LITERATURE REVIEW:
Schiff bases derived from aromatic amines and aromatic aldehyde have been found to possess the pharmacological activities such as antimalarial (Li et. al., 2003) anticancer (Villar et. al., 2004) antibacterial (Venugopal et. al., 2008) antifungal (Pandey et.al., 2003) antitubercular (Bhat et. the assistance of al., 2005), anti-inflammatory, antimicrobial (Wadher et. al., 2009) and antiviral (Karthikeyan et. al., 2006) etc.
Synthesis, characterization, and magnetic behavior of dinuclear nickel(II) complexes of N,N'-substituted dithiooxamides derived from α-amino acids was reported [1].

Synthesis and in Vitro Antiviral Activities of Some New 2-Arylthiomethyl-4-tertiaryaminomethyl substituted derivatives of 6-Bromo-3-ethoxycarbonyl-5-hydroxyindoles was studied and reported in 2004 [2].

Synthesis of some transition metal complexes with Schiff bases derived from 2-formylindole, salicylaldehyde and N-amino Rhodanine. The Schiff base ligands were characterized by elemental analysis, IR, Mass, 1H NMR and electronic spectra. The free ligands and their metal complexes were also screened for antimicrobial activities. The complexes showed more activity against the same organisms under identical experimental conditions [3].

Metal Complexes of sulpha drugs have been reported with appreciable biological activities. However, metal complexation of Schiff base derivatives of sulpha drugs are found to be further successful against bacterial strains [4].

Synthesis of Schiff base is often carried out with acid-catalyzed and generally by refluxing the mixture of aldehyde (or ketone ) and amine in organic medium. However with the assistance of microwave irradiation, it was found that the condensation reaction of salicylaldehyde and various aryl amines could proceed fast and efficiently without solvent. The products could be purified simply by re-crystallization in an appropriate solvent or a mixture of solvents. The yields of the product were high [5].

Antimicrobial activity of some Schiff bases derived from 4-amino benzoic acid was evaluated using the Agar Ditch method. The solvents used were 1,4-dioxane and dimethyl sulfoxide. Different effects of the compounds were found in the bacterial strains investigated and the solvents used, suggesting that the antibacterial activity is dependent on the molecular structure of the compound, the solvent used and the bacterial strain under consideration [6].

Catabolism of indole-3-acetic acid and 4- and 5-chloroindole-3-acetic acid in Bradyrhizobium japonicum was reported in Journal of Bacteriology in 1995 [7].
Thermal studies on pyridine-3,4-dicarboxylic acid compounds of cobalt, nickel and copper was reported [8].

Syntheses, characterization and study of the use of cobalt (II) Schiff-Base complexes as catalysts for the oxidation of styrene by molecular oxygen was studied [9].

Pd(II), Pt(II), and Cu(II) complexes of N,N'-bis(methoxy-ylethyl)ethandithioamide synthesis and spectroscopic studies was studied and reported in 2001[10].

Mixed ligand transition metal complexes of Cu(II), Ni(II) and Co(II) ions with Schiff base ligands derived from the condensation of o-hydroxy benzaldehyde with amino phenols and nitrogen donor amine bases was reported. The authors have also studied the antibacterial and antifungal activities of the compounds[11].

Synthesis and characterization of nickel(II) complexes with some tetraaza macrocyclic ligands was reported in Indian Journal of Chemistry in 1996 [12].

N,N' -substituted dithiooxamides derived from alkyl-α-amino acids or from glycylglycine: acid dissociation properties in aqueous solution and crystal and molecular structures of N,N' -bis(carboxymethyl) dithiooxamide (GLYDTO) and N,N' -bis(1-carboxyethyl) dithiooxamide (ALADDTO) was reported [13].

Structures of [M-44]+ ions in the electron impact and fast atom bombardment mass spectra of the β-blocker nipradilol with nitrate ester group was studied by Mass Spectrometry [14].

Quantitative liquid chromatography-mass spectrometry determination of isatin in urine using automated on-line extraction was reported in Journal of Chromatography in 2002 [15].

