

Dayanand Mahila Mahavidyalaya, Kurukshetra

Lesson Plan (Odd Semester)

Session 2021-22 (08.10.2021 to 22.02.2022)

Name of Teacher... Mrs. Asha Malik

Subject ... Chemistry

Week	Date	Class B.Sc.I NM	Class B.Sc.I NM	Class B.Sc.I NM
		Semester I	Semester I	Semester I
	08.10.2021	Orientation Course		
	09.10.2021	Orientation Course		
	11.10.2021	Bridge Course		
	12.10.2021	Bridge Course		
	13.10.2021		chapter 1 Gaseous state Introduction, Kinetic theory of gases	
	14.10.2021		Maxwell distribution of velocities	
	15.10.2021	Dussehra		
	16.10.2021			chapter 1 Introduction, localised and delocalised bonds
	18.10.2021	Chapter 1 Introduction, de Broglie		
	19.10.2021	Heisenberg uncertainty principle, atomic orbital		
	20.10.2021	Maharishi Balmiki Jayanti		
	21.10.2021		Calculation of average, most probable, RMS velocities	
	22.10.2021			Resonance
	23.10.2021			Hyperconjugation
	25.10.2021	Quantum numbers, shapes of s, p, d, f orbitals		
	26.10.2021	radial and angular wave function and probability distribution curves		
	27.10.2021		Collision diameter, collision number, collision frequency	
	28.10.2021		Mean free Path and numericals	
	29.10.2021			Inductive effect
	30.10.2021			Electromeric effect and their comparison
	31.10.2021 to 07.11.2021	Diwali Vacations		
	08.11.2021	Aufbau & Pauli exclusion Principle, Hund multiplicity, electron configuration		
	09.11.2021	Effective nuclear charge, Slater rule		
	10.11.2021		Test and assignment given	
	11.11.2021		Ideal and real gases, deviation of real gases from ideal gases	

Week	Date	Class B.Sc.I NM	Class B.Sc.I NM	Class B.Sc.I NM
		Semester I	Semester I	Semester I
	12.11.2021			Test of Chapter 1
	13.11.2021			Chapter 3 Introduction , curved Half headed,double headed arrow, homolytic and heterolytic bond fission
	15.11.2021	Chapter 3 Valence bond theory , and its limitation		
	16.11.2021	Directional characteristics oooof covalent bond , hybirdisation of BeF2,BF3,CH4 ,PF5		
	17.11.2021		Derivation of Vander Waal's Equation	
	18.11.2021		Derivation of Boyle's Temperature	
	19.11.2021	Guru Nanak Dev Jayanti		
	20.11.2021			Types of reagents ,types of reaction
	22.11.2021	NAAC TEAM VISIT		
	23.11.2021	NAAC TEAM VISIT		
	24.11.2021		Numericals	
	25.11.2021		Test Chapter 1	
	26.11.2021			Energy consideration of reaction
	27.11.2021			Carbocations
	29.11.2021	Hybridisation of IF7, SO4 ²⁻ ,ClO4 ⁻ , NO3 ⁻		
	30.11.2021	VSPER theory and shapes NH3 , H3O ⁺ , SF4, ClF3		
	01.12.2021		Chapter 2 Critical Temperature ,Critical Pressure,Critical Volume and their determination	
	02.12.2021		PV isotherms , continuity of states, Assignment 2	
	03.12.2021			Carbanions
	04.12.2021			Free radicals
	06.12.2021	H2O, SnCl4, ClO3 ⁻ , ICl2 ⁻ , Molecular orbital theory		
	07.12.2021	discussion of N2, O2, CO, NO		
	08.12.2021		Isotherms of Vander Waal's equation and their relationship with critical constant	
	09.12.2021		Law of corresponding states, numericals, liqification of gases	
	10.12.2021			carbenes
	11.12.2021			Chapter 2 concept of isomerism , types of isomerism

