Dayanand Mahila Mahavidyalaya, Kurukshetra

Lesson Plan (Even Semester)

Session 2022-23 (01.02.2023 to 26.05.2023)

Name of Teacher Mrs. Asha Malik

Subject Chemistry

Week	Date	Class B.Sc.I (NM)	Class B.Sc.I (NM)	Class B.Sc.III (NM)	Class B.Sc.II (NM)	Class B.Sc.II (NM)
		Semester II Paper physical chemistry	Semester II Paper Organic chemistry	Semester VI Paper Organic chemistry	Semester II Paper Inorganic chemistry	Semester II Paper Organic chemistry
	01.02.2023	Chapter 1. Introduction , Rate of reaction, rate equation				bridge course
	02.02.2023	factors effecting rate of reaction , order of reaction, molecularity of reaction ,numerical problems related to them				bridge course
	03.02.2023					
	04.02.2023			Chapter Polymer - Addition growth polymerisation		
	06.02.2023		Chapter 1 - Nomenclature of alkenes, dehydration of alcohols		Chapter 1 Lanthanides : Electronic States and Oxidation states	
	07.02.2023		dehyrohalogenation of alkenes, saytzeff rule,hoffmann elimination		Magnetic properties	
	08.02.2023	Integrated rate expression of zero order reaction and it's characteristics				chapter IR spectroscopy : molecular vibrations,hooke's law
	09.02.2023	Integrated rate expression of first order reaction and it's characteristics , numerical problems of first order reaction				selection rules , intensity and position of IR bands
	10.02.2023					

Week	Date	Class B.Sc.I (NM)	Class B.Sc.I (NM)	Class B.Sc.III (NM)	Class B.Sc.II (NM)	Class B.Sc.II (NM)
		Semester II Paper physical chemistry	**Semester II Paper Organic chemistry**	**Semester VI Paper Organic chemistry**	**Semester II Paper Inorganic chemistry**	**Semester II Paper Organic chemistry**
	11.02.2023			free radical vinyl polymerisation		
	13.02.2023		Physical properties ,stablity of alkenes,catalytic hydrogenation		Complex formation	
	14.02.2023		Addition of hydrogen halides, markownikoff and anti markownikoff rule, hydroboration -oxidation		colour and ionic radii	
	15.02.2023	Integrated rate expression of second and third order reaction and it's characteristics				measurement of IR spectrum,fingerprint region
	16.02.2023	numerical problems , Arrhenius equation				characteristic absorptions of various functional groups
	17.02.2023					
	18.02.2023	**Maha Shivratri**			**Maha Shivratri**	
	20.02.2023		oxymercuration- reduction , ozonolysis ,hyration, hydroxylation and oxidation with KMnO4		Lanthanide contractions	
	21.02.2023		Chapter 2 Nomenclatureof benzene derivatives, Huckel rule, aromatic ions		occurrence, separation of lanthanides	
	22.02.2023	unimolecular collision theory, bimolecular collision theory				characteristic absorptions of various functional groups

Week	Date	Class B.Sc.I (NM)	Class B.Sc.I (NM)	Class B.Sc.III (NM)	Class B.Sc.II (NM)	Class B.Sc.II (NM)
		Semester II Paper physical chemistry	**Semester II Paper Organic chemistry**	**Semester VI Paper Organic chemistry**	**Semester II Paper Inorganic chemistry**	**Semester II Paper Organic chemistry**
	23.02.2023	transition state theory, numerical problems				interpretation of IR spectraof simle organic compounds
	24.02.2023					
	25.02.2023			ionic vinyl polymerisation, Ziegler natta polymerisation and vinyl polymers		
	27.02.2023		test of Chapter Alkenes		Lanthanides compounds	
	28.02.2023		annulenes upto 10 carbon atoms, aromatic ,anti aromatic and non aromatic compounds		Lanthanides compounds	
	01.03.2023	test of chapter upto first order reaction with numericals				applications of IR
	02.03.2023	Numerical problems of chapter 1				chapter 4 Nomenclature of carbonyl groups, synthesis of aldehyes
	03.03.2023					
	04.03.2023			condensation polymerisation, polyesters, polyamides,		
	05.03.2023 to 12.03.2023	**Holi Vacations**			**Holi Vacations**	
	13.03.2023		Aromatic electrophilic subsitution,general pattern of mechanism , nitration		test of lanthanides	
	14.03.2023		Halogenation , sulphonation ,Friedel Craft reaction		chapter actinides : general characteristics	

