

Class: XIIth **CHEMISTRY** Date:

Subject:

DPP No.: 8

Topic :- Alcohols, Phenols & Ethers

1.
$$CH_3 CH_3 COnc. H_2SO_4 \longrightarrow A$$
, OH OH

The product A is

- 2. Glycerol catches fire on mixing with:
 - a) $KMnO_4$
- b) $K_2Cr_2O_7$
- c) HNO_3
- d) None of these

- 3. The end product of the reaction, $CH_3OH \xrightarrow{Cu} A \xrightarrow{NaOH} B$ is:

 - a) Alkane
 - b) Carboxylic acid
 - c) Sodium salt of carboxylic acid
 - d) Ketone



- 4. What is the hybridisation of carbon and oxygen in electronic structure of ether?
 - a) sp^3 and sp^2
- b) sp^3 and sp^3
- c) sp and sp
- d) sp^2 and sp^2
- 5. During dehydration of alcohols to alkenes by heating with concentrated H_2SO_4 the initiation step is
 - a) Protonation of alcohol molecule
 - b) Formation of carbocation
 - c) Elimination of water
 - d) Formation of an ester
- 6. Which of the following is tertiary alcohol?

a)
$$CH_3$$
 CH_3 CH_2 CH_2 CH_2 CH_3 CH_2 CH_2 CH_3 CH_3 CH_3 CH_3 CH_4 CH_5 CH_5 CH_6 CH_7 CH_7 CH_8 CH_8 CH_8 CH_8 CH_8 CH_8 CH_8 CH_8 CH_8

7. Which of the following reagent will convert glycerol to acrolein? b) Conc. H₂SO₄ c) KHSO₄ a) P_2O_5 d) All of these 8. Among the following, which is least acidic? a) Phenol b) o-cresol c) *p*-nitrophenol d) p-chlorophenol 9. Glycerol on heating with oxalic acid at 110°C gives a) Ethanol b) Methanoic acid c) Ether d)Acetone 10. The dehydration of neo-pentanol gives mainly: c) CH_3 -C=CH- CH_3 d)None of the above CH_3 11. Phenol, when it first reacts with concentrated sulphuric acid and then with concentrated nitric acid, gives a) 2, 4, 6-trinitrobenzene b) o-nitrophenol c) *p*-nitrophenol d) Nitrobenzene 12. Which of the following is dihydric alcohol? a) Glycerol b) Ethylene glycol c) Catechol d)Resorcinol 13. Absolute alcohol contains: c) $5\% H_2O$ a) 40% H₂0 b) 10% H₂O d) $100\% C_2H_5OH$ 14. The order of reactivity of the following alcohols a) I > II > III > IVb) I > III > II > IVc) IV > III > II > Id) IV > III > I > II15. The most important ingredient of dynamite is: a) Nitrobenzene b) Glycerine trinitrate c) Nitroaniline d) Nitrosobenzene 16. 2-methoxy butane is obtained by reacting diazomethane with a) 2-butanol b) 1-butanol c) 2-butanone d)Butanal

a) 4

c) 6

d)7

17. How many structural isomers are known for $C_4H_{10}O$? b)3

18.

Product is

$$\begin{array}{c} \text{OH} \\ \text{CH}_2\text{CH}=\overset{*}{\text{CH}}_2 \end{array}$$

$$\begin{array}{c}
\mathsf{OH} \\
^*\mathsf{CH}_2\mathsf{-CH}=\mathsf{CH}_2
\end{array}$$

- 19. Amongst the following, HBr reacts fastest with
 - a) Propane-1-ol
 - c) 2-methyl propane-1-ol

- b) Propane-2-ol
- d)2-methyl propane-2-ol

- 20. Physical properties of:
 - a) Alcohols lie between alkanes and H₂O
 - b) H₂O lie between alcohols and alkenes
 - c) Alkenes lie between alcohols and H₂O
 - d) None of the above

