

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		
Topic	Link	Teacher	Topic	Link	Teacher
Boron family	https://www.slideshare.net/NitinBansod5/boron-family-newqid=587e4e7e-0d0b-4198-933d-	Dr. N. H. Bansod			
Electronic Displacements:	https://www.slideshare.net/pramodpadole35/sem-i-a-electronic-displacements-by-dr-pramod-r-padole	Dr Pramod R Padole			
Reactive intermediates	https://www.slideshare.net/pramodpadole35/semester-i-b-reactive-intermediates-by-dr-pramod-r-padole	Dr Pramod R Padole			
Aliphatic Hydrocarbons	https://www.slideshare.net/pramodpadole35/semester-i-c-aliphatic-hydrocarbons-by-dr-pramod-r-padole-242708143	Dr Pramod R Padole			
Polarization and Polarizing property	https://www.slideshare.net/GajananDongare/dongare-g-m-bsci-sem-ii-unit-i-polarisation	Dr. G. M. Dongare			
Chemical Thermodynamics	https://drive.google.com/file/d/1WLiWF35MtJ-ucQwuokrh1-V9VshPqaGH/view?usp=sharing	Dr. S. P. Ingole			
Chemical Thermodynamics	https://drive.google.com/file/d/1WLiWF35MtJ-ucQwuokrh1-V9VshPqaGH/view?usp=sharing	Dr. S. P. Ingole			
Chemical Thermodynamics	https://drive.google.com/file/d/1WLiWF35MtJ-ucQwuokrh1-V9VshPqaGH/view?usp=sharing	Dr. S. P. Ingole			

B. Sc. Part – II (Semester – III)

Notes and PowerPoints			Links to Video Lectures		
Topic	Link	Teacher	Topic	Link	Teacher
Thermodynamics	https://docs.google.com/presentation/d/11sxodL5-YdSelQh6FFKrd7ferwXx_u5q/edit#slide=id.p1	Dr. S. K. Rithe			
Colligative Property	https://www.slideshare.net/NitinBansod5/colligative-properties-ppt-sscamtqid=1f148b90-697c-4457-9068-5d94d6543064&v	Dr. N. H. Bansod			

Stereochemistry	https://www.slideshare.net/Munna19/conformation-ug-newedited23110555	Dr. N. R. Thakare			
Paper Chromatography	https://www.slideshare.net/Munna19/paperchromatography-231168806	Dr. N. R. Thakare			
Stereochemistry	https://www.slideshare.net/pramodpadole35/stereochemistry-by-dr-p-r-padole	Dr Pramod R Padole			
Benzoin Condensation	https://drive.google.com/file/d/1OfgKBSi6UlxEze-tgVvFuyjJwR9eWTqz/view?usp=sharing	Dr. S. A. Wadhal			
Reduction of Carbonyl compound	https://drive.google.com/file/d/123nUrlmV0Asz-Oeg5MNE5BK4JlZDFP39/view?usp=sharing	Dr. S. A. Wadhal			
Stereochemistry	https://drive.google.com/file/d/1oivXFW0oLYucLs9wiyWJfj0EmSdpZRS0/view?usp=sharing	Dr. S. A. Wadhal			
Cannizaro Reaction	https://drive.google.com/file/d/1PK_JkRf7PIFP2YvtzaPA6My2wevxobxq/view?usp=sharing	Dr. S. A. Wadhal			
Aldehyde Ketone	https://drive.google.com/file/d/1B9bPAgeXAxmIvYdH-X4UozyWw7sFSJAB/view?usp=sharing	Dr. S. A. Wadhal			
Perkin Reaction	https://drive.google.com/file/d/1UylLexEqQ0Zani6iJcvUjaj-ccNZJ-tG/view?usp=sharing	Dr. S. A. Wadhal			
Reformatsky Reaction	https://drive.google.com/file/d/1C3bbCBcQgAzHRBR9GvRj2BlykPg5WYSH/view?usp=sharing	Dr. S. A. Wadhal			
Mannich Reaction	https://drive.google.com/file/d/1V1Mx5YnZcRCXbl_nXoGAmfSiK2dxTLkD/view?usp=sharing	Dr. S. A. Wadhal			
Stereochemistry	https://drive.google.com/file/d/19Hese5Zn_DT_MZQ9nNapoK2BSUfRwJhyo/view?usp=sharing	Dr. S. A. Wadhal			
Basic concepts of Thermodynamics	https://www.slideshare.net/ProfYogitaThakare/lect-1-introduction-syllabus-b-sc-ii-sem-iii-basic-concept-of-thermodynamics-238439121	Dr. Y. S. Thakare			
Gibbs free energy and Helmholtz free energy	https://www.slideshare.net/ProfYogitaThakare/lect-2-gibbs-free-energy-and-helmholtz-free-energy	Dr. Y. S. Thakare			
Gibbs Helmholtz equation, Chemical potential, Gibbs Duhem equation	https://www.slideshare.net/ProfYogitaThakare/lect-3-gibbs-helmholtz-equation-chemical-potential-gibbs-duhem-equation	Dr. Y. S. Thakare			

