

India's Number 1 Education App

## **CHEMISTRY**

# **BOOKS - JEEVITH PUBLICATIONS CHEMISTRY (KANNADA ENGLISH)**

# ALCOHOLS, PHENOLS AND ETHERS

#### Questions

1. What are alcohols? Give example.

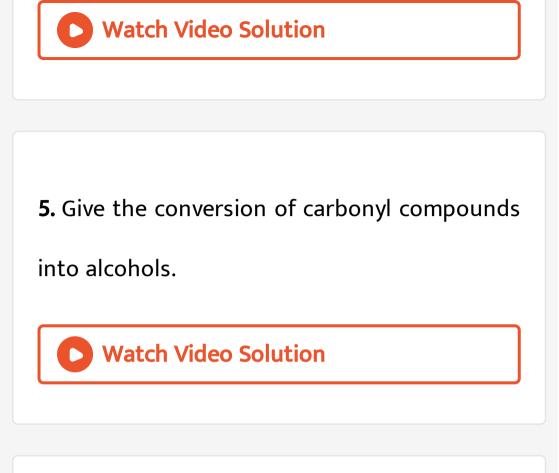
**2.** What are phenols? Give example.

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**3.** What are primary, secondary and tertiary alcohols?



**4.** Give the conversion of alkenes into alcohols.



**6.** Give the conversion of carboxylic acids into alcohols.

7. Explain the preparation of phenols from cumene.

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8. Alcohols of lower molecular mass of phenols

are solubel in water. Give reasons

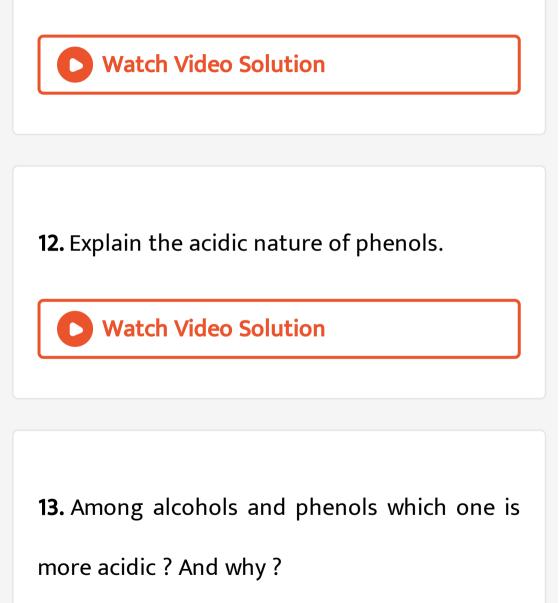
9. The boiling points of alcohols and phenol

are high. Give reason.

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**10.** How boiling points varies when number of carbon atoms Increases in linear and branched alcohols.

**11.** Explain the acidic nature of alcohols.



14. What is the effect of

Electron withdrawing group on acidity of phenols

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**15.** What is the effect of

Electron donating group on acidity of alcohols.



16. What is the effect of

Boiling point of alcohols on increasing

number of carbon atoms.

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17. What is the effect of the group on the

acidity of phenols?

 $CH_3$ 

18. What is the effect of the group on the acidity of phenols?  $-NO_2$ 

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**19.** Explain esterification reaction with an example.

20. What is acetylation reaction? Explain the

acetylation of salicylic acid.

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**21.** What is Lucas reagent: Give its reaction with primary  $(1^{\circ})$  and tertiary  $(3^{\circ})$  alcohols?

22. Explain the dehydration of primary, secondary and tertiary alcohols.
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**23.** Explain the mechanism of dehydration of ethanol



**24.** What happens when  $1^\circ, 2^\circ, 3^\circ$  alcohols

are passed over heated heated at 573 K.



#### **25.** Complete the following reactions.

 $RCH_2OH \xrightarrow[573K]{Cu}$ ?



**26.** Complete the following:

#### $CH_3-CH=CH_2+H_2O ightarrow$ .

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27. Give two methods of conversion of primary

alcohol to aldehyde.



