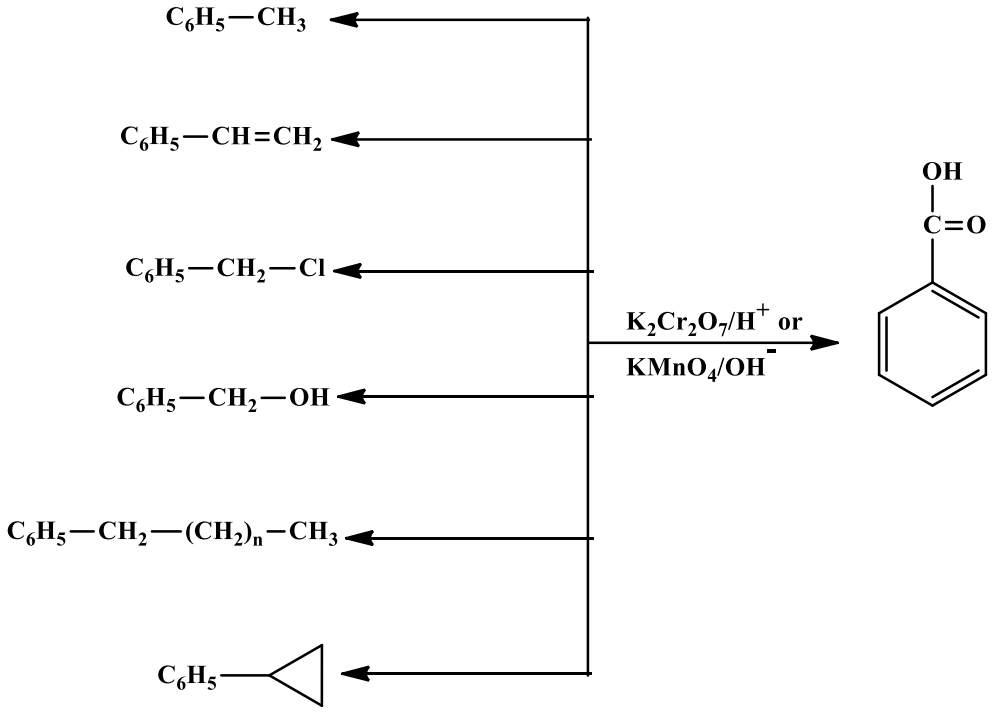
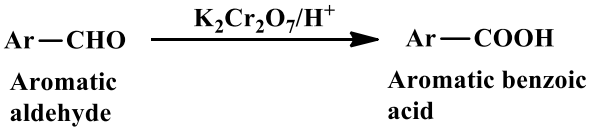
## METHODS OF PREPARATIONS OF AROMATIC CARBOXYLIC ACIDS

1. **Oxidation of alkyl benzene and other benzene derivatives containing side chain:**
   The side chain on oxidation is converted to carboxyl group (-COOH), hence the benzene ring is sufficiently stable towards oxidising agents.

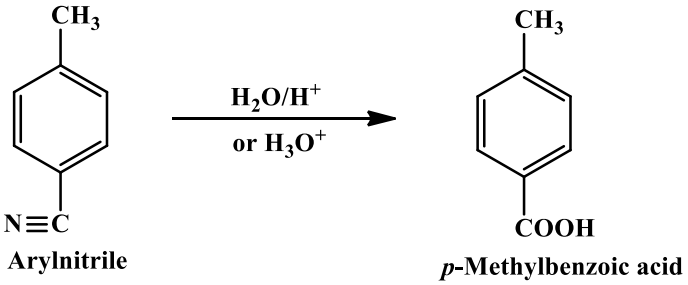



   **Note:** The oxidation of side chain, it is oxidised all the way back to the carbon atom linked to aromatic ring, due to greatest reactivity of benzylic carbon atom.

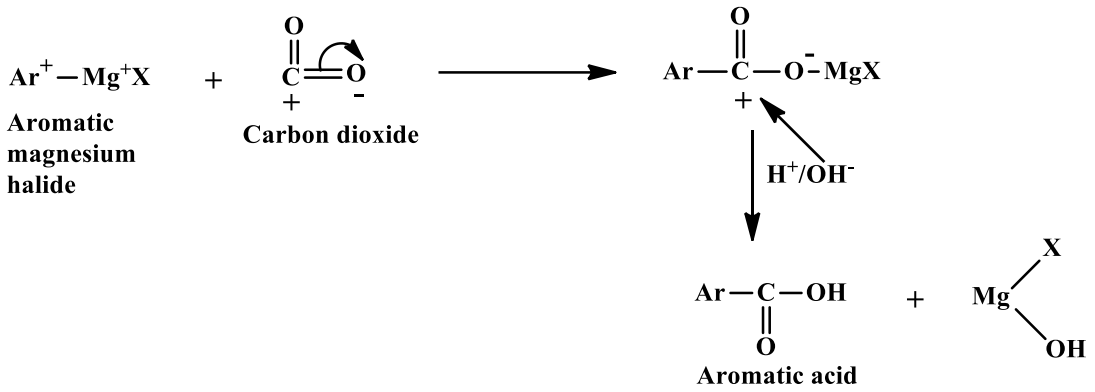
2. **Oxidation of aromatic aldehydes:**
   Aromatic aldehyde on oxidation give aromatic carboxylic acid.




3. **Hydrolysis of aryl nitriles:**
   Aryl nitriles on hydrolysis gives corresponding acids.




4. **From Grignard's reagent:**
   Aryl magnesium halides, on reaction with carbon dioxide, produce aromatic acids.




5. **By Friedel Craft's reaction:**
   Reaction of arenes with carbonyl chloride in the presence of anhydrous aluminium chloride gives aryl chloride which, on hydrolysis, form aromatic acids.