

## ALCOHOLS, PHENOLS AND ETHERS

1. General formula of primary alcohol is

- (a)  $\text{C}_n\text{H}_{2n+1}\text{OH}$       (b)  $\text{C}_n\text{H}_{2n}\text{OH}$       (c)  $\text{C}_n\text{H}_{2n+2}\text{OH}$       (d)  $\text{C}_n\text{H}_{2n-2}\text{OH}$

2. Ethanol is prepared industrially by

- (a) Hydration of ethylene      (b) Fermentation of sugars (c) Hydrolysis of ethyl acetate

3. Which of the following is boiled with ethyl chloride to form ethyl alcohol

- (a) Alcoholic  $\text{KOH}$       (b) Aqueous  $\text{KOH}$       (c)  $\text{H}_2\text{O}$       (d)  $\text{H}_2\text{O}_2$

4. The process of manufacture of absolute alcohol from rectified spirit is

- (a) Fractional distillation      (b) Steam distillation  
(c) Azeotropic distillation      (d) Vacuum distillation

5. Which enzyme converts glucose and fructose both into ethanol

- (a) Diastase      (b) Invertase      (c) Zymase      (d) Maltase

6. The ionization constant of phenol is higher than that of ethanol, because

- a) Phenoxide ion is stronger base than ethoxide ion  
b) Phenoxide ion is stabilized through delocalization  
c) phenoxide ion is less stable than ethoxide ion  
d) phenoxide ion is bulkier than ethoxide ion

7. Methyl alcohol is industrially prepared from

- (a)  $\text{CO} + \text{H}_2$       (b)  $\text{C}_2\text{H}_5\text{OH}$       (c)  $\text{CH}_3\text{COCH}_3$       (d)  $\text{CH}_3\text{COOH}$

8. Benzyl alcohol is obtained from benzaldehyde by

- (a) Fittig's reaction      (b) Cannizaro's reaction  
(c) Kolbe's reaction      (d) Wurtz's reaction

9. Primary alcohols can be obtained from the reaction of the  $\text{RMgX}$  with

- (a)  $\text{CO}_2$       (b)  $\text{HCHO}$       (c)  $\text{CH}_3\text{CHO}$       (d)  $\text{H}_2\text{O}$

10. Absolute ethanol cannot be obtained by simple fraction of a solution of eth  
(a) Their B.P.'s are very nearer  
(b) Ethanol remains dissolved in water  
(c) They form a constant boiling mixture  
(d) Ethanol molecules are solvated
11. Lucas test is used for  
(a) Alcohols (b) Amines (c) Diethyl ether (d) Glacial acetic acid
12. Alcohols reacts with dry sodium liberating  
a) oxygen b) hydrogen c) carbon dioxide d) carbon monoxide
13. A primary alcohol on oxidation gives  
a) a ketone b) an aldehyde  
c) an ester d) a secondary alcohol
14. In the esterification of an alcohol  
a) hydroxyl group is replaced by phenol  
b) hydrogen is replaced by sodium metal  
c) hydroxyl group is replaced by chlorine  
d) hydrogen is replaced by R-CO group
15. In Cumene process, phenol is manufactured from  
a) chlorobenzene and alkali b) benzene and propylene  
c) chlorobenzene and ethanol d) benzene and acetyl chloride
16. Phenol  $\xrightarrow[H^+]{CHCl_3 / NaOH}$  Salicylaldehyde. This reaction is known as  
(a) Reimer-Tiemann reaction (b) Bucherer reaction  
(c) Gattermann synthesis (d) Perkin reaction
17. Phenol and benzoic acid is distinguished by



25. The compound formed when ethyl bromide is heated with dry silver oxide is  
(a) Dimethyl ether (b) Diethyl ether  
(c) Methyl alcohol (d) Ethyl alcohol
26. For the reaction of phenol with  $\text{CHCl}_3$  in the presence of  $\text{KOH}$ , the electrophile is  
a)  $^+\text{CHCl}_2$  b)  $:\text{CCl}_2$  c)  $\text{CHCl}_2$  d) None of these
27. When ether is exposed in air for some time, an explosive substance formed is,  
a) peroxide b) TNT  
c) Oxide d) Super oxide
28. The most suitable reagent for the conversion of  $\text{R-CH}_2\text{OH} \rightarrow \text{R-CHO}$  is,  
a)  $\text{KMnO}_4$  b)  $\text{K}_2\text{Cr}_2\text{O}_7$   
c) PCC (pyridiniumchloro chromate) d) all the above
29. Lucas reagent is ;  
a) an equimolar mixture of anhy.  $\text{ZnCl}_2$  + conc.  $\text{HCl}$   
b)  $\text{FeCl}_3$  +  $\text{Fe}$   
c) Conc.  $\text{HCl}$  +  $\text{Zn}$  d) Anhy.  $\text{AlCl}_3$  +  $\text{Zn}$
30. Picric acid is :  
a) 2,4,6-trinitro phenol b) 2,4,6-trinitroaniline  
c) 2,4,6-trinitrotoulene d) 2,4-dinitrophenol
31. Which compound is called as *oil of winter green*?  
a) phenyl benzoate b) phenyl salicylate  
c) phenyl acetate d) Methyl salicylate
32. Which one of the following compounds will be most readily attacked by an electrophile?  
a) chlorobenzene b) benzene c) phenol d) toluene



## Answer key

Q.No.	Ans	Q.No.	Ans	Q.No.	Ans	Q.No.	Ans
1	c	11	A	21	c	31	d
2	d	12	B	22	d	32	c
3	b	13	B	23	a	33	a
4	c	14	D	24	a	34	a
5	c	15	B	25	b	35	b
6	b	16	A	26	b	36	d
7	a	17	B	27	a		
8	b	18	D	28	d		
9	b	19	A	29	a		
10	c	20	C	30	a		