**28.** i) Identifiy 'A' and 'B' in the following equations.

 $CH_3-CH=CH_2\stackrel{H_2rac{\emptyset}{H^+}}{\longrightarrow}A\stackrel{CrO_3}{\longrightarrow}B$ 

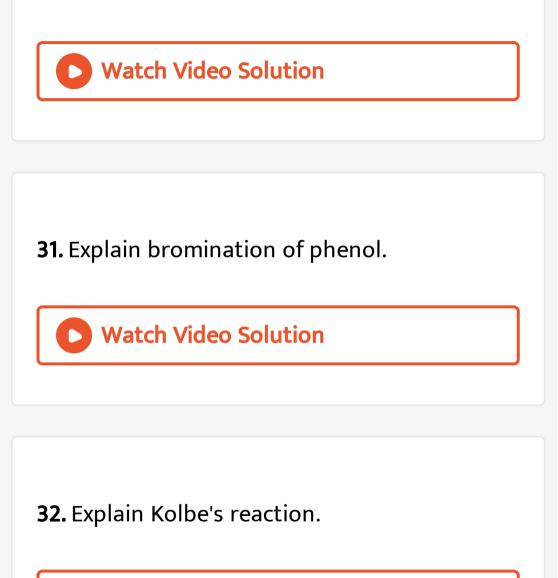
ii) What is Lucas reagent?

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### 29. Give the conversion of secondary alcohol

to ketone.

**30.** Explain nitration of phenol.

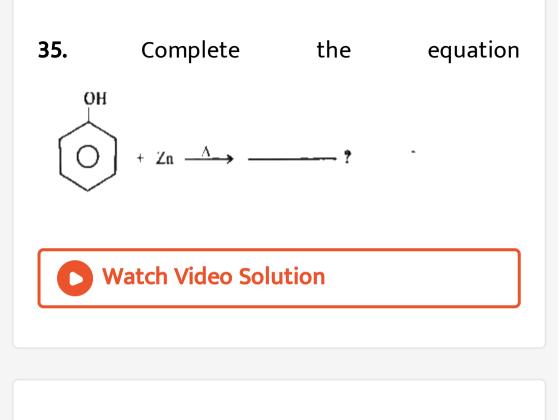


**33.** Explain Reimer-Tiemann reaction.



#### 34. What happens when phenol is heated with

zinc dust? Give equation.



**36.** Explain the oxidation of phenol with chromic acid.



**37.** How methoanol is produced commercially?

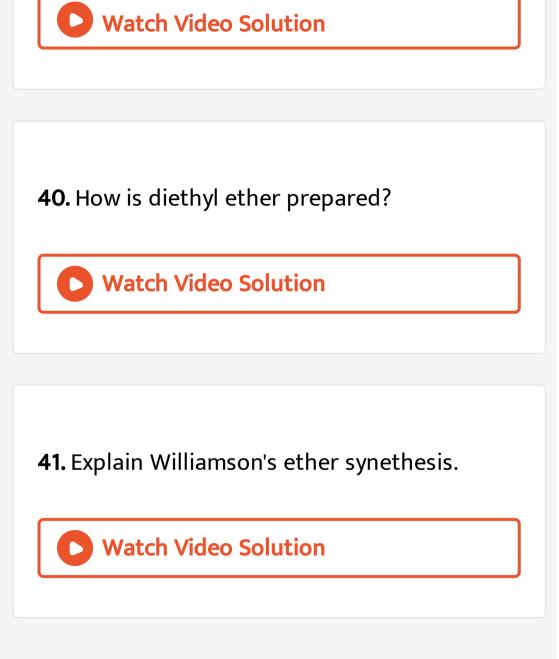


#### 38. Name the alcohol which is called as wood

spirit.

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**39.** How ethanol is mamufactured from molasses.

