

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

Teacher Name & Designation : JV'n Dr. Mangat Singh, Assistant Professor

Program Name : M.Sc. Chemistry

Semester : I

Course/Subject Name : Physical Chemistry

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

Sr. No.	Course Outcome
1	Know about the factors affecting reaction rate, rate constant, Arrhenius equation, activation energy, and its experimental determination, and simple collision theorymechanism of bimolecular reaction.
2	Understand the types of reactions; Parallel, consecutive, and reversible reactions, and their rate equations.
3	Learn various theories to understand the kinetics of complex reactions; Lindemann's theory, Hinshelwood's theory, Rice Ramopereger, and RKKM theory for unimolecular reaction.
4	Explain the surface phenomenon; type of absorption; physical and chemical adsorptions, Kelvin equation, absorption theory; BET, and Gibbs Isotherms, Critical micellar concentration (CMC)and their applications in daily life situations.
5	Know about the polymer classifications, Kinetics and Mechanism of polymerization (Chain reaction and step growth), Number and Mass average molecular mass, and Mass determination methods: Osmometry, diffusion, and light scattering methods.