

ALCOHOLS, PHENOLS AND ETHERS

- Which substance is used for denaturing of ethanol?
(a) Methanol (b) Acetone (c) Pyridine **(d) All**
- The product of fermentation of sucrose is:
(a) Ethanol and H_2O (b) Ethanol and CO **(c) Ethanol and CO_2** (d) Glucose and CO_2
- Absolute alcohol is that which is:
(a) 100% (b) 95% (c) Ethanol mixed with Methanol (d) Ethanol mixed with H_2O
- Ethanol on oxidation in the presence of $K_2Cr_2O_7$ and conc. H_2SO_4 changes to:
(a) Acetaldehyde (b) Ethane (c) Ethene (d) CO_2 and H_2O
- Ethanol on dehydration can be changed to:
(a) Ethene (b) Diethyl ether **(c) Both a and b** (d) None of these
- Ethanol reacts with Na metal to form sodium ethoxide. What product will be formed when C_2H_5ONa reacts with methyl bromide.
(a) $C_2H_5OC_2H_5$ **(b) $C_2H_5OCH_3$** (c) $CH_3COC_2H_5$ (d) C_2H_5Br and $NaBr$
- Which compound shows hydrogen bonding?
(a) C_2H_6 **(b) C_2H_5OH** (c) $CH_3 - O - CH_3$ (d) C_2H_5Cl
- Which compound shows maximum hydrogen bonding with water?
(a) CH_3OH (b) C_2H_5OH (c) $CH_3 - O - CH_3$ (d) C_6H_5OH
- Which compound is more soluble in water?
(a) C_6H_5OH **(b) C_2H_5OH** (c) CH_3OCH_3 (d) n-Hexanol
- Which compound will have the maximum repulsion with H_2O ?
(a) C_6H_6 (b) C_2H_5OH (c) $CH_3CH_2CH_2OH$ (d) $CH_3 - O - CH_3$
- Ethanol can be converted into ethanoic acid by.
(a) Hydrogenation (b) Hydration **(c) Oxidation** (d) Fermentation
- Which enzyme is not involved in fermentation of starch?
(a) Diastase (b) Zymase **(c) Urease** (d) Invertase

13. Which compound is called a universal solvent?
(a) H_2O (b) CH_3OH (c) $\text{C}_2\text{H}_5\text{OH}$ (d) $\text{CH}_3 - \text{O} - \text{CH}_3$
14. Methyl alcohol is not used.
(a) As a solvent (b) As an anti-freezing agent
(c) As a substitute for petrol (d) For denaturing of ethyl alcohol
15. Rectified spirit contains alcohol about.
(a) 80% (b) 85% (c) 90% **(d) 95%**
16. According to Lewis concept ethers behave as.
(a) Acid **(b) Base** (c) Acid as well as a base (d) None of them
17. Which one of the following compounds is the isomer of ethyl alcohol?
(a) CH_3OH **(b) CH_3OCH_3** (c) $\text{CH}_3 - \text{CH}(\text{OH})\text{CH}_3$ (d) $\text{CH}_3\text{OC}_2\text{H}_5$
18. Methyl alcohol can be represented by all of the following words or symbols except.
(a) Grain alcohol (b) CH_3OH (c) Methanol (d) Wood spirit
19. Phenol is also known as:
(a) Citric acid (b) Carbonic acid **(c) Carbolic acid** (d) Maleic acid
20. The IUPAC name of $\text{CH}_3\text{OC}_6\text{H}_5$ is.
(a) Methyl Phenyl ether **(b) Phenoxy methane** (c) Methoxy benzene (d) Methoxy phenyl
21. Which substance shows very weak hydrogen bonding with water?
(a) Methanol (b) Ethanol **(c) Diethyl ether** (d) Benzene
22. Absolute alcohol can be obtained from rectified spirit by.
(a) By adding sodium metal (b) By extraction
(c) By redistillation in the presence of CaO (d) Not possible because of azeotropic mixture.
23. The conversion of ethane to ethanol is an example of:
(a) Hydration (b) Dehydration (c) Neutralization (d) Esterification
24. Zymase can be used to convert glucose to.
(a) Carbon and steam (b) CO_2 and hydrogen **(c) CO_2 and Ethanol** (d) Ethanol and water
25. Methyl alcohol can also be prepared commercially by.
(a) Natural gas **(b) Water gas** (c) Marsh gas (d) Coal gas