Week	Date	Class B.Sc.I NM	Class B.Sc.I NM	Class B.Sc.I NM
		Semester I	Semester I	Semester I
	13.12.2021	Bond energy, Bond length, dipole moment, percentage ionic character		
	14.12.2021	Chapter 2 classification of periodic table into s, p, d, f block, atomic radii & ionic radii		
	15.12.2021		Chapter 3 classification of solids	
	16.12.2021		law of constancy of interfacial angles	
	17.12.2021			Optical isomerism, elements of symmetry, molecular chirality
	18.12.2021			Enantiomers, properties of enantiomers
	20.12.2021	test of Chapter 3		
	21.12.2021	Ionisation energy, electron affinity		
	22.12.2021		Law of rational indices	
	23.12.2021		Miller indices, Weiss indices, interplanar distances of planes	
	24.12.2021			Test of Chapter 3
	25.12.2021	Christmas		
	27.12.2021	Electronegativity, Pauling, Mulliken		
	28.12.2021	Allred Rachow & Mulliken jaffe scale		
	29.12.2021		Law of rational indices	
	30.12.2021		Miller indices, Weiss indices, interplanar distances of planes	
	31.12.2021			Stereogenic centre, optical activity, chiral & achiral molecules
	01.01.2022			Diastereomers, thero, Erythro, meso compounds
	03.01.2022	test of chapter 2		
	04.01.2022	Chapter 4 Ionic structure of NaCl, CsCl, ZnS, CaF ₂		
	05.01.2022		numericals and seven crystal system, fourteen Bravais lattice	
	06.01.2022		test, Laue method	
	07.01.2022			Resolution of enantiomers, inversion, retention
	08.01.2022			Racemization, test of chapter 3
	10.01.2022	Radius Ratio Effect And coordination number		
	11.01.2022	Limitation of radius ratio rule, Lattice defects		

Week	Date	Class B.Sc.I NM	Class B.Sc.I NM	Class B.Sc.I NM
		Semester I	Semester I	Semester I
	12.01.2022		Bragg's law and method	
	13.01.2022		Numericals problems	
	14.01.2022			Relative and absolute configuration , R-S nomenclature
	15.01.2022			practice of R-S nomenclature
	17.01.2022	Semiconductors, lattice energy		
	18.01.2022	Born haber cycle		
	19.01.2022		powder method and numericals	
	20.01.2022		chapter 4 Structure of liquids , theory of liquids	
	21.01.2022			Geometric isomerism , E-Z nomenclature
	22.01.2022			Practice of E-Z nomenclature , conformational isomerism & analysis of ethane and butane
	24.01.2022	solvation energy , numericals		
	25.01.2022	solubility of ionic solids		
	26.01.2022	Republic Day		
	27.01.2022		Surface tension	
	28.01.2022			conformation of cyclohexane , newmann sawhorse formulae , difference between configuration and conformation
	29.01.2022			chapter 4 IUPAC nomenclature of alkanes and cycloalkanes , classification of carbons
	31.01.2022	Polarising power and polarisability of ions		
	01.02.2022	test		
	02.02.2022		viscosity	
	03.02.2022		Test	
	04.02.2022			test of R-S & E-Z
	05.02.2022	Basant Panchami		
	07.02.2022	Fazan's Rule		
	08.02.2022	Revision		
	09.02.2022		Refractive index, optical rotation	
	10.02.2022		Liquid crystal and application	
	11.02.2022			Isomerism and method of formation of alkanes

Week	Date	Class B.Sc.I NM	Class B.Sc.I NM	Class B.Sc.I NM
		Semester I	Semester I	Semester I
	12.02.2022			Physical properties , mechanism of free radical, reactivity and selectivity
	14.02.2022	Revision		
	15.02.2022	Revision		
	16.02.2022	Guru Ravidas Jayanti		
	17.02.2022		Revision	
	18.02.2022			synthesis of cycloalkanes, baeyer strain theory, strainless theory
	19.02.2022			Revision
	21.02.2022	Revision		
	22.02.2022	Revision		

