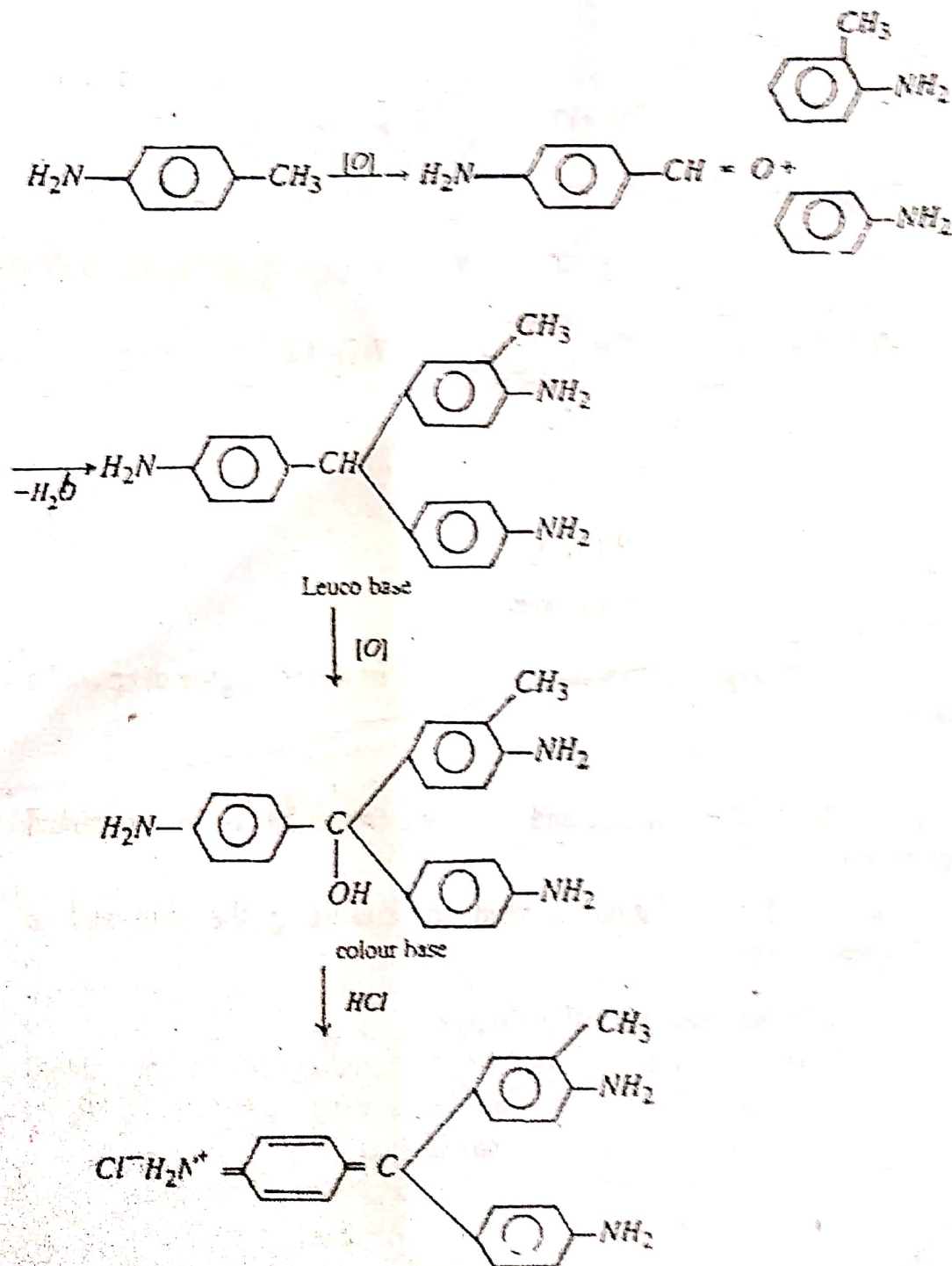


Uses : 1. For directly dyeing silk, wool, jute and leather. 2. For dyeing cotton a green colour after mordanting, 3. For staining host tissue in plants infected with fungi, 4. For staining bacterial spores with safranin as counterstain, 5. As a spot test reagent for detecting  $H_2SO_4$  and cerium and 6. As a topical antiseptic for bacterial and mycotic infections.

### (2) Resaniline, Fuchsine or Magenta

It is prepared by oxidation of an equimolar mixture of aniline, *o*- and *p*-toluidines with nitrobenzene in presence of iron fillings. The product is a mixture of para-rosaniline in which the latter is the main.

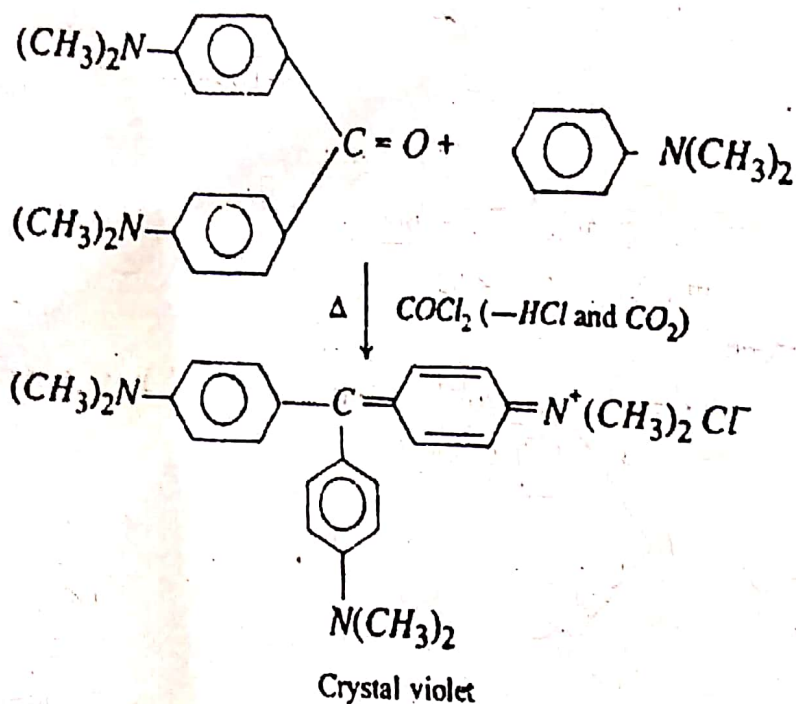


The crystals of rosaniline have a green metallic lusture. It dissolves in water giving deep red solution. Upon decolourisation by  $\text{SO}_2$ , Schiff's reagent is obtained. It gives pink colour with aldehydes.

Uses : 1. In the preparation of Schiff's reagent 2. It dyes wool and silk directly imparting violet red colour. Cotton is dyed after mordanting with tannin.

### (3) Crystal Violet

It is prepared by heating Michler's ketone with dimethylaniline in presence of  $\text{POCl}_3$  or  $\text{COCl}_2$ .



It has bronzy-green crystals. It dissolves in water to give deep violet solutions.

Uses :

1. As direct dyes for silk and wool but cotton has to be mordanted before dyeing.
2. 0.5% of its solution is used for sterilising the skin and in gynecological practice.

**Q.5. Write short note on phthalein dyes.**

**Ans. : Phthalein Dyes :** These are prepared by condensing phthalic anhydride with phenols in the presence of a dehydrating agent. Pheno!phthalein, Fluorescein and Eosin are important phthalein dyes.

**1. Phenolphthalien :** It is prepared by condensating phthalic anhydride with phenol (1 : 2) in the presence of conc.  $\text{H}_2\text{SO}_4$