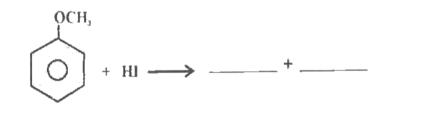


**42.** Complete the following equations:

#### $CH_3 - O - C_2H_5 + HI$

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**43.** Complete the following equations:



**44.** Complete the following equations:

$$CH_3 - egin{array}{c} CH_3 \ dots \ CH_3 - CH_3 \ dots \ CH_3 \ dots \ CH_3 + HI 
ightarrow \ CH_3 + HI 
ightarrow$$



45. What is the action of bromine in ethanoic

acid on anisole?

**46.** Explain Friedel-Crafts alkylation of anisole.



**47.** How anisole reacts with acetyl chloride  $[CH_3COCl]$  in the presence of anhydrous  $AlCl_3$ ? Write the chemical equation for the reaction.

48. Write the IUPAC name of major product

formed in Friedel-Crafts acylation of anisole.

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**49.** A carbonyl compound (P) with the formula  $C_2H_4O$  reacts with  $CH_3MgX$  followed by hydrolysis to form an alcohol (Q). Name the alcohol Q.



50. Name the major product formed when the

vapours of following alcohols are passed over

hot cooper at 573K.

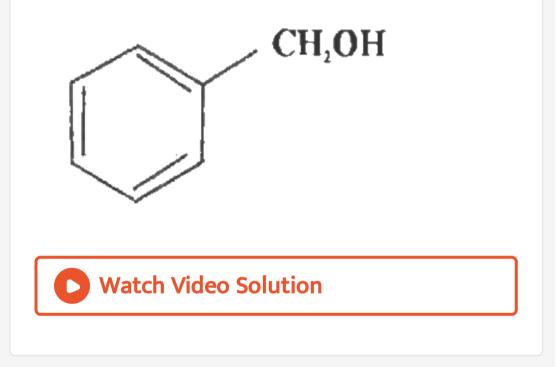
 $CH_3 - CH(OH)CH_3$ 



51. Name the major product formed when the

vapours of following alcohols are passed over





**52.** Arrange water, ethanol and phenol in increasing order of a acidity and give reason for your answer.

**53.** A carboxylic acid is treated with an alcohol in presence of Conc.  $H_2SO_4$ . Name the reaction. Give its general equations.

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**54.** Name the major product formed when sodium phenoxide is heated with carbon dioxide at 400K and at 4 to 7 atmospheric pressure. What is the name of the reaction?



55. Mention the major product formed in the

following

 $C_2H_5OH \xrightarrow{\operatorname{Conc.}H_2SO_4}{443K}$ 

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#### 56. Mention the major product formed in the

following

 $C_2H_5OH \xrightarrow[443K]{ ext{Conc.}H_2SO_4}$ 

**57.** On treating phenol with chloroform in presence of aqueous sodium hydroxide at 340 followed by acid hydrolysis give the product. Write the name of the product

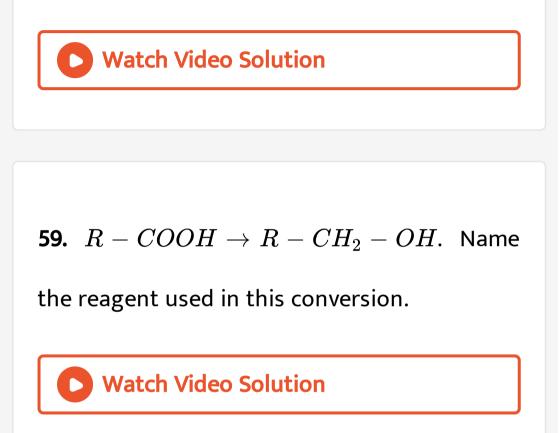
while the hume of the product



# **58.** On treating phenol with chloroform in presence of aqueous sodium hydroxide at 340

followed by acid hydrolysis give the product.

Give the name of the reactions.



**60.** An organic compound with molecular formula  $C_6 H_6 O$  gives white ppt with bromine

water. Identify the functional group in the compound. Write the chemical equation for the reaction.