- Q) Sodium salt of which acid will be needed for the preparation of propane ? Write chemical equation for the reaction.
- A) Butanoic acid,  $CH_{3}CH_{2}CH_{2}COO^{-}Na^{+} + NaOH \xrightarrow{CaO}$  $CH_{3}CH_{2}CH_{3} + Na_{2}CO_{3}$

- 2.Why iodination of alkane is done in presence of HIO3 or HNO3 ?
  3.Convert the following 1) ethanoic acid into methane 2) ethanoic acid into ethane
- A) 2.Oxidising agent like HIO<sub>3</sub> /HNO<sub>3</sub> is added during iodination for reduction of HI into Iodine to prevent reversible reaction
  - 3 (1)Decarboxylation by heating with sodalime(2)By Kolbe's electrolysis