Synthesis and spectral studies of manganese(II), cobalt(II), nickel(II), copper(II), zinc(II), cadmium(II) and mercury(II) complexes of 4-oxo-4H-1-benzopyran-3-carboxaldehyde hydrazone derivatives was reported in Indian Journal of Chemistry in 1996 [16].
Copper(II), cobalt(II), nickel(II) and zinc(II) complexes of Schiff base derived from benzil-2,4-dinitrophenylhydrazone with aniline was reported in Journal of Chemical Sciences in 2004 [17]

Synthesis of a novel 14-membered macrocyclic Schiff base derived from 3-cinnamalideneacetanalide and o-phenylenediamine which acts as a tetradentate and strongly conjugated ligand to form a cationic solid complex with metal ions has been reported. The ligand and the complexes were characterized by the usual spectral and analytical techniques. The antimicrobial tests were also recorded and gave good results in the presence of metal ions with ligands [18].

Neutral complexes of Cu(II), Ni(II), and Co(II) with a Schiff base derived from benzaldehyde and sulfonamide were synthesized and characterized the basis of FTIR, UV-VIS, molar conductance and atomic absorption spectroscopic data. These metal complexes were also screened for their antibacterial activity. The metal complexes showed enhanced antibacterial activity as compared to uncomplexed ligand [19].

Mild template synthesis of (2,8-dithio-3,7-diaza-5-oxanonanedithioamido-1,9) aquohydroxocobalt(III) in the KCoFe(CN)6 gelatin-immobilized matrix systems was studied and reported [20].

A new series of transition metal complexes of Cu(II), Ni(II), Co(II), Mn(II), Zn(II), VO(IV), Hg(II) and Cd(II) have been synthesized from the Schiff base (L) derived from 4-aminoantipyrine,3-hydroxy-4-nitrobenzaldehyde and o-phenylenediamine. Structural features were obtained from elemental analysis, magnetic susceptibility, molar conductance, mass, IR, UV-Vis. 1H NMR and ESR spectral studies. Antimicrobial screening tests gave good results in the presence of metal ion in the ligand system [21].

Tetradentate dithiooxamide ligands and their nickel complexes. Synthesis, characterization, and crystal structure of a mononuclear neutral complex, Ni(c-C5H9)NHC(S)N(CH2)2NC(S)C(S)NH(c-C5H9) were reported in 1991 [22].

Application of Schiff Base derived from Sulfanilamide as an Acid Base indicator was presented in J.Iran.Chem.Soc. in 2009. The reagent solution shows a reproducible change in its colour due
to the addition of acid and base. A UV Vis spectrophotometer characterization and acid-base equilibrium study of the reagent for its possible use as an indicator were investigated. [23].

Synthesis and antibacterial screening of hydrazones, Schiff and Mannich bases of isatin derivatives was reported in European Journal of Medicinal Chemistry in 2001 [24].

Anticonvulsant activity of hydrazones, Schiff and Mannich bases of isatin derivatives were reported in European Journal of Pharmaceutical Sciences in 2002 [25]

Synthesis and antimicrobial activity of Schiff and Mannich bases of isatin and its derivatives with pyrimidine was reported in 1999 [26]

. Synthesis, antibacterial, antifungal and anti-HIV activities of norfloxacin Mannich bases were reported in European Journal of Medicinal Chemistry [27]

Synthesis of the better antimicrobial compounds using different substituted aromatic aldehydes were chosen as starting material for synthesis of Schiff base. Antibacterial and antifungal activity was done in comparison with ciprofloxacin and ketoconazole as standard to reveal the potency of synthesized derivatives [28].

Schiff bases are versatile ligands which are synthesized from the condensation of primary amines with carbonyl groups. These compounds are very important in medicinal and pharmaceutical fields because of their wide spectrum of biological activities [29].

Substituted sulfonamides were reacted with different aromatic aldehydes to form Schiff bases. TLC ascertained the purity of synthesized compounds on
silica gel G coated plates and visualized by using iodine vapour. The structures of synthesized compounds were confirmed by various techniques. The derivatives were subjected to antimicrobial activity using different bacterial strains [30].