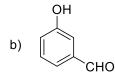
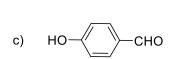
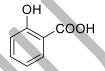
## **ALCOHOLS, PHENOLS AND ETHERS**

- 1. Which of the following cannot be obtained from a mixture of ethanol and concentrated sulphuric acid, if the composition of the mixture and the reaction conditions are suitably adjusted?
  - a) C<sub>2</sub>H<sub>4</sub>
- b) CH<sub>3</sub>CHO
- c) CH<sub>3</sub>CH<sub>2</sub>OCH<sub>2</sub>CH<sub>3</sub>
- d) CH<sub>3</sub>CH<sub>2</sub>HSO<sub>4</sub>
- 2. The alcohol that does not give a stable compound on dehydration is
  - a) ethyl alcohol
- b) Methyl alcohol
- c) n-propyl alcohol
- d) n-butyl alcohol
- 3. What is the major product obtained when phenol is treated with chloroform and aqueous alkali?

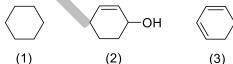






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- 4. Reimer-Tiemann reaction involves
  - a) carbonium ion intermediate
  - b) carbene intermediate
  - c) carbonium intermediate
  - d) free radical intermediate
- 5. Pinacol is
  - a) 3-methylbutan-2-ol
  - b 2,3-dimethyl-2,3-butanediol
  - c) 2,3-dimethyl-2-propanone
  - d) none of the above
- 6. The correct order of ease of dehydration of following is

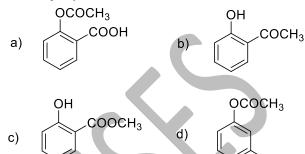


- a) 1 > 2 > 3
- b) 3 > 2 > 1
- a) 1 > 3 > 2
- a) 3 > 1 > 2
- 7. Sodium phenoxide when treated with CO<sub>2</sub> under pressure at 125°C yields a product which

on acetylation produces C

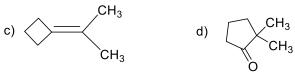
ONa  
+ 
$$CO_2 \xrightarrow{125^{\circ}C} B \xrightarrow{H^{+}} C$$

the major product C would be

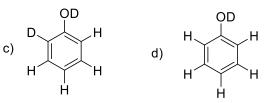


8. Identify the correct product during the following reaction

$$CH_3$$
  $CH_3$   $CH_3$ 



9. When phenol is treated with D<sub>2</sub>SO<sub>4</sub>/D<sub>2</sub>O, some of the hydrogens get exchanged. The final product in this exchange reaction is



10. An organic acid without a carboxylic acid group is

## INDRESH NAIK (9146095319/7620850635)

- a) picric acid
- b) oxalic acid
- c) vinegar
- d) ascorbic acid

11.

$$B \stackrel{\text{i) } B_2H_6/\text{THF}}{=} \bigcirc \text{CH}_2 \stackrel{\text{H}_3O^+}{\longrightarrow} A$$

A and B respectively are

a) both 
$$\bigcirc$$
 CH<sub>2</sub>OH



- 12. to prepare an ether by williamson's synthesis, the reactants needed are
  - a) ethyl alcohol and tert butyl alcohol
  - b) sodium ethoxide and tert butyl bromide
  - c) sodium tert butoxide and ethylbromide
  - d) sodium ethoxide and sodium tert butoxide
- 13. which of the following reactions does not yield an ether?
  - a) sodium methoxide reacts with dimethyl sulphate
  - b) sodium ethoxide reacts with

bromocyclopropane

c)sodium ethoxide reacts with

bromocyclopropane

- d) ethanol reacts with  $CH_2N_2$  in presence of  $HBE_4$
- 14. compound A and C in the following reaction are

CH<sub>3</sub>CHO 
$$\xrightarrow{i) \text{ CH}_3 \text{MgBr}}$$
 A

A 
$$\xrightarrow{\text{H}_2\text{SO}_4}$$
 B  $\xrightarrow{\text{hydroboration}}$  C

- a) identical
- b) positional isomers
- c) functional isomers d) optical isomers
- 15. which of the following is the most acidic compound among the following
  - a) Phenol
- b) o-cresol
- c) p-cresol
- d) p-nitrophenol

## **PRABHU CLASSES**

- 16. Among the following compunds, the most acidic is
  - a) p-nitrophenol
- b) p-hydroxybezoic acid
- c) o-hydroxybezoic acid c) p-toluic acid
- 17. Phenol is less acidic than
  - a) ethanol
- b) o-nitrophenol
- c) o-methylphenol
- d) o-methoxyphenol

## **ANSWER KEY**

1.b 2.b 3.a 4.b 5.b 6.b 7.a 8.d 9.a 10.a 11.d 12.c 13.b 14.b