Chemical potential of an ideal gas Vanthoffreaction isotherm-equation	https://www.slideshare.net/ProfYogitaThakare/lecture-4-chemical-potential-of-an-ideal-gas-vant-hoff-reaction-isothermvant-hoff-equation-238439398	Dr. Y. S. Thakare			
Problems on thermodynamic equilibrium	https://www.slideshare.net/ProfYogitaThakare/lecture-6-problems-on-thermodynamics	Dr. Y. S. Thakare			
Surface tension, Defination , Experimental Determination Effect of temperature, Applications	https://www.slideshare.net/ProfYogitaThakare/lecture-1-surface-tension	Dr. Y. S. Thakare			
Basic concepts of Thermodynamics	https://www.slideshare.net/ProfYogitaThakare/lecture-1-introduction-syllabus-b-sc-ii-sem-iii-basic-concept-of-thermodynamics-238439121	Dr. Y. S. Thakare			
Gibbs free energy and Helmholtz free energy	https://www.slideshare.net/ProfYogitaThakare/lecture-2-gibbs-free-energy-and-helmholtz-free-energy	Dr. Y. S. Thakare			
Gibbs Helmholtz equation, Chemical potential, Gibbs Duhem equation	https://www.slideshare.net/ProfYogitaThakare/lecture-3-gibbs-helmholtz-equation-chemical-potential-gibbs-duhem-equation	Dr. Y. S. Thakare			
Chemical potential of an ideal gas Vanthoffreaction isotherm-equation	https://www.slideshare.net/ProfYogitaThakare/lecture-4-chemical-potential-of-an-ideal-gas-vant-hoff-reaction-isothermvant-hoff-equation-238439398	Dr. Y. S. Thakare			
Problems on thermodynamic equilibrium	https://www.slideshare.net/ProfYogitaThakare/lecture-6-problems-on-thermodynamics	Dr. Y. S. Thakare			
Surface tension, Defination , Experimental	https://www.slideshare.net/ProfYogitaThakare/lecture-1-surface-tension	Dr. Y. S. Thakare			

Determination Effect of temperature, Applications					
Basic concepts of Thermodynamics	https://www.slideshare.net/ProfYogitaThakare/lect-1-introduction-syllabus-b-sc-ii-sem-iii-basic-concept-of-thermodynamics-238439121	Dr. Y. S. Thakare			
Metallurgy	https://www.slideshare.net/harshaliwankhade/metallurgy-242824511	Dr. H. G. Wankhade			
		Dr. N. A. Kalambe			
Crystalline State	https://drive.google.com/file/d/15fzakRRJuqlZW7XlrJ1_rLf5xSbazg4Z/view?usp=sharing	Dr. S. P. Ingole			
Amorphous Solid	https://drive.google.com/file/d/15fzakRRJuqlZW7XlrJ1_rLf5xSbazg4Z/view?usp=sharing	Dr. S. P. Ingole			
Crystallography	https://drive.google.com/file/d/15fzakRRJuqlZW7XlrJ1_rLf5xSbazg4Z/view?usp=sharing	Dr. S. P. Ingole			
Law of Crystallography	https://drive.google.com/file/d/15fzakRRJuqlZW7XlrJ1_rLf5xSbazg4Z/view?usp=sharing	Dr. S. P. Ingole			
Interplaner distance in cubic system	https://drive.google.com/file/d/15fzakRRJuqlZW7XlrJ1_rLf5xSbazg4Z/view?usp=sharing	Dr. S. P. Ingole			
Inter planer distances ratio is summarized	https://drive.google.com/file/d/15fzakRRJuqlZW7XlrJ1_rLf5xSbazg4Z/view?usp=sharing	Dr. S. P. Ingole			

