Curriculum Plan

(Odd Semester 2024-2025) Semester-V

Teacher Name: Dr. Shiv Kumar

Name of Paper: B.Sc. (H), Coordination Chemistry and its application in biological

systems (1 Periods Per Week)

Contents	Allocations of Lectures	Month wise Schedule to be followed	Tutorials/ Assignment/ Presentation
Introduction to Coordination compounds: Brief discussion with examples of types of ligands, denticity and concept of chelate. IUPAC system of nomenclature of coordination compounds (mononuclear and binuclear) involving simple monodentate and bidentate ligands. Structural and stereoisomerism in complexes with coordination numbers 4 and 6. Thermodynamic and Kinetic aspects of Metal Complexes: A brief outline of thermodynamic and kinetic stabilities of metal complexes and factors affecting the stability. Substitution reactions of square-planar complexes – Trans effect: cisplatin and trans platin.	-	August – 3 rd to October – 19 th October – 26 th to November of 2 nd week	Related Problems, Class Test, Home - Register Overview, -Related Problems, -Previous Year Qsn Papers discussion, - Assignm ent