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		Semester II Paper physical chemistry	**Semester II Paper Organic chemistry**	**Semester VI Paper Organic chemistry**	**Semester II Paper Inorganic chemistry**	**Semester II Paper Organic chemistry**
	15.03.2023	Chapter 2 electrolytic conduction, factors affecting electrolytic conduction				test of IR spectroscopy
	16.03.2023	specific conduction, molar conduction, equivalent conduction and their relationship				synthesis of aldehyes
	17.03.2023					
	18.03.2023			phenol formaldehyde resins, urea formaldehyde resins, epoxy resins		
	20.03.2023		Energy profile diagram, activating and deactivating subsituents and orientation		chemistry of separation of Np, Pu and Am from uranium	
	21.03.2023		Test of Aromatic electrophilic subsitution		chemistry of separation of Np, Pu and Am from uranium	
	22.03.2023	Arrhenius theory of ionization				synthesis of aldehyes and ketones
	23.03.2023	**Shaheedi Diwas**			**Shaheedi Diwas**	
	24.03.2023					
	25.03.2023			polyurethane, natural and synthetic rubbers		
	27.03.2023		Chapter 3 Nomenclature and classification of dienes,stucture of butadiene,Assingment - 1given		transuranic elements	

Week	Date	Class B.Sc.I (NM)	Class B.Sc.I (NM)	Class B.Sc.III (NM)	Class B.Sc.II (NM)	Class B.Sc.II (NM)
		Semester II Paper physical chemistry	**Semester II Paper Organic chemistry**	**Semester VI Paper Organic chemistry**	**Semester II Paper Inorganic chemistry**	**Semester II Paper Organic chemistry**
	28.03.2023		1,2 &1,4 addution Diel's Alder reaction, nomenclature and structure of alkynes		comparison of properties of lanthanides and actinides with transition elements	
	29.03.2023	Ostwald dilution law ,Debye Huckel Onsager equation for strong electrolysis				physical properties,comparision of reactivities of aldehydes and ketones
	30.03.2023	**Ram Navmi**			**Ram Navmi**	
	31.03.2023					
	01.04.2023			Chapter 2 Introduction, Pyrrole- molecular orbital, aromatic character, methods of formation, Chemical reactions		
	03.04.2023		methods of preparation alkynes ,Physical properties of alkynes		comparison of properties of lanthanides and actinides with transition elements	
	04.04.2023	**Mahavir Jayanti**			**Mahavir Jayanti**	
	05.04.2023	kohlrausch law and it's application				benzoin condensation,aldol condensation,perkin condensation
	06.04.2023	Applications of kohlrausch law, numerical problems				knoevenagel condensation, ammonia and its derivaties condensation
	07.04.2023					
	08.04.2023			Furan - molecular orbital, aromatic character, methods of formation, Chemical reactions		

Week	Date	Class B.Sc.I (NM)	Class B.Sc.I (NM)	Class B.Sc.III (NM)	Class B.Sc.II (NM)	Class B.Sc.II (NM)
		Semester II Paper physical chemistry	**Semester II Paper Organic chemistry**	**Semester VI Paper Organic chemistry**	**Semester II Paper Inorganic chemistry**	**Semester II Paper Organic chemistry**
	10.04.2023		Elecrophilic reaction of alkynes with mechanism		test of actinides	
	11.04.2023		Nucleophilic addition reactions with mechanism and acidity of alkynes		Chapter 3 chemistry of analysis of various groups of acidic and basic radicals	
	12.04.2023	Test of chapter upto Kohlrausch law with numericals				wittig reaction ,mannich reaction,oxidation,reduction
	13.04.2023	conductometric titration				chapter3 mechanism of diazotisation and structure of benzene diazonium chloride
	14.04.2023	**Vaisakhi/Dr. B.R. Ambedkar Jayanti**			**Vaisakhi/Dr. B.R. Ambedkar Jayanti**	
	15.04.2023			Thiophene- molecular orbital, aromatic character, methods of formation, Chemical reactions ,Pyridine molecular orbital, aromatic character		
	17.04.2023		Chapter 4 Nomenclature of alkyl halides		Chemistry of identification of acid radicals in typical combination	
	18.04.2023		methods of formation,physical properties		chemistry of interference of acid radicals involving removal basic radical	
	19.04.2023	pH and pKa, buffer solution				test of aldehydes and ketones
	20.04.2023	Numericals of pH and pKa, buffer solution				relacement of diazo groupby H, OH,F, Cl, Br, NO2, CN
	21.04.2023					

