**KSHITIJ TUTORIALS**

**(**Shop no. 15, First Floor Tropical lagoon shopping center, Anand Nagar, Thane West**)**

**(Alcohols, Phenols and Ether)**

Standard :- XII (CBSE Board) Marks :- 25 Time:- 1 hr

I). Give the structures of the following 5 Marks

1. (i) 2 – Methylbutan – 2 –ol

(ii) 1 – Phenylpropan – 2 – ol

(iii) 3 , 5 – Dimethylhexane – 1 , 3 , 5 – triol

(iv) 2, 3 – Diethylphenol

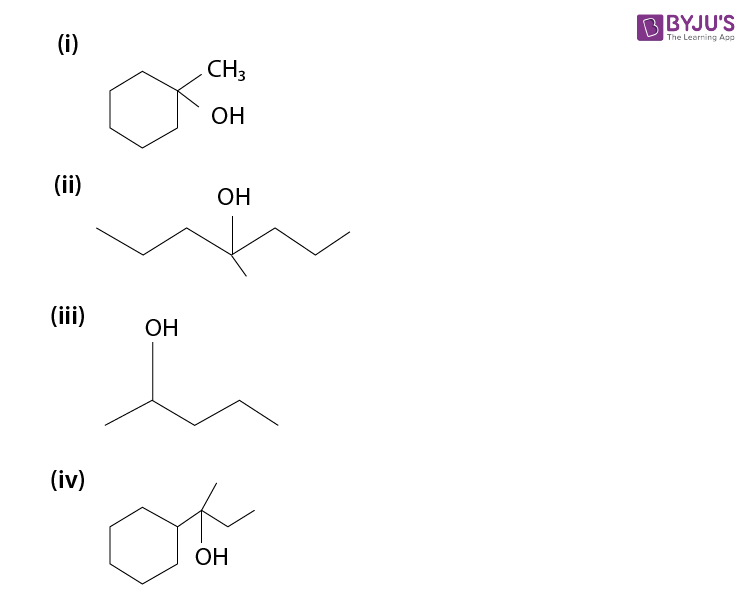
(v) 1 – Ethoxypropane

II). Answer the following 10 Marks

1. **Explain why propanol has higher boiling point than that of the hydrocarbon, butane.**
2. **While separating a mixture of ortho and para nitrophenols by steam distillation, name the isomer which will be steam volatile. Give reason.**
3. **Write a chemical reaction for the preparation of phenol from chlorobenzene.**
4. **Give two reactions that show the acidic nature of phenol. Compare acidity of phenol with that of ethanol.**
5. **Explain the following with an example.**  
   **(i) Kolbe’s reaction.**  
   **(ii) Reimer-Tiemann reaction.**

**III). Answer in detail 10 M**

1. **Name the reagents used in the following reactions:**  
   **(i) Oxidation of primary alcohol to a carboxylic acid.**  
   **(ii) Oxidation of primary alcohol to aldehyde.**  
   **(iii) Bromination of phenol to 2,4,6-tribromophenol.**  
   **(iv) Benzyl alcohol to benzoic acid.**  
   **(v) Dehydration of propan-2-ol to propene.**
2. **Illustrate with examples the limitations of Williamson synthesis for the preparation of certain types of ethers.**
3. **Show how would you synthesise the following alcohols from appropriate alkenes.**

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