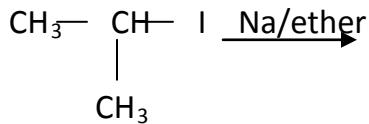
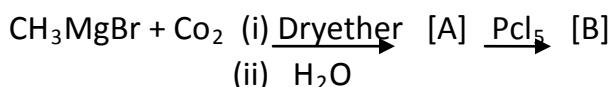


1. Give IUPAC name of Acrolein
 2. What happens when phenol is reacted with excess of bromine water?
 3. Predict the product:



4. Give formula of A and B



5. Draw the structure of t – butylamine
 6. Why are primary amines have higher boiling point than tertiary amines?
 7. Give IUPAC name of

- (i) $\text{CH}_3\text{CH}_2\text{OH}$ (ii) $\text{CH}_3\text{CH}_2\text{CH}_2\text{OCH}_3$

8. Explain why: Alkyl halides though polar, are immiscible with water.
 9. The treatment of alkyl chlorides with aqueous KOH leads to the formation of alcohols but in presence of alcoholic KOH, alkenes are major products. Explain.
 10. (i) Out of Br and I ions, which is better nucleophile & why?
(ii) Which will have a higher boiling point I – Chloropentane or 2-chloro-2-Methylbutane?
Justify your answer.

11. In separating a mixture of ortho and para nitrophenols by steam distillation, name the isomer which is steam volatile. Give reason.

12. Write the names of reagents and equations for the synthesis of given ethers by Williamson's synthesis: (i) I - Methoxyethane (ii) I - propoxypropane

13. Write the equation for the reaction of HI with:

- 14 Write chemical test to distinguish between:

Write the chemical equation for each also.

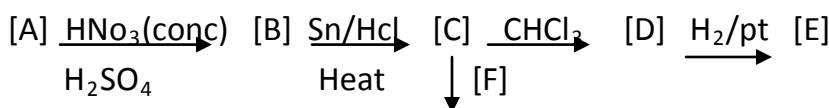
15. Convert: (i) Ethanol to 3-hydroxybutanal (ii) Propanal to Butanone
(Not more than 2 steps)

17. Describing the method for the identification of primary, secondary and tertiary amines. Also write the chemical equations.

18. Complete the reaction and name the reaction:

- $$(i) \text{C}_6\text{H}_5\text{NH}_2 + \text{CHCl}_3 + \text{alc. K}_2\text{H}\xrightarrow{\hspace{1cm}} \quad (ii) \text{RCOHNH}_2 + \text{Br}_2 + \text{NaOH} \xrightarrow{\hspace{1cm}}$$

19. Write the structure of reagents / organic compounds A to F in the given sequence reaction



20. Write short notes on the following:

21. Give equation for the following chemical reactions:

- (i) Oxidation of propan-1-ol with alkaline KMnO_4 solution
 - (ii) Action of dilute HNO_3 on phenol
 - (iii) Friedel crafts acetylation of anisol

22. Explain why:

- (i) Phenols are acidic in nature
 - (ii) Sulphuric acid is not used during the reaction of alcohols with KI
 - (iii) Chloroform is not used as anesthetic these days

23. An unknown aldehyde [A] on reacting with alkali gives 1,3-hydroxyaldehyde which loses water to form an unsaturated aldehyde but -2-enal. Another aldehyde [B] undergoes disproportion reaction in the presence of concn. alkali to form products [C] and [D]. The compound [C] is an aryl. alcohol with formula C_7H_8O . (i) Identify [A], [B] & [D] (ii) Name the products when [B] reacts with zinc amalgam and hydrochloric acid.

24. Identify A, B, C, D, E R and R in the following:

