



"बेटी बचाओ, बेटी पढ़ाओ"

JAYOTI VIDYAPEETH WOMEN'S UNIVERSITY, JAIPUR
Faculty of Education & Methodology

Teacher Name & Designation : **JV'n Dr. Mangat Singh**, Assistant Professor
Program Name : **B.Sc. B.Ed. (ZBC/PCM)**
Semester : **V**
Course/Subject Name : **Transition Elements, Coordination Compounds And Chemical Kinetics**

By the end of the course, the students will be able to:

Sr. No.	Course Outcome
1	Relate the electronic configuration to the properties and structure of transition metals and their compounds.
2	Understand the general characteristics; ionic radii, oxidation states, magnetic behavior, spectral properties, and stereochemistry of transition metal compounds.
3	Understand the position of f-block elements, and their properties spectral and magnetic. Purification of important inner transitional elements
4	Understand the terms, ligand, and denticity of ligands, chelate, coordination number, and use standard rules to name coordination compounds.
5	Have an understanding of isomerism in coordination compounds, effective atomic number (EAN) concept, and carbonyl compounds of d-block elements
6	Explain the meaning of the terms Δ_o , Δ_t , pairing energy, CFSE, high spin and low spin, and magnetic properties and colour of complexes based on Valence band Theory (VBT) and Crystal Field Theory (CFT).
7	Have an understanding of rate law and rate of reaction, theories of reaction rates, order of reaction, and factors that affect the rate of reaction; catalysts temperature, and concentration of reactants.
8	Have an understanding of mathematical characteristics of simple chemical reactions – zero order, first order, second order, pseudo first order, half-life time of chemical reaction
9	Explain the surface phenomenon; type of absorption; physical and chemical adsorptions, absorption theory; Langmuir adsorption Isotherm, BET, and Gibbs Isotherms and their applications in daily life situations.