

Shri Shivaji Science College, Amravati

E – Contents for Under Graduate Students

Department of Chemistry

B. Sc. Part – I (Semester – I)

Notes and PowerPoints		Links to Video Lectures	
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B. Sc. Part – II (Semester – III)

Notes and PowerPoints		Links to Video Lectures	
Topic	Link	Topic	Link
Surface tension, Defination , Experimental Determination Effect of temperature, Applications	https://www.slideshare.net/ProfYogitaThakare/lect-1-surface-tension		
Gibbs free energy and Helmholtz free energy	https://www.slideshare.net/ProfYogitaThakare/lect-2-gibbs-free-energy-and-helmholtz-free-energy		
Gibbs Helmholtz equation, Chemical potential, Gibbs Duhem equation	https://www.slideshare.net/ProfYogitaThakare/lect-3-gibbs-helmholtz-equation-chemical-potential-gibbs-duhem-equation		
Chemical potential of an ideal gas Vant hoff reaction isotherm-equation	https://www.slideshare.net/ProfYogitaThakare/lect-4-chemical-potential-of-an-ideal-gas-vant-hoff-reaction-isothermvant-hoff-equation-238439398		
Problems on thermodynamic equilibrium	https://www.slideshare.net/ProfYogitaThakare/lect-6-problems-on-thermodynamics		
Surface tension, Defination , Experimental Determination Effect of temperature, Applications	https://www.slideshare.net/ProfYogitaThakare/lect-1-surface-tension		
Basic concepts of Thermodynamics	https://www.slideshare.net/ProfYogitaThakare/lect-1-introduction-syllabus-b-sc-ii-sem-iii-basic-concept-of-thermodynamics-238439121		
Phase Transition	https://www.slideshare.net/ProfYogitaThakare/lect-10-phase-transition		
Solvent Extraction	https://www.slideshare.net/ProfYogitaThakare/lect-9-solvent-extraction		

Conductometric Titration	https://www.slideshare.net/ProfYogitaThakare/lect-8-conductometric-titration		
Applications of Nernst Distribution Law	https://www.slideshare.net/ProfYogitaThakare/lect-8-application-of-nernst-distribution-law-copy-copy-242824384		
Conductivity- Cell Constant - Problems	https://www.slideshare.net/ProfYogitaThakare/lect-6-conductivity-cell-constantproblems		
Liquid State- Viscosity	https://www.slideshare.net/ProfYogitaThakare/lect-2-viscosity		

B. Sc. Part – III (Semester – V)

Notes and PowerPoints		Links to Video Lectures	
Topic	Link	Topic	Link
Photochemistry, EMR, parameters of EMR	https://www.slideshare.net/ProfYogitaThakare/lect-1-photochemistry-introductionemrparameters-of-emr		
Interaction of EMR, photochemical and thermal reaction	https://www.slideshare.net/ProfYogitaThakare/lect-2-interaction-of-emr-photochemical-and-thermal-reaction		
Laws of absorption of light	https://www.slideshare.net/ProfYogitaThakare/lect-3-laws-of-absorption-of-light-lamberts-beers-law		
Laws of photochemistry	https://www.slideshare.net/ProfYogitaThakare/lect-4-limitation-of-beers-law-laws-of-photochemistry		
Quantum yield, experimental arrangement, reasons for high and low Quantum yield, problems, photochemical reactions, kinetics of photochemical decomposition of HI, photosensitized reaction, mechanism of photosensitization,	https://www.slideshare.net/ProfYogitaThakare/lect-5-quantum-yield-and-photosensitize-reaction		
Quantum yield, experimental arrangement, reasons for high and low Quantum yield, problems,	https://www.slideshare.net/ProfYogitaThakare/lect-5-quantum-yield-and-photosensitize-reaction		

photochemical reactions, kinetics of photochemical decomposition of HI, photosensitized reaction, mechanism of photosensitization,			

B. Sc. Part – III (Semester – VI)

Rotational and Vibrational Spectroscopy	https://www.slideshare.net/ProfYogitaThakare/lect-23-rotational-vibrational-raman-spectroscopy		
Raman Spectroscopy Introduction	https://www.slideshare.net/ProfYogitaThakare/lect-21-raman-spectroscopy-introduction		
Force constant and problems	https://www.slideshare.net/ProfYogitaThakare/lect-20-force-constant-problems		
Applications of Rotational Spectroscopy	https://www.slideshare.net/ProfYogitaThakare/lect-16-applications-of-rotational-spectroscopy-problems		
Expression for moment of Inertia	https://www.slideshare.net/ProfYogitaThakare/lect-13-expression-for-moment-of-inertia		
Energy Level Diagram and Degree of Freedom	https://www.slideshare.net/ProfYogitaThakare/lect-11-energy-level-diagram-degree-of-freedom		
Electrochemistry	https://www.slideshare.net/ProfYogitaThakare/electrochemistry-b-sc-iiisemvi		
Nuclear Chemistry	https://www.slideshare.net/ProfYogitaThakare/nuclear-chemistry-b-sc-iiisemvi		
Quantum Chemistry	https://www.slideshare.net/ProfYogitaThakare/quantum-chemistryb-sc-iiisemvi		

