Dr. Vidya Singh

Assistant Professor

Department of Chemistry

Maharaja Bijli Pasi Govt. P.G. College, Ashiana, Lucknow

Academic Calendar for UG (Semester I, III and V) 2026-27

S. No.	Class/Semester	Paper/Unit	Unit	Topic Name	Monthly Plan/Weekly Plan	Teaching Pedagogy	Learning Outcome	Any other Detail
1.	B.Sc. Ist Year (B.Sc. Ist Semester)	Inorganic Chemistry	Unit 1	Atomic Structure	August 2026 Discussion on Quantum Mechanics (First and Second Week), Periodic Properties, Electron Affinity & Electronegativity (Third and Fourth Week), Practical work	Lecture Method and Notes	Students will get an understanding of the key Characteristics of the basics of Quantum Mechanics, Aufbau, Pauli and Hund's Multiplicity rules, Practical work	Assignment/Test, ICT Tools like You tube Videos and PPT will be used as well
	B.Sc. Ist Year (B.Sc. Ist Semester)	Inorganic Chemistry	Unit 2	Chemical Bonding	September 2026 (First and Second Week) "VBT theory" Explanation and "VSEPR Theory" Explanation September2026 (Third and Fourth Week) "Bond Strength and Bond Energy" and % Ionic Character Discussion, Practical work	Lecture Method and Notes	Students will get an understanding of the key Characteristics of the basics of VBT theory, VSEPR Theory, Bond Strength and Bond Energy, Practical work	Assignment/Test, ICT Tools like You tube Videos and PPT will be used as well
	B.Sc. Ist Year (B.Sc. Ist Semester)	Inorganic Chemistry	Unit 3, 4	Ionic Solid, s-block and Noble gases and P-Block	October2026 (First and Second Week) Explanation of Lattice energy and Born Haber cycle and Fajan's rule Lecture Method and Notes students will be able	Lecture Method and Notes	Students will get an understanding of the key Characteristics of Lattice energy and Born Haber cycle, s-blocks	Assignment/Test, ICT Tools like You tube Videos and PPT will be used as well

					to Understand and s- blocks elements October2026(Third Week) Explanation of P-block elements, Practical work		and P-blocks elements, Practical work	
	B.Sc. Ist Year (B.Sc. Ist Semester)	Inorganic Chemistry	Unit 4	P-Block elements	October (Fourth Week) 2026 And November 2026 Explanation of "P-Block elements", Practical work	Lecture Method and Notes	Students will get an understanding of the key Characteristics of P-blocks elements, Practical work	Assignment/Test, ICT Tools like You tube Videos and PPT will be used as well
	B.Sc. Ist Year (B.Sc. Ist Semester)	Inorganic Chemistry	All Units	Revisions	Remaining Working Days till Examinations	Interactive Sessions	Student Participation	Practice And Discussion
2.	B.Sc. IInd Year (B.Sc. IIIrd Semester)	Physical Chemistry	Unit 1	Mathematical concepts and Computers	August 2026 Discussion on Mathematical concepts (First and Second Week), Gaseous State, Molecular Velocities (Third and Fourth Week), Practical work	Lecture Method and Notes	Students will get an understanding of the key Characteristics of the basics of Mathematical concepts, Gaseous State, Molecular Velocities, Practical work	Assignment/Test, ICT Tools like You tube Videos and PPT will be used as well
	B.Sc. IInd Year (B.Sc. IIIrd Semester)	Physical Chemistry	Unit 2	Solid state, Liquid state, colloidal state, Emulsions	September 2026 (First and Second Week) "Solid state" Explanation and "Liquid state" Explanation September2026 (Third and Fourth Week) "colloidal state" Discussion, Practical work	Lecture Method and Notes	Students will get an understanding of the key Characteristics of the basics of Solid state, Liquid state, colloidal state, Emulsions, Practical work	Assignment/Test, ICT Tools like You tube Videos and PPT will be used as well
	B.Sc. IInd Year (B.Sc. IIIrd Semester)	Physical Chemistry	Unit 3	Chemical Kinetics, Catalysis, Buffer Mixture	October2026 (First and Second Week) Explanation of Chemical Kinetics Lecture Method and Notes October2026(Third Week) Explanation of theories of	Lecture Method and Notes	Students will get an understanding of the key Characteristics of Chemical Kinetics, theories of chemical kinetics, Practical work	Assignment/Test, ICT Tools like You tube Videos and PPT will be used as well

