

Class: XIIth Subject: CHEMISTRY

Date: DPP No.:5

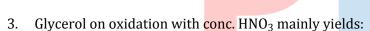
## Topic :- Alcohols, Phenols & Ethers

1. The products obtained when benzyl phenyl ether is heated with HI in the mole ratio 1:1 are

- I. Phenol
- II. Benzyl alcohol
- III. Benzyl iodide
- IV. Iodobenzene
- a) 1 and 3 only
- b) 3 and 4 only
- c) 1 and 4 only
- d) 2 and 4 only

2. Which of the following is an example of elimination reaction?

- a) Chlorination of CH<sub>4</sub>
- b) Dehydration of C<sub>2</sub>H<sub>5</sub>OH
- c) Nitration of benzene
- d) Hydroxylation of C<sub>2</sub>H<sub>4</sub>



- a) Glyceric acid
- b) Tartronic acid
- c) Mesoxalic acid
- d) Both (a) and (b)

4. During fermentation little H<sub>2</sub>SO<sub>4</sub> is added:

- a) To get acidic medium
- b) To hydrolyse the glucose solution  $\,$
- c) To prevent the growth of undesirable bacteria
- d) Which acts as dehydrating agent

5. The principal organic product in the reaction is:

$$CH_3$$
 + one equivalent of  $HI \xrightarrow{\Delta} Product$   $CH_3$   $CH_2I$ 



$$d$$
)  $CH_2$ 

- 6. Dialkyl sulphides are known as:
  - a) Sulphonal
- b) Mercaptan
- c) Thioethers
- d) Thioesters

- 7. Acrolein is obtained when glycerol is dehydrated with:
  - a) KHSO<sub>4</sub>
- b)  $P_2O_5$
- c) Conc. H<sub>2</sub>SO<sub>4</sub>
- d) All of these

8. In the following reaction, *X* and *Y* respectively are

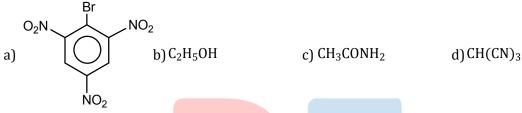
$$C_2H_5OH \xrightarrow{\mathsf{KMnO_4/H^+}} X \xrightarrow{Y} \mathsf{CH_3CO_2C_2H_5}$$

- a)  $CH_3OH$ ,  $C_2H_5OH$
- b) CH<sub>3</sub>CHO, CH<sub>3</sub>OH
- c)  $CH_3CO_2H$ ,  $C_2H_5OH$  d)  $C_2H_4$ ,  $CH_3CO_2H$
- 9. The compound which gives turbidity immediately with Lucas reagent at room temperature is
  - a) Butan-1-ol

b) Butan-2-ol

c) 2-methyl propan-2-ol

- d) 2-methyl propan-1-ol
- 10. Which of the following will not react with NaOH?



- 11. The alcohol manufactured from water gas is
  - a) CH<sub>3</sub>OH
- b)  $C_2H_5OH$
- c) CH<sub>3</sub>CH<sub>2</sub>COOH
- d) (CH<sub>3</sub>)<sub>2</sub>CHOH
- 12. The –OH group of an alcohol or the –COOH group of a carboxylic acid can be replaced by –CI
  - a) Phosphorus pentachloride

b) Hypochlorus acid

c) Chlorine

- d) Hydrochloric acid
- 13. Methanol cannot be dried with anhydrous CaCl<sub>2</sub> because
  - a) CaCI2 dissolves in it

- b) It is not good dehydrating agent
- c) It forms a solid CaCI<sub>2</sub>.4CH<sub>3</sub>OH
- d) It reacts with CH<sub>3</sub>OH
- 14. Sodium ethoxide has reacted with ethyanoyl chloride. The compound that is produced in the above reaction is:
  - a) Diethyl ether
- b) 2-Butanone
- c) Ethyl chloride
- d) Ethyl ethanoate
- 15. Which method is employed to convert alkyl halide into alcohol?
  - a) Substitution
- b) Addition
- c) Dehydration
- d) Rearrangement

- 16. Lucas test is associated with
  - a) Aldehydes
- b) Phenols
- c) Carboxylic acids
- d) Alcohols

17. 
$$C_2H_6 \xrightarrow{H_2SO_4} A \xrightarrow{Alkali} B \xrightarrow{Br} C$$

In the above sequence, *C* is

a) o-bromophenol

b) p-bromophenol

c) m-bromophenol

- d) 2, 4, 6-tribromophenol
- 18. The boiling points of thio-ethers are...than those of ether.
  - a) Lesser
- b) Equal
- c) Higher
- d) None of these

19. 
$$B \stackrel{\text{PCl}_5}{\longleftarrow} C_2 H_5 O H \stackrel{\text{Na}}{\longrightarrow} A$$

$$A + B \rightarrow C$$

$$C \stackrel{\text{CO}}{\longrightarrow} D$$

In the above sequence *D* is

- a)  $CH_3COOC_2H_5$
- b) CH<sub>3</sub>COOCH<sub>3</sub>
- c)  $C_2H_5COOC_2H_5$  d)  $(C_2H_5)_2O \rightarrow BF_3$
- 20. The toxicity order for CH<sub>3</sub>OH, C<sub>2</sub>H<sub>5</sub>OH and C<sub>3</sub>H<sub>7</sub>OH is:
  - a)  $C_2H_5OH < CH_3OH < C_3H_7OH$
  - b)  $C_3H_7OH < C_2H_5OH < CH_3OH$
  - c)  $C_2H_5OH < C_3H_7OH < CH_3OH$
  - d)  $CH_3OH < C_2H_5OH < C_3H_7OH$