94	Which is a reagent for Lucas test	A. ZnCl ₂ + Conc. HCl B. Zn C. Na D. Br
95	Which of the following groups will increase the acidity of phenol?	ANO ₂ BCN CX (halogens) D. All
96	Alcohols, phenols and ethers may be considered as derivative of	A. Hydrocarbons B. Benzene C. Carboxylic acid D. Water
97	Methanol and ethanol can be distinguished by	A. lodoform test B. lucas test C. Dichromate/H ₂ SO ₄ oxidation test D. Flame test
98	Which bond shows maximum hydrogen bonding with water?	A. CH ₃ OH B. C ₂ H ₅ OH C. CH ₃ CH ₃ D. C ₆ H ₅ OH
99	Rectified spirit contains alcohol about:	A. 80% B. 85% C. 90% D. 95%
100	Which compound shows more hydrogen bonding?	A. C ₂ H ₆ B. C ₂ H ₅ Cl C. CH ₃ CH ₃ D. C ₂ H ₅ OH
101	Which of the following is weakly acidic in nature	A. Alcohol B. Phenol C. Aidehyde D. Amide
102	Which is possible in ethers?	A. Reactivity high B. Oxidation and reduction C. Reactivity towards bases D. Towards acids
103	When sodium metal reacts with alcohols	A. Hydrogen gas evolves B. Sodium hydroxide is obtained C. Alcohol is reduced D. Alcohol is polymerised

		D. Alcohol is polyhierised
104	Ethyl alcohol may be identified by	A. Ring test B. lodoform test C. Tollen's test D. Bazeyer's test
105	Which structure shows a tertiary alcohol	A. CH ₃ CH ₂ OH B. (CH ₃) ₂ CHOH C. (CH ₃) ₃ COH D. CH ₂ OH
106	Which compound has the maximum repulsion with water?	A. C ₆ H ₆ B. C ₂ H ₅ OH C. CH ₃ CH ₂ CH ₃ OH D. CH ₃ OCH ₃
107	Question Image	A. A primary alcohol B. A secondary alcohol C. An eher D. A phenol
108	Question Image	A. 1-bromobutane B. 2-bromobutane C. 1-bromo-2-methyl propane D. 2-bromo-2-methyl propane
109	Industrial alcohol may be denaturated by the addition of	A. Methyl alcohol B. Acetone C. Pyridine D. Any of the above reagent
110	In Dow's method, phenol can be made from	A. Chlorobenzene B. Benzene C. Toluene D. Benzene sulphonic acid
111	To prepare ethanol by fernentation the optimum temp. is	A. 10 - 20°C B. 25 - 30°C C. 20°C D. 35°C
112	Which of the following compounds will not react with sodium metal to release hydrogen	A. CH ₃ CH ₂ CH ₃ B. CH ₃ CH ₂ OH C. C ₆ H ₅ OH D. C ₆ H ₅ CH ₂ OH
113	Which compound is more soluble in water?	A. C ₂ H ₅ OH B. C ₅ H ₅ OH C. CH ₃ OCH ₃ D. n-Hexanol
114	Which is not the enzyme involved in the preparation of ethyl alcohol by fermentation of starch	A. Diastase B. Maltase C. Zymase D. Invertase
115	Alcohals can be distinguished using test:	A. Lucas B. Tollen's C. Koib's D. William's
116	Phenol is used in the preparation of	A. Bakelite B. Phenatherene C. Cellulose D. All of these
117	When alcohol reacts with concentreated $\rm H_2SO_4$ intermediate compound formed as	A. carbonium ion B. alkoxy ion C. alkyl hydrogen sulphate D. non of these
118	Which of the following is used as anesthetics	A. Alcohol B. Diethylether C. Phenol D. Dimethyl ether
119	The strongest acid among the following aromatic compound is	A. Ortho-nitrophenol B. Para-chlorophenol C. Para-nitrophenol D. Meta-nitrophenol
120	Phenol is a weak acid. The correct order of acid strength of carboxylic acid, phenol and alcohol is	A. Carboxylic acid > phenol > alcohol B. Carboxylic acid > alcohol > phenol C. Phenol > carboxylic acid > alcohol D. Alcohol > phenol > carboxylic acid
121	Organic acid without a carboxylic acid group is	A. Ascorbic acid B. Vinegar