26. Ethanol can be prepared by reacting.
(a) Ethane and oxygen **(b) Ethene and water** (c) Ethane and water (d) Ethene and hydrogen
27. Which condition are not suitable for the growth of enzymes.
(a) Temperature between 25 °C to 37 °C.
(b) Solution must be dilute
(c) Environment must be aerated
(d) Some preservative should be present in solution.
28. The correct name of $\text{CH}_3 - \text{CH} = \text{CH}_2 - \text{OH}$ is:
(a) 2-buten - 4 - ol (b) 3-buten-1-ol **(c) 2-buten-1-ol** (d) Ethylene glycol
29. When ethyl alcohol is heated, with NH_3 in presence of The O_2 then.
(a) O - H bond is broken **(b) C - O bond is broken** (c) Ethene is formed (d) Ethane is formed
30. The conversion of ethanol to ethane is an example of.
(a) Dehydration (b) Hydration (c) Hydrogenation (d) Fermentation
31. Methyl alcohol can be distinguished from ethyl alcohol by.
(a) Action of Cl_2 (b) Action NH_3 (c) Dissolving in H_2O **(d) $\text{NaOH} + \text{I}_2$**
32. Iso propyl alcohol on oxidation forms.
(a) Ether (b) Aldehyde **(c) Ketone** (d) Carboxylic acid
33. Primary, secondary and tertiary alcohols can be distinguish by.
(a) Iodoform test **(b) Lucas test**
(c) Fehling solution (d) Ammonical silver nitrates (Tollens reagent)
34. Which one is used as dehydrating agent for alcohol?
(a) H_2SO_4 (b) Al_2O_3 (c) H_3PO_4 **(d) All of these**
35. How much dose of methanol can cause death.
(a) 10 - 15 mL (b) 15 - 20 mL **(c) 100 -250 mL** (d) Has no effect
36. Which substance is used to convert ethanol to ethyl chloride?
(a) SOCl_2 (b) PCl_3 (c) PCL_5 **(d) All of these**
37. Phenol is the derivative of.
(a) Alkane **(b) Aromatic hydrocarbon** (c) Aliphatic hydrocarbon (d) Alkene

38. Phenol after reduction with hydrogen changes to.
(a) Picric acid (b) Benzene (c) Cyclohexane **(d) Cyclohexanol**
39. Phenol can be prepared from chlorobenzene by.
(a) Williamson synthesis **(b) Dow's process**
(c) Kolbe reaction (d) Cannizzaro reaction
40. Phenol on heating with concentrated nitric acid forms.
(a) o – nitro phenol (b) T.N.T **(c) Na₂CO₃** (d) Cyclo hexanol
41. Conversion of phenol to benzene is known as.
(a) Oxidation **(b) Reduction** (c) Hydrolysis (d) Hydration
42. When ethyl bromide is heated with Ag₂O the product formed is.
(a) Ethanol (b) Ethene (c) Ethanal **(d) Diethyl ether**
43. Which one of the following methods is used for the preparation of ether?
(a) Kolbe's Reaction (b) Frankland Reaction
(c) Williamson synthesis (d) Dow's process
44. Diethyl ether can be converted to alcohol by heating with.
(a) HI (b) NaOH (c) Water (d) KMnO₄
45. Which compound causes maximum repulsion with water?
(a) CH₃ – O – CH₃ **(b) CH₃ – CH₃** (c) CH₃ = CH₃ (d) C₂H₅-OH
46. Isopropyl alcohol on oxidation gives.
(a) Acetaldehyde **(b) Acetone** (c) Ether (d) Propene
47. Alcohol obtained by fermentation is only up to:
(a) 10% **(b) 12%** (c) 20% (d) 95%
48. Ether show the phenomenon of.
(a) Position isomerism (b) Functional group isomerism
(c) Mesomerism (d) Cis-trans isomerism
49. Which one of the following is dihydric alcohol?
(a) Ethanol (b) Cyclohexanol (c) Glycerol **(d) Glycol**
50. Phenol can be identified by test.
(a) Bromine water (b) Chlorine water (c) Lucas test (d) Bayers test

51. In t-butyl alcohol, the tertiary carbon is bonded to.
(a) Three hydrogen atoms (b) Two hydrogen atoms
(c) One hydrogen atom **(d) No hydrogen atom**
52. Ethanol can be converted into ethanoic acid by.
(a) Oxidation (b) Fermentation (c) Hydrogenation (d) Hydration
53. _____ is alcohol in the following:
(a) CH₃CH₂OH (b) CH₃OCH₃ (c) CH₃COOH (d) CH₃CHO
54. Alcohol obtained by fermentation never exceeds.
(a) 14% (b) 10% (c) 16% (d) 95%
55. The most reactive alcohol when O- H bond breaks is.
(a) Tertiary alcohol (b) Secondary alcohol (c) Primary alcohol **(d) Methyl alcohol**
56. Bakelite is obtained from phenol by reacting with.
(a) Acetate (b) Ethanal **(c) Formaldehyde** (d) Methanol