Name of Teacher- Deepika Mural

Week	Date	Class-B.Sc non med	Class final year B.Sc n.m	Class
		Semester-5th	Semester	Semester
	08.10.2021	Orientation Course		
	09.10.2021	Orientation Course		
	11.10.2021	black body radiation		
	12.10.2021	plank's radiation law		
	13.10.2021		Principle of NMR, PMR spectrum	
	14.10.2021		No. of signals, peak areas	
	15.10.2021	Dussehra		
	16.10.2021			Limitations of VBT
	18.10.2021			CFT
	19.10.2021	Photoelectric effect, heat capacity of solids		
	20.10.2021	Maharishi Balmiki Jayanti		
	21.10.2021	compton effect, wave function		
	22.10.2021	postulates of quantum mechanics		
	23.10.2021		equivalent and non equivalent protons	
	25.10.2021		position of signals and chemical shift	
	26.10.2021			splitting in octahedral
	27.10.2021			splitting in tetrahedral
	28.10.2021	test		
	29.10.2021	Operators in Q.M		
	30.10.2021		shielding and deshielding, proton counting	
	31.10.2021 to 07.11.2021	Diwali Vacations		
	08.11.2021		splitting of signals, coupling effect	
	09.11.2021			factors affecting crystal field parameters
	10.11.2021			test

Week	Date	Class B.Sc.I NM	Class B.Sc.I NM	Class B.Sc.I NM
		Semester I	Semester I	Semester I
	11.11.2021	heisenberg uncertainty principle,particle in 1-D box		
	12.11.2021	test		
	13.11.2021		magnetic equivalence of protons	
	15.11.2021		PMR spectra of different molecules	
	16.11.2021			thermodynamic stability of metal complexes and factors affecting stability
	17.11.2021			irving william series, substitution reactions of square planar complexes pf pt(ii)
	18.11.2021			
	19.11.2021	Guru Nanak Dev Jayanti		
	20.11.2021	optical activity, polarization		
	22.11.2021	NAAC TEAM VISIT		
	23.11.2021	NAAC TEAM VISIT		
	24.11.2021	orientation of dipoles in an electric field		
	25.11.2021		test	
	26.11.2021		classification of carbohydrates, nomenclature	
	27.11.2021			types of magnetic behaviour, magnetic susceptibility
	29.11.2021			method of determining magnetic susceptibility
	30.11.2021			
	01.12.2021	included dipole moment,measurement of dipole moment temperature method and refractivity method		
	02.12.2021	dipole moment and structure of molecule		
	03.12.2021		monosaccharides,mechanism of osazone formation	
	04.12.2021		interconversion of glucose and fructose,	
	06.12.2021			doubt session
	07.12.2021			test
	08.12.2021	magnetic permeability, magnetic susceptibility		
	09.12.2021	application of magnetic susceptibility,magnetic properties		
	10.12.2021		chain lengthening and chain shortening of aldose,configuration of monosaccharides	

Week	Date	Class B.Sc.I NM	Class B.Sc.I NM	Class B.Sc.I NM
		Semester I	Semester I	Semester I
	11.12.2021		conversion of glucose into mannose, formation of glycosides	
	13.12.2021			spin only formula, l-s coupling
	14.12.2021			correlation of μ and $\mu(\text{eff})$, orbital contribution to magnetic moments
	15.12.2021	born-oppenheimer approximation, DOF		
	16.12.2021	basic features of spectroscopy		
	17.12.2021		erythro and threo diastereomers, conversion of glucose into mannose	
	18.12.2021		formation of glycosides	
	20.12.2021			application of magnetic moment data for 3d-metal complexes
	21.12.2021			doubt session
	22.12.2021	diatomic molecules, energy levels of rigid rotator, selection rules		
	23.12.2021	spectral intensity distribution using population distribution		
	24.12.2021		determination of ring size of glucose and fructose	
	25.12.2021	Christmas		
	27.12.2021		open chain and cyclic structure of D(+)-glucose and D(-)FRUCTOSE	
	28.12.2021		mechanism of mutarotation	
	29.12.2021			doubt session
	30.12.2021			revision
	31.12.2021	determination of bond length, non rigid rotator, isotope effect		
	01.01.2022	revision+doubt session		
	03.01.2022		structures of ribose and deoxyribose	
	04.01.2022		disaccharides introduction	
	05.01.2022			types of electronic transitions
	06.01.2022			selection rules for d-d transitions
	07.01.2022	IR spectrum, harmonic oscillator		
	08.01.2022	selection rules, pure vibrational spectrum		
	10.01.2022		maltose, sucrose	
	11.01.2022		lactose	
	12.01.2022			spectroscopic ground states,
	13.01.2022			spectrochemical series

