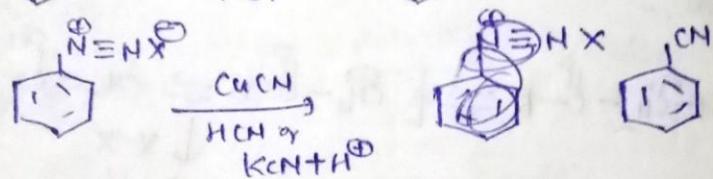
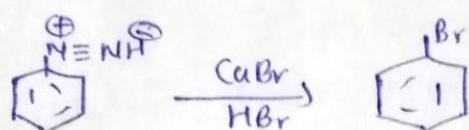
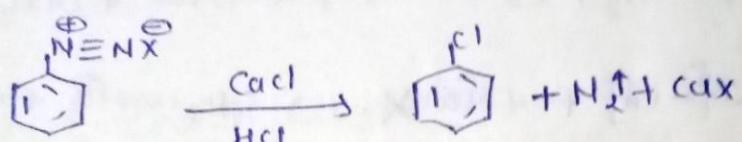
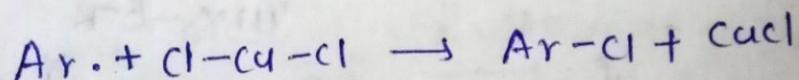


Sandmayer reaction:- The diazonium group can be replaced by chloro, bromo, or cyano group. The replacement proceed in the presence of the corresponding cuprous salts dissolved in corresponding halogen acids.

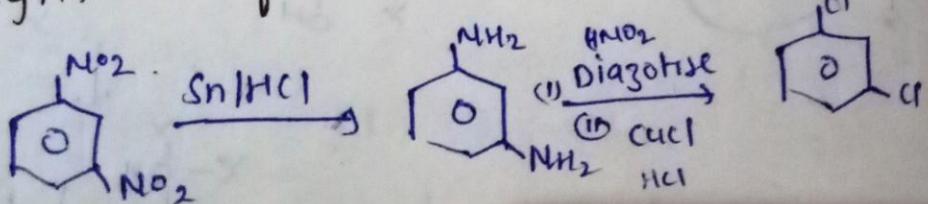


Mechanism:-

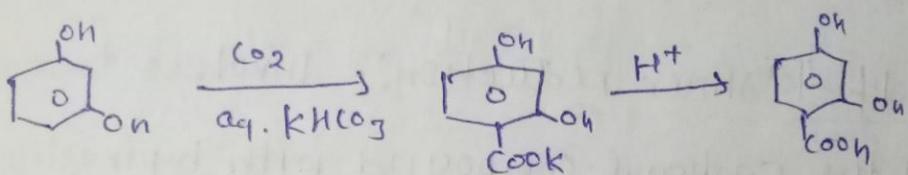
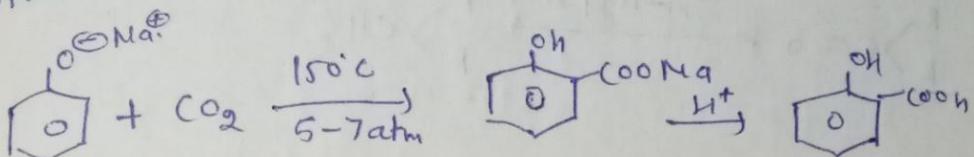


Application:-

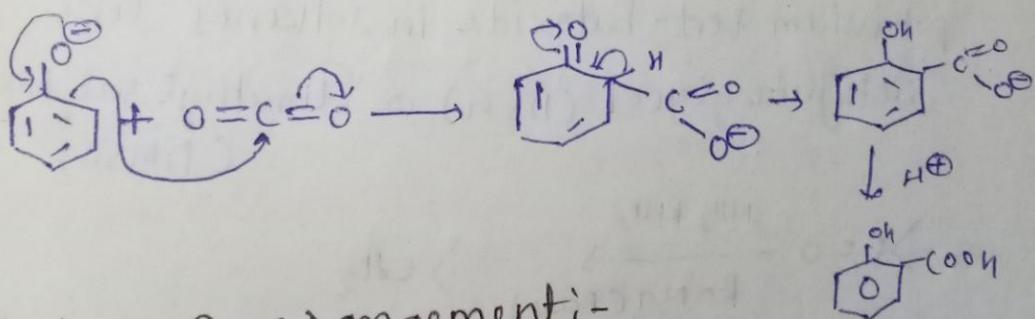
(i) synthesis of m-dichlorobenzene.



Kolbe - Kolbe reaction or Schmitt reaction:- When phenoxide is treated with carbon dioxide gas under pressure a carboxyl group is introduced, preferably in ortho position to the OH group into the aromatic nucleus to form salicylic acid.



Mechanism:-



Fries - Rearrangement:-

The rearrangement of a phenolic ester into an ortho / para hydroxy ketone on heating with a Friedel-Crafts catalyst most commonly with AlCl_3 is known as Fries rearrangement.