		D. Picric acid
122	Ethanol containing some methanol is called	A. Absolute spirit B. Rectified spirit C. Power alcohol D. Methylated spirit
123	Oxidation of 2-propanol gives	A. Propanone B. Butanone C. Pentanone D. None of these
124	Sodium phenoxide reacts with CO ₂ at 400 K and 4.7 atm pressure to give	A. Sodium salicylate B. Salicyl aldehyde C. Catechol D. Benzoic acid
125	In Lucas test teriary alcohol make an oily layer	A. Immediately B. In 10 mins C. On heating D. Not
126	Glucose in the presence of zymase is converted into	A. Alcohol B. Acid C. Ethyl alcohol D. Ketone
127	Which compound shows hydrogen bonding	A. C ₂ H ₆ B. C ₂ H ₅ Cl C. CH ₃ -O-CH ₃ D. C ₂ H ₅ OH
128	95% alcohol is called	A. Rectified spirit B. Spirit of wine C. Spirit D. Methylated
129	Ethyl alcohol on oxidation with K ₂ Cr ₂ O ₇ gives	A. Acetic acid B. Acetaldehyde C. Formaldehyde D. Formic acid
130	A compound of the formula C ₄ H ₁₀ O _{reacts} with sodium and undergoes oxidation to give a carbonyl compound which does not reduce Tollen's reagent, the original compound is	A. Diethyl ether B. n-Butyl alcohol C. Isobutyl alcohol D. sec-Butyl alcohol
131	What will react differently with the two isomeric pentols, (CH ₃) ₃ CCH ₂ OH and (CH ₃) ₂ CH CH ₂ CH ₂ OH	A. Acidified (aq) KMnO ₄ B. Concentrated H ₂ SO ₄ C. PCI D. Sodium
132	Which one of the following reacts immediately with conc. \mbox{HCI} in the presence of \mbox{ZnCl}_2	A. Primary alcohol B. Secondary alcohol C. Tertiary alcohol D. Ether
133	Absolute alcohol is obtained by adding rectified apirit in alcohol:	A. Water B. Na ₂ CO ₃ C. NaOH D. CaO
134	The organic compounds which derivative of hydrocarbons due to oxygen is:	A. Phenol B. Alcohol C. Alkyl halide D. Either
135	Which compound contains - OH in their molecule	A. Alcohol B. Phenol C. Alcohol and phenol D. Ether
136	During dehydration of alcohols to alkenes by heating with conc. H ₂ SO ₄ , the initial step is	A. Formation of an ester B. Protonation of alcohol molecule C. Formation of carbocation D. Elimination of water
137	General formula of alcohol is:	A. ROH B. Ar-OH C. R-O-R D. Ph-OH
138	Which of the following is an isomer of ethanol	A. CH ₃ OCH ₃ B. C ₂ H ₅ OC ₂ H ₅ C. CH ₃ OH D. C ₂ H ₅ OH
		A. Reduction of any aldehyde gives secondary alcohol

С. Сханс асій

139	Which of the following is correct?	B. Reaction of vegetable oil with H ₂ SO ₄ gives glycerine C. Alcoholic iodine with NaOH gives iodoform D. Sucrose on reaction with NaCl gives invert sugar
140	Derivative of water is:	A. Alcohals B. Phenols C. Either D. Phenol
141	The organic compounds which are derivative of hydrocarbons of oxygen are:	A. Carbohydrates B. Phenols C. Alcohals D. All of these
142	Use of ethanol as:	A. Drink B. Solvent and fuel C. In beverage D. All of these
143	I-Phenylethanol can be prepared by reaction of benzaldehyde with	A. Methyl iodide an Magnesium B. Methyl bromide C. Methyl bromide and AlBr ₃ D. C ₂ H ₅ l and Mg
144	Alcohols are derivatives of:	A. Benzene B. Alkanes C. Alkens D. Alkynes
145	Taste of lower alcohols is:	A. Sweet B. Bitter C. Our D. Salty
146	Na reacts with phenol to produce	A. H ₂ gas B. Benzene C. CO ₂ gas D. CO gas
147	Hydrolytic coversion of sucrose into glucose and fructose is known as	A. Induction B. Inversion C. Insertion D. Inhibition
148	The boiling points of alcohols are higher than the corresponding alkanes, This is because	A. Of hydrogen bonding existing between molecules of alcohols B. Alkanes are dipolar compounds C. Alcohols are sweet in taste D. Alcohols are soluble in water
149	An organic compound 'X' on treatment with acidified K ₂ Cr ₂ O ₇ gives a compound 'Y' which reacts with I ₂ and sodium carbonate to form Triodomethane. The compound 'X' is	A. CH ₃ OH B. CH ₃ CHO C. CH ₃ CH(OH)CH ₃ D. CH ₃ COCH ₃
150	Ethanol can be converted into ethanoic acid :	A. Hydrogenation B. Hydration C. Oxidation D. Fermentation
151	Question Image	A. Aqueous bromine B. Dilute HNO ₃ C. Dilute HCI D. CH ₃ COCI
152	Oxidation of methyl alcohol gives	A. Formaldehyde B. Acetone C. Ester D. Acid
153	The order of reactivity of halogen acids for reaction with $\ensuremath{\text{C}_2\text{H}_5\text{OH}}$ is	A. HCI > HBr > HI B. HI > HBr > HCI C. HBr > HI > HCI D. HBr > HCI > HI
154	Phenols are derivative of:	A. Alkanes B. Alkenes C. Alkynes D. Benzene
155	Alcohols of low molecular weight are	A. Soluble in water B. Soluble in water on heating C. Insoluble in water D. Insoluble in all solvents
156	Alcohol reacts with halogen acid to produce	A. Alkyl halides B. Aldelydes C. Ketones

		D. Alkanes
157	Which of the following compound is known as oil of winter green?	A. Phenyl benzoate B. Phenyl salicylate C. Phenyl acetate D. Methyl salicylate
158	Treatment of a secondary alcohol with a suitable oxidizing agent (K ₂ Cr ₂ O ₇) results in the formation of	A. Ketone B. Aidehyde C. Ether D. Alkyl halide
159	Which of the following is produced when an aqueous solution of butan-2-ol is refluxed with dil acidified KMnO ₄	A. Butanol B. Butanoic acid C. Butanone D. Butane