

S.S. Jain Subodh PG (Autonomous) College Jaipur

Department of Chemistry

Syllabus of CIA October 2026

Class	Subject	Unit	Name
B.Sc I sem	Chemical bonding, Chemistry of s - block & p - block elements, Mathematical concepts, States of matter and Nuclear Chemistry	Unit I	Ionic solid, metallic bond, weak interactions, Periodicity of s and p-block elements and s-block elements
		Unit III	Mathematical concepts, liquid and solid state
B Sc III sem	Chemistry of Transition Elements, Lanthanides & Actinides, Chemistry of Alcohols, Phenols, Ethers, Epoxides, Aldehydes & Ketones, Basic Enolate Chemistry, Thermodynamics, Thermochemistry and Chemical Equilibria.	Unit II	Alcohols, phenols, ethers and epoxides
		Unit IV	Thermodynamic-I, Thermochemistry and Chemical equilibrium
B.Sc V sem,	Paper I: Inorganic and Organic Chemistry-V (BSCH 501 A)	Unit -I Unit IV	Coordination Compounds Organometallic Compounds
	Paper II: Organic and Physical Chemistry-V (BSCH 502 B)	Unit -I Unit III	Carbohydrates Electrochemistry-II
B.Sc I sem, Hons	Paper I: Chemical Bonding, Reaction Mechanism, Mathematical Concepts, Chemical Kinetics and Gravimetric Analysis	Unit I	Ionic Solids and metallic bond
		Unit II	Covalent bond, MOT, weak interaction
	Paper II: States of matter, Chemical kinetics, Thermodynamics and thermochemistry	Unit I	Ideal and real gases
		Unit IV	Chemical kinetics
B.Sc III sem, Hons	Paper I: Coordination Compounds, Metal-Ligand Bonding in Transition Metal Complexes, Alcohols, Phenols, Ethers and Epoxides, Chemical Equilibrium & Thermodynamics –II, Chromatography and Ion Exchange Methods	Unit II	Alcohols, Phenols, Ethers and epoxide
		Unit III	Chromatography and Ion exchange methods
	Paper II: Magnetic Properties of Transition Metal Complexes, Lanthanides and Actinides, Aldehydes and Ketones, Basic Enolate Chemistry, Electrochemistry I, Nano chemistry, Conductometric & Potentiometric Titrations and Air & Water Pollutants.	Unit III	Electrochemistry-I and introduction to Nano-chemistry
		Unit IV	Conductometric and potentiometric titrations, air and water pollutants
B.Sc V sem, Hons	Paper I: Inorganic and Organic Chemistry-V (SSCH 501 A)	Unit -I Unit IV	Coordination Compounds Organometallic Compounds
		Unit -I Unit III	Carbohydrates Electrochemistry-II
	Paper III: Analytical Chemistry-V (SSCH 503)	Unit I	Electrogravimetry and Coulometry
		Unit II	Polarography