B. Sc. Part – III (Semester – V)

Notes and PowerPoints			Links to Video Lectures		
Topic	Link	Teacher	Topic	Link	Teacher
Spectroscopy	https://docs.google.com/presentation/d/1EnDR6bwer56kqfoHt8UAfLLX8zTNujCd/e	Dr. S. K. Rithe			

	dit#slide=id.p1				
Photochemistry	https://drive.google.com/file/d/1fB9tBADyHujGleOB-34zd0TWOEUHM9k/view?usp=sharing	Dr. A. S. Bhurghate			
Photochemistry	https://drive.google.com/file/d/1PH0VjCNV4srB-sXvrEfklLsAC2Q2ZfEfZ/view?usp=sharing	Dr. A. S. Bhurghate			
Dyes	https://www.slideshare.net/Munna19/dyes-ppt-231168582	Dr. N. R. Thakare			
Drugs & Pesticides	https://www.slideshare.net/pramodpadole35/drugs-pesticides-by-dr-pramod-r-padole	Dr Pramod R Padole	B.Sc. Sem-V University Chemistry Syllabus	https://www.youtube.com/watch?v=fVe0vtyZURw	Dr Pramod R Padole
Orientation of Electrophilic Substitution in Pyrrole	https://www.slideshare.net/pramodpadole35/heterocyclic-compounds-part-iv-pyrrole-by-dr-pramod-r-padole	Dr Pramod R Padole	Unit-III Heterocyclic Compounds Part-I (Pyrrole) Definition of Heterocyclic compounds, Nomenclature of heterocycles, Classification of heterocyclic compounds & Preparations of Pyrrole	https://www.youtube.com/watch?v=GpsCZ8_bXYw&feature=youtu.be	Dr Pramod R Padole
6 – membered heterocyclic compounds, Preparation of Pyridine, Molecular Orbital Structure / Picture / M.O. diagram of Pyridine	https://www.slideshare.net/pramodpadole35/heterocyclic-compounds-part-i-pyridine-by-dr-pramod-r-padole-239022661	Dr Pramod R Padole	Heterocyclic Compounds Part-II (Pyrrole) Molecular orbital diagram of	https://www.youtube.com/watch?v=Um_ZJEwRFYQ	Dr Pramod R Padole

			pyrrole		
Resonance Structures of Pyridine, Basic Nature or Basic Character of Pyridine, Pyridine is more basic than Pyrrole,	https://www.slideshare.net/pramodpadole35/heterocyclic-compounds-partii-pyridine-by-dr-pramod-r-padole		Heterocyclic Compounds Part-III (Pyrrole) Resonance, Resonance Structures of Pyrrole, Basic nature of Pyrrole& Acidic nature of Pyrrole	https://youtu.be/T37iOQ13sQM	Dr Pramod R Padole
Orientation and Reactivity of Electrophilic Substitution in Pyridine, Electrophilic Substitution Reactions of Pyridine at C-3 position	https://www.slideshare.net/pramodpadole35/heterocyclic-compounds-partiii-pyridine-by-dr-pramod-r-padole	Dr Pramod R Padole			
Orientation and Reactivity of Nucleophilic Substitution in Pyridine, Nucleophilic Substitution Reactions of Pyridine at C-2 position	https://www.slideshare.net/pramodpadole35/heterocyclic-compounds-partiv-pyridine-by-dr-pramod-r-padole	Dr Pramod R Padole			
Resonance structure of Pyrrole, Basic Nature (or Character) of Pyrrole, Acidic Nature of Pyrrole,	https://www.slideshare.net/pramodpadole35/heterocyclic-compounds-part-iii-pyrrole-by-dr-pramod-r-padole	Dr Pramod R Padole			
Heterocyclic Compounds, Nomenclature of Heterocycles, Classification of Heterocyclic	https://www.slideshare.net/pramodpadole35/heterocyclic-compounds-parti-pyrroleby-dr-pramod-r-padole	Dr Pramod R Padole			