Week	Date	Class B.Sc.I NM	Class B.Sc.I NM	Class B.Sc.I NM
		Semester I	Semester I	Semester I
	14.01.2022	numerical session		
	15.01.2022	intensity ,		
	17.01.2022		polysaccharides	
	18.01.2022		starch and cellulose	
	19.01.2022			orgel-energy level diagram for d1 and d9
	20.01.2022			revision
	21.01.2022	doubt session		
	22.01.2022	test		
	24.01.2022		effects of anharmonic motion and isotopic effect on the spectra	
	25.01.2022		vibrational frequencies of different functional groups	
	26.01.2022	Republic Day		
	27.01.2022			organomagnesium compounds
	28.01.2022			structure and chemical reaction
	29.01.2022	numerical session		
	31.01.2022	doubt session		
	01.02.2022		organozinc compounds	
	02.02.2022		formation and chemical reaction	
	03.02.2022			electronic spectrum of [Ti(h ₂ O) ₆] ³⁺
	04.02.2022			test
	05.02.2022	Basant Panchami		
	07.02.2022	concept of polarization		
	08.02.2022	pure rotational, pure vibrational raman spectra of diatomic molecules		
	09.02.2022		organolithium compounds	
	10.02.2022		formation and chemical reaction	
	11.02.2022			doubt session
	12.02.2022			test
	14.02.2022	selection rules		
	15.02.2022	quantum theory of raman spectra		
	16.02.2022	Guru Ravidas Jayanti		
	17.02.2022	doubt session		
	18.02.2022	test		
	19.02.2022		doubt session	
	21.02.2022		test	
	22.02.2022			doubt session

Name of Teacher...mrs Rajwant kaur.....

Week	Date	Class ...B.sc- 2nd year session 2021-2022(N.M).....	Class B.sc 2nd year session 2021-2022(N.M).....	Class B.sc 2nd year session 2020-2022(N.M).....
		Semester 3rd(Organic chemistry)	Semester3rd (Physical chemistry)	Semester 3rd(Inorganic chemistry)

Week	Date	Class B.Sc.I NM	Class B.Sc.I NM	Class B.Sc.I NM
		Semester I	Semester I	Semester I
	08.10.2021	Orientation Course		
	09.10.2021	Orientation Course		
	11.10.2021		bridge course	
	12.10.2021		bridge course	
	13.10.2021		introduction of thermodynamics	
	14.10.2021		definition of thermodynamics term	
	15.10.2021	Dussehra		
	16.10.2021			introduction of d block elements
	18.10.2021	introduction of alcohol-nomenclature		
	19.10.2021	methods of formation by reductions of aldehydes, ketone, carboxylic acids and ester		
	20.10.2021	Maharishi Balmiki Jayanti		
	21.10.2021		define state function and path function	
	22.10.2021			definition of transition elements and position in periodic table
	23.10.2021			General characteristic and properties of d block elements
	25.10.2021	hydrogen bonding and acidic nature reaction of alcohol		
	26.10.2021	test and assignments		
	27.10.2021		thermodynamics process	
	28.10.2021		concept of heat and work	
	29.10.2021			comparison of properties of 3d elements with 4d and 5d elements with reference to only ionic radii
	30.10.2021			stability of various oxidation states and emf
	31.10.2021 to 07.11.2021	Diwali Vacations		
	08.11.2021	dihydric alcohol nomenclature		
	09.11.2021	chemical reaction of vicinal glycols		
	10.11.2021		first law of thermodynamics	
	11.11.2021		test and assignment	
	12.11.2021			structures and properties of some compounds of transition elements
	13.11.2021			test and assignments
	15.11.2021	oxidative cleavage		

Week	Date	Class B.Sc.I NM	Class B.Sc.I NM	Class B.Sc.I NM
		Semester I	Semester I	Semester I
	16.11.2021	pinacol pinacolone rearrangement		
	17.11.2021		concepts of internal energy and enthalpy	
	18.11.2021		heat capacity at constant volume pressure and their relationships	
	19.11.2021	Guru Nanak Dev Jayanti		
	20.11.2021			introduction of coordinations compounds and effective atomic number
	22.11.2021	NAAC TEAM VISIT		
	23.11.2021	NAAC TEAM VISIT		
	24.11.2021		Jules thomson coefficient for ideal gas and real gas and inversion temperature.	
	25.11.2021		revision and test	
	26.11.2021			chelates nomenclature of coordination compound
	27.11.2021			isomerism in coordination compound
	29.11.2021	introduction of phenol-nomenclature		
	30.11.2021	preparations of phenol		
	01.12.2021		calculations of w,q,du and dh for the expansion of ideal gases for reversible	
	02.12.2021		Test and revision	
	03.12.2021			velence bond theory of transition metal complexes
	04.12.2021			test and revision
	06.12.2021	physical properties and acidic character		
	07.12.2021	comparative acidic strengths of alcohol and phenol		
	08.12.2021		introduction of chemical equilibrium	
	09.12.2021		free energy concept of chemical potential	
	10.12.2021			introduction of non aqueous solvents
	11.12.2021			physical properties of solvents types of solvents and their general characteristics
	13.12.2021	reactions of phenols e.a substitution		
	14.12.2021	machanisms of fries rearrangement		