Week	Date	Class B.Sc.I (NM)	Class B.Sc.I (NM)	Class B.Sc.III (NM)	Class B.Sc.II (NM)	Class B.Sc.II (NM)
		Semester II Paper physical chemistry	**Semester II Paper Organic chemistry**	**Semester VI Paper Organic chemistry**	**Semester II Paper Inorganic chemistry**	**Semester II Paper Organic chemistry**
	22.04.2023	**Id-Ul-Fitr/Parshuram Jayant**			**Id-Ul-Fitr/Parshuram Jayant**	
	24.04.2023		Nucleophilic subsitution reaction with mechanism		chemistry of interference of acid radicals involving removal basic radical	
	25.04.2023		SN2 &SN1 reaction with energy profile diagram		common ion effect	
	26.04.2023	Test of Arrhenius equation and conductometric titrations				reduction of diazinium salts , coupling reaction and its synthetic applications
	27.04.2023	Revision of numericals				chapter 4 structure and nomenclature of amines, physical properties
	28.04.2023					
	29.04.2023			methods of formation, Chemical reactions ,comparison of basicity of pyridine, piperidine and pyrrole , introduction to condensed five and six members heterocycles		
	01.05.2023		aryl halides nomenclature		solubility product	
	02.05.2023		preparation of aryl halides ,nuclear reaction of aryl halides ,		theory of precipitation,co-precipitation	
	03.05.2023	Buffer action				separation of primary ,secondary, tertiary amines, structural features affecting basicity of amines
	04.05.2023	Henderson Hazel equation				preparation of alkyl and aryl amines

Week	Date	Class B.Sc.I (NM)	Class B.Sc.I (NM)	Class B.Sc.III (NM)	Class B.Sc.II (NM)	Class B.Sc.II (NM)
		Semester II Paper physical chemistry	**Semester II Paper Organic chemistry**	**Semester VI Paper Organic chemistry**	**Semester II Paper Inorganic chemistry**	**Semester II Paper Organic chemistry**
	05.05.2023					
	06.05.2023			preparation of indole, quinoline, isoquinoline, chemical reaction of condensed rings		
	08.05.2023		electrophilic aromatic subsitution ,reduction		post precipitation	
	09.05.2023		Elimination-addition reaction , Addition-elimination reaction		purification of precipitates	
	10.05.2023	buffer mechanism of buffer action				preparation of alkyl and aryl amines
	11.05.2023	numerical problems				electrophilic aromatic subsitution in aryl amines
	12.05.2023					
	13.05.2023			mechanism of electrophilic substitution of quinoline and isoquinoline. Assignment		
	15.05.2023		reactions of aralkyl halides , relative rectivities of alkyl halides ,allyl,vinyl,aryl halides		test of chapter 3	
	16.05.2023		Revision		revision	
	17.05.2023	Numerical Problems				electrophilic aromatic subsitution in aryl amines
	18.05.2023	Revision				reaction of amines with nitrous acid
	19.05.2023					
	20.05.2023			revision		
	22.05.2023	**Maharan Partap Jayanti**			**Maharan Partap Jayanti**	
	23.05.2023		Revision		revision	
	24.05.2023	Revision				revision
	25.05.2023	Revision				revision

Week	Date	Class B.Sc.I (NM)	Class B.Sc.I (NM)	Class B.Sc.III (NM)	Class B.Sc.II (NM)	Class B.Sc.II (NM)
		Semester II Paper physical chemistry	Semester II Paper Organic chemistry	Semester VI Paper Organic chemistry	Semester II Paper Inorganic chemistry	Semester II Paper Organic chemistry
	26.05.2023					

Dayanand Mahila Mahavidyalaya, Kurukshetra

Lesson Plan (Even Semester)

Session 2022-23 (01.02.2023 to 26.05.2023)

Name of Teacher-DEEPIKA MURAL

Subject-CHEMISTRY

Week	Date	Class -B.ScIII(N.M)	Class-B.Sc III(N.M)	Class -B.Sc III(N.M)
		Subject-Inorganic chem	**Subject-Physical chem**	**Subject-Organic chem**
	01.02.2023	organicmetallic definition, nomenclature, classification		
	02.02.2023	preparation , properties of organometallic		
	03.02.2023		need of statistical thermodynamics, thermodynamics probability	
	04.02.2023		maxwell-boltzmann distribution statistics,born-oppenheimer,partition function	
	06.02.2023			introduction to condensed 5 and 6 membered heterocycles, preparation and reaction of indole
	07.02.2023			
	08.02.2023	bonding in alkyls Li, Al, Hg and Sn , brief account of metal- ethylenic complexes		
	09.02.2023	test+revision		
	10.02.2023		factorization of partition function	
	11.02.2023		interaction of radiation with matter, difference between thermal and photochemical processes	
	13.02.2023			preparation and rxn of quinoline , isoquinoline
	14.02.2023			
	15.02.2023	mononuclear carbonyls and the nature of bonding in metal carbonyls		
	16.02.2023	doubts		
	17.02.2023		laws of photochemistry, jablonski diagram	
	18.02.2023	**Maha Shivratri**		
	20.02.2023		fluorescence, phosphoroscence, non-radiative processes, quantum yeild	
	21.02.2023			mechanism of electrophilic substitution rxn of quinoline and isoquinoline
	22.02.2023			

