CHAPTER - VI

S U M M A R Y

SUMMARY

A successful attempt is made in this investigation to synthesis & characterise mixed Schiff base complexes of hydroxy aldehydes and hydroxy ketones with aliphatic, aromatic and heterocyclic mono and diamines as p;rimary amines. An attempt is also made to evaluate their applications as pigments and bioactive agents. All the complexes synthesised are in good agreement with the expected structure. The complexes are either mononuclear or binuclear in nature with distorted octahedral geometry. Most of them possess two water molecules except anthranilic acid complexes.

The Schiff base complexes are also found to be good pigments for woolen and cotton fabrics due to the presence of chromophoric azomethine group. They possess good rubbing and light fastness.

Almost all the complexes are found to be bioactive in nature. The complexes are more bioactive than free metal ions or free organic ligand. The activity is found to increase due to the presence of $-OCH_3$, -Cl · · and > C = N groups. The activity is found to decrease with

increase in the number of aromatic groups.

These complexes can also be further studied for their luminescence properties and more structural support can be added by X-ray study.