Week	Date	Class B.Sc.I NM	Class B.Sc.I NM	Class B.Sc.I NM
		Semester I	Semester I	Semester I
	15.12.2021		thermodynamics derivation of law of chemical equilibrium	
	16.12.2021		temperature dependence of equilibrium constant	
	17.12.2021			reactions in non aqueous solvents with reference to liquid NH ₃ and SO ₂
	18.12.2021			revision
	20.12.2021	claisen rearrangement and reimer tiemann reaction		
	21.12.2021	kolb reaction and schotten and baumann reactions		
	22.12.2021		clausius clapyron equation and its applications	
	23.12.2021		test and revision	
	24.12.2021			revision
	25.12.2021	Christmas		
	27.12.2021	introduction of epoxides, synthesis		
	28.12.2021	acid and base catalyzed ring opening of epoxides		
	29.12.2021		introduction of distribution law	
	30.12.2021		applications of distribution law	
	31.12.2021			test
	01.01.2022			revision
	03.01.2022	test and revision		
	04.01.2022	introduction of ultraviolet absorption spectroscopy and absorption laws		
	05.01.2022		determination of degree of hydrolysis	
	06.01.2022		hydrolysis constant of aniline hydrochloride	
	07.01.2022			revision
	08.01.2022			revision
	10.01.2022	analysis of uv spectra and types of electronic transitions		
	11.01.2022	effect of conjugation and concept of chromophore and auxochrome		
	12.01.2022		determination of equilibrium constant of potassium tri iodide complex	
	13.01.2022		process of extraction	
	14.01.2022			revision and test
	15.01.2022			revision
	17.01.2022	concept of chromophore and auxochrome		

Week	Date	Class B.Sc.I NM	Class B.Sc.I NM	Class B.Sc.I NM
		Semester I	Semester I	Semester I
	18.01.2022	uv spectra of conjugated enes and enones wood ward fieser rules		
	19.01.2022		more stress on numerical	
	20.01.2022		test	
	21.01.2022			numerical problems
	22.01.2022			numerical problems
	24.01.2022	calculation of lamda maximum of simple conjugated dienes and alfa or beta unsaturated ketones		
	25.01.2022	applications of uv spectroscopy in structure elucidation of simple organic compound		
	26.01.2022	Republic Day		
	27.01.2022		revision	
	28.01.2022			test
	29.01.2022			revision
	31.01.2022	introduction of carboxylic acids and acid derivatives		
	01.02.2022	physical properties and acidity of carboxylic acids effects of substituents on acid strength		
	02.02.2022		test	
	03.02.2022		revision	
	04.02.2022			revision
	05.02.2022	Basant Panchami		
	07.02.2022	effect of substituents on acid strength and preparation of corboxylicacids		
	08.02.2022	reactions of corboxylicacids hell volhard zelinkky reactions reduction of corboxylicacids		
	09.02.2022		revision	
	10.02.2022		revision	
	11.02.2022			
	12.02.2022			
	14.02.2022	relative stablity of acyl derivatives physical properties		
	15.02.2022	interconversion of acid derivatives by nucleophilic acyl substitution		
	16.02.2022	Guru Ravidas Jayanti		
	17.02.2022		revision	
	18.02.2022			
	19.02.2022			

Week	Date	Class B.Sc.I NM	Class B.Sc.I NM	Class B.Sc.I NM
		Semester I	Semester I	Semester I
	21.02.2022	machanisms of desertification and hydrolysis		
	22.02.2022	revision and test		