Compounds, a) 5-membered Heterocyclic compounds, Preparation of Pyrrole:				
Molecular Orbital Structure / Picture / M.O. diagram of Pyrrole	https://www.slideshare.net/pramodpadole35/heterocyclic-compounds-partii-pyrrole-by-dr-pramod-r-padole	Dr Pramod R Padole		
Dyes, Drugs & Pesticides	https://www.slideshare.net/pramodpadole35/dyes-drugs-pesticides-by-dr-pramod-r-padole-242750175	Dr Pramod R Padole		
Grignard Reagent	https://drive.google.com/file/d/1rxBmDRqw1nziQdEqbYf9428QZcvgdDEZ/view?usp=sharing	Dr. S. A. Wadhal		
Polymer	https://drive.google.com/file/d/12LdNGs5Oz2sffujBF8i3SaqOl4YMStcU/view?usp=sharing	Dr. S. A. Wadhal		
Organolithium Compound	https://drive.google.com/file/d/1p3kVorqYVi7SIhg4apK4HI3_0VkQq8b3/view?usp=sharing	Dr. S. A. Wadhal		
Pyridine	https://drive.google.com/file/d/1Ei5fuh2KgdAnpYCb2NmCwYqoXbd29Ziq/view?usp=sharing	Dr. S. A. Wadhal		
Pyrrol	https://drive.google.com/file/d/1IODmh9Vv-7qPTY6wsm55VdSm02Wf4ent/view?usp=sharing	Dr. S. A. Wadhal		
Pesticides	https://drive.google.com/file/d/1xo0H16j6MhIRYCA97czlmbTPxckCSbk_/view?usp=sharing	Dr. S. A. Wadhal		
Indigo, Alizarin	https://drive.google.com/file/d/1YE05loqdGuGT_E_GJJd9paG4lKhqLO3R/view?usp=sharing	Dr. S. A. Wadhal		
Photochemistry , EMR, parameters of EMR	https://www.slideshare.net/ProfYogitaThakare/lect-1-photochemistry-introductionemrparameters-of-emr	Dr. Y. S. Thakare		
Interaction of	https://www.slideshare.net/ProfYogitaThakare/lect-1-photochemistry-introductionemrparameters-of-emr	Dr. Y. S.		

EMR, photochemical and thermal reaction	akare/lect-2-interaction-of-emr-photochemical-and-thermal-reaction	Thakare			
Laws of absorption of light	https://www.slideshare.net/ProfYogitaThakare/lect-3-laws-of-absorption-of-light-lamBERTS-beers-law	Dr. Y. S. Thakare			
Laws of photochemistry	https://www.slideshare.net/ProfYogitaThakare/lect-4-limitation-of-beers-law-laws-of-photochemistry	Dr. Y. S. Thakare			
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	Dr. Y. S. Thakare			
Photochemistry , EMR, parameters of EMR	https://www.slideshare.net/ProfYogitaThakare/lect-1-photochemistry-introductionemrparameters-of-emr	Dr. Y. S. Thakare			
Interaction of EMR, photochemical and thermal	https://www.slideshare.net/ProfYogitaThakare/lect-2-interaction-of-emr-photochemical-and-thermal-reaction	Dr. Y. S. Thakare			

reaction					
Laws of absorption of light	https://www.slideshare.net/ProfYogitaThakare/lect-3-laws-of-absorption-of-light-lamBERTS-beers-law	Dr. Y. S. Thakare			
Laws of photochemistry	https://www.slideshare.net/ProfYogitaThakare/lect-4-limitation-of-beers-law-laws-of-photochemistry	Dr. Y. S. Thakare			
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	Dr. Y. S. Thakare			
Photochemistry , EMR, parameters of EMR	https://www.slideshare.net/ProfYogitaThakare/lect-1-photochemistry-introductionemrparameters-of-emr	Dr. Y. S. Thakare			