					chemical kinetics, Practical work			
	B.Sc. IInd Year (B.Sc. IIIrd Semester)	Physical Chemistry	Unit 4	Thermodynamics and thermochemistry	October (Fourth Week) 2026 and November 2026 Explanation of "Thermodynamics and thermochemistry", Practical work	Lecture Method and Notes	Students will get an understanding of the key Characteristics of Thermodynamics and thermochemistry, Practical work	Assignment/Test, ICT Tools like You tube Videos and PPT will be used as well
	B.Sc. IInd Year (B.Sc. IIIrd Semester)	Physical Chemistry	All Units	Revisions	Remaining Working Days till Examinations	Interactive Sessions	Student Participation	Practice And Discussion
3.	B.Sc. IIIrd Year (B.Sc. Vth Semester)	Organic Chemistry	Unit 1	Alcohols and Phenol	August 2026 Discussion on Synthesis and properties of alcohol (First and Second Week), Name reactions (Third and Fourth Week), Practical work	Lecture Method and Notes	Students will get an understanding of the key Characteristics of the basics of Synthesis and properties of alcohol, Practical work	Assignment/Test, ICT Tools like You tube Videos and PPT will be used as well
	B.Sc. IIIrd Year (B.Sc. Vth Semester)	Organic Chemistry	Unit 2	Aldehyde and Ketone	September 2026 (First and Second Week) "Synthesis and properties of Aldehyde" Explanation and "Ketones" Explanation September2026 (Third and Fourth Week) "Name reactions" Discussion, Practical work	Lecture Method and Notes	Students will get an understanding of the key Characteristics of the Synthesis and properties of Aldehyde, ketone, Name reactions, Practical work	Assignment/Test, ICT Tools like You tube Videos and PPT will be used as well
	B.Sc. IIIrd Year (B.Sc. Vth Semester)	Organic Chemistry	Unit 3	Carboxylic acids	October2026 (First and Second Week) Explanation of Carboxylic acids Lecture Method and Notes October 2026(Third Week) Explanation of Carboxylic acids derivatives, fat, oil & detergents, Practical work	Lecture Method and Notes	Students will get an understanding of the key Characteristics of Carboxylic acids & derivatives, Practical work	Assignment/Test, ICT Tools like You tube Videos and PPT will be used as well

	B.Sc. IIIrd Year (B.Sc. Vth Semester)	Organic Chemistry	Unit 4	Organic compounds of Nitrogen, Amino acid and Proteins	October (Fourth Week) 2026 and November 2026 Explanation of "Organic compounds of Nitrogen, Amino acid and Proteins", Practical work	Lecture Method and Notes	Students will get an understanding of the key Characteristics of Organic compounds of Nitrogen, Amino acid and Proteins, Practical work	Assignment/Test, ICT Tools like You tube Videos and PPT will be used as well
	B.Sc. IIIrd Year (B.Sc. Vth Semester)	Organic Chemistry	All Units	Revisions	Remaining Working Days till Examinations	Interactive Sessions	Student Participation	Practice And Discussion
4.	B.Sc. IIIrd Year (B.Sc. Vth Semester)	Physical Chemistry	Unit 1	Thermodynamics-II & Concepts of Entropy	August 2026 Discussion on Synthesis and properties of Thermodynamics-II (First and Second Week), & Concepts of Entropy (Third and Fourth Week), Practical work	Lecture Method and Notes	Students will get an understanding of the key Characteristics of the basics of Thermodynamics-II & Concepts of Entropy, Practical work	Assignment/Test, ICT Tools like You tube Videos and PPT will be used as well
	B.Sc. IIIrd Year (B.Sc. Vth Semester)	Physical Chemistry	Unit 2	Electrochemistry-I	September 2026 (First and Second Week) "Electrochemistry-I" Explanation and September 2026 (Third and Fourth Week) "application of conductivity measurements" Discussion, Practical work	Lecture Method and Notes	Students will get an understanding of the key Characteristics of the Electrochemistry-I & conductivity measurements, Practical work	Assignment/Test, ICT Tools like You tube Videos and PPT will be used as well
	B.Sc. IIIrd Year (B.Sc. Vth Semester)	Physical Chemistry	Unit 3	Electrochemistry-II	October2026 (First and Second Week) Explanation of Electrochemistry-II Lecture Method and Notes October 2026 (Third Week) Explanation of EMF of Cell and thermodynamic quantities, Practical work	Lecture Method and Notes	Students will get an understanding of the key Characteristics of Electrochemistry-II, EMF of Cell and thermodynamic quantities, Practical work	Assignment/Test, ICT Tools like You tube Videos and PPT will be used as well

	B.Sc. IIIrd Year (B.Sc. Vth Semester)	Physical Chemistry	Unit 4	Concentration cell & Surface Chemistry	October (Fourth Week) 2026 and November 2026 Explanation of "Concentration cell & Surface Chemistry", Practical work	Lecture Method and Notes	Students will get an understanding of the key Characteristics of Organic compounds of Concentration cell & Surface Chemistry, Practical work	Assignment/Test, ICT Tools like You tube Videos and PPT will be used as well
	B.Sc. IIIrd Year (B.Sc. Vth Semester)	Physical Chemistry	All Units	Revisions	Remaining Working Days till Examinations	Interactive Sessions	Student Participation	Practice And Discussion

(*Dr. Vidya Singh*, Assistant Professor, Department of Chemistry)