Week	Date	Class -B.ScIII(N.M)	Class-B.Sc III(N.M)	Class -B.Sc III(N.M)
		Subject-Inorganic chem	**Subject-Physical chem**	**Subject-Organic chem**
	23.02.2023	arrhenius, bronsted-lowry		
	24.02.2023	lux-food, solvent system		
	25.02.2023		photosensitized reaction-energy transfer processes	
	27.02.2023		test+revision	
	28.02.2023			classification of amino acids, acid-base behaviour, isoelectric point
	01.03.2023			
	02.03.2023	lewis concepts of acids and bases		
	03.03.2023	relative strength of acid and base		
	04.03.2023		ideal and non ideal solutions, methods of expressing concentration of solution, dilute solution	
	05.03.2023 to 12.03.2023	**Holi Vacations**		
	13.03.2023		raults law, colligative properties:(i) relative lowering of v.p (ii)elevation in b.pt	
	14.03.2023			electrophorosis, preparation of alpha-amino acids
	15.03.2023			
	16.03.2023	lewis concepts of acids and bases		
	17.03.2023	relative strength of acid and base		
	18.03.2023		depression in freezing pt, osmotic pressure,thermodynamic derivation of relation between amount of solute and elevation in b.pt and dpression in freezing pt	
	20.03.2023		application	
	21.03.2023			structure and nomenclature of peptides and proteins, classification of proteins
	22.03.2023			
	23.03.2023	**Shaheedi Diwas**		
	24.03.2023	concept of hard and soft acids and bases		
	25.03.2023	test		
	27.03.2023		doubts+revision	
	28.03.2023		test	

Week	Date	Class -B.ScIII(N.M)	Class-B.Sc III(N.M)	Class -B.Sc III(N.M)
		Subject-Inorganic chem	Subject-Physical chem	Subject-Organic chem
	29.03.2023			peptide structure determine, end group analysis, selective hydrolysis of peptides
	30.03.2023	**Ram Navmi**		
	31.03.2023			
	01.04.2023	essential and trace elements in biological processes		
	03.04.2023	metalloporphines with special reference to hb and mb		
	04.04.2023	**Mahavir Jayanti**		
	05.04.2023		phase, compnent, DOF	
	06.04.2023		thermodynamics derivation of gibbs phase rule, phase equilibira of one component	
	07.04.2023			classical peptide synthesis, solid-phase peptide synthesis
	08.04.2023			
	10.04.2023	biological role of alkali and alkaline earth ions with special reference to Ca		
	11.04.2023	nitrogen fixation		
	12.04.2023		water system	
	13.04.2023		revision	
	14.04.2023	**Vaisakhi/Dr. B.R. Ambedkar Jayanti**		
	15.04.2023			structure of peptides and proteins
	17.04.2023			
	18.04.2023	silicons and phosphazenes		
	19.04.2023	nature of bonding in triphosphazenes		
	20.04.2023		phase equilibria of 2 component system solid-liquid equilibria	
	21.04.2023		doubts	
	22.04.2023	**Id-Ul-Fitr/Parshuram Jayant**		
	24.04.2023			numerical analysis
	25.04.2023			
	26.04.2023	silicons and phosphazenes		
	27.04.2023	preparation of phosphazene		
	28.04.2023		simple eutectic pb-ag system	
	29.04.2023		test	
	01.05.2023			doubts
	02.05.2023			
	03.05.2023	properties and structure of phosphazenes		

Week	Date	Class -B.ScIII(N.M)	Class-B.Sc III(N.M)	Class -B.Sc III(N.M)
		Subject-Inorganic chem	**Subject-Physical chem**	**Subject-Organic chem**
	04.05.2023	revision		
	05.05.2023		desilverisation of lead	
	06.05.2023		revision+doubts	
	08.05.2023			test
	09.05.2023			
	10.05.2023	doubts		
	11.05.2023	test		
	12.05.2023		test	
	13.05.2023		numericals practice	
	15.05.2023			numerical practice
	16.05.2023			
	17.05.2023	revision+doubts		
	18.05.2023	test		
	19.05.2023		eutectic system	
	20.05.2023		test	
	22.05.2023	**Maharan Partap Jayanti**		
	23.05.2023			revision
	24.05.2023			
	25.05.2023	test		
	26.05.2023	doubts		

Dayanand Mahila Mahavidyalaya, Kurukshetra

Lesson Plan (Even Semester)

Session 2022-23 (01.02.2023 to 26.05.2023)

Name of Teacher-DEEPIKA MURAL

Subject CHEMISTRY

Week	Date		Class b.sc II(N.M)	Class b.sc I(n.m)
			Subject- physical chem	**Semester -inorganic chem**
	01.02.2023			
	02.02.2023			
	03.02.2023		second law, second law of thermodynamics, need for the law	hydrogen bonding, types
	04.02.2023		different statement of the law and Carnot cycle	effect of hydrogen