Shri Shivaji Science College, Amravati

E – Contents for Under Graduate Students

Department of Chemistry

B. Sc. Part – I (Semester – II)

Notes and PowerPoints			Links to Video Lectures		
Topic	Link	Teacher	Topic	Link	Teacher
Periodic table	https://docs.google.com/presentation/d/1MCFvgXCs7rCjItUhqR3g7ny0cBsXRbzOxB9Op1uZYUs/edit?usp=sharing	Dr. A. B. Bodade			
Modern Periodic table	https://docs.google.com/presentation/d/1T4JsSJ7IosU7SMNT0c70ZF8_967bCl1-b4a5pSqmmyQ/edit?usp=sharing				

B. Sc. Part – II (Semester – IV)

Notes and PowerPoints			Links to Video Lectures		
Topic	Link	Teacher	Topic	Link	Teacher
Liquid State	https://docs.google.com/presentation/d/194IU47tMpdKMHtK7hVA7qBF-6zcPnhCZmPa8bC4zsNg/edit?usp=sharing	Dr. G. N. Chaudhari			
Covalent bonding ,Metallic Bonding and VSERP Theory	https://docs.google.com/presentation/d/1Gg_7nBI5wfwTqOPNXsKZB3WOQnEnD00F_4bPCNF2CAo/edit?usp=sharing	Dr. A. B. Bodade			
Inner Transition element	https://www.slideshare.net/savedfiles?s_title=inner-transition-element-2020	Dr. N. H. Bansod			
Acid base theory	https://www.slideshare.net/savedfiles?s_title=acid-base-theory-234386976&user_login=NitinBansod5	Dr. N. H. Bansod			
Extraction of element	https://www.slideshare.net/savedfiles?s_title=extraction-of-elements&user_login=NitinBansod5	Dr. N. H. Bansod			
Solid state	https://www.slideshare.net/savedfiles?s_title=copy-of-solid-state-fff-2013&user_login=NitinBansod5	Dr. N. H. Bansod			
Paper Chromatography	https://www.slideshare.net/Munna19/paperchromatography-231168806	Dr. K. N. Puri			
Carbohydrates	https://www.slideshare.net/pramodpadole35/carbohydrates-by-dr-pramod-r-padole	Dr. N. R. Thakare			
		Dr. Pramod R Padole			

Aromatic nitro compounds	https://www.slideshare.net/pramodpadole35/aromatic-nitro-compounds-by-dr-pramod-r-padole	Dr Pramod R Padole			
Amino Compounds	https://www.slideshare.net/pramodpadole35/amino-compounds-by-dr-pramod-r-padole	Dr Pramod R Padole			
Benzene Diazonium Chloride	https://www.slideshare.net/pramodpadole35/benzene-diazonium-chloride-by-dr-pramod-r-padole	Dr Pramod R Padole			
Amino acids & Proteins	https://www.slideshare.net/pramodpadole35/amino-acids-proteins-by-dr-pramod-r-padole	Dr Pramod R Padole			

B. Sc. Part – III (Semester – VI)

Notes and PowerPoints		Links to Video Lectures			
Topic	Link	Teacher	Topic	Link	Teacher
NMR	https://www.slideshare.net/Munna19/nmr-231168675	Dr. N. R. Thakare			
UV-Visible Spectroscopy	https://www.slideshare.net/pramodpadole35/uv-visible-spectroscopy-by-dr-pamod-r-padole	Dr Pramod R Padole			
IR Spectroscopy	https://www.slideshare.net/pramodpadole35/ir-spectroscopy-by-dr-pramod-r-padole	Dr Pramod R Padole			
NMR Spectroscopy	https://www.slideshare.net/pramodpadole35/nmr-spectroscopy-by-dr-pramod-r-padole	Dr Pramod R Padole			
Mass Spectroscopy	https://www.slideshare.net/pramodpadole35/mass-spectroscopy-by-dr-pramod-r-padole	Dr Pramod R Padole			
		Dr. S. A. Wadhal	NMR	https://www.youtube.com/watch?v=2mgqAJQxaCY	
		Dr. S. A. Wadhal	NMR	https://www.youtube.com/watch?v=77cEO4_vT34	
Organometallic Chemistry	https://www.slideshare.net/GajananDongare/organometallic-chemistry-gmdongare	Dr. G. M. Dongare			