

B.Sc. III Inorganic Chemistry	
1 st week of august	Metal-ligand Bonding in Transition Metal Complexes Limitations of valence bond theory, an elementary idea of crystal-field theory
2 nd week of august	Crystal field splitting in octahedral complexes
3 rd week of august	Crystal field splitting in tetrahedral complexes
4 th week of august	Crystal field splitting in square planar complexes
1 st week of september	Factors affecting the crystal-field parameters.
2 nd week of september	Doubt Class
3 rd week of september	Thermodynamic and Kinetic Aspects of Metal Complexes A brief outline of thermodynamic stability of metal complexes
4 th week of september	Thermodynamic stability of metal complexes
1 st week of october	Factors affecting the stability
2 nd week of october	Substitution reactions of square planar complexes of Pt(II). Substitution reactions of square planar complexes of Pt(II).
3 rd week of october	Magnetic Properties of Transition Metal Complexes Types of magnetic behaviour
4 th week of october	Methods of determining magnetic susceptibility
1 st week of november	Spin-only and eff values, orbital contribution to magnetic μ
2 nd week of november	Application of magnetic moment data for 3d-metal complexes.
3 rd week of november	Electron Spectra of Transition Metal Complexes Types of electronic transitions, selection rules for d-d transitions
4 th week of november	Spectroscopic ground states, spectrochemical series. Orgel-energy level diagram for d1 and d9 states,
1 st week of december	Discussion of the electronic spectrum of $[\text{Ti}(\text{H}_2\text{O})_6]^{3+}$ complex ion.
2 nd week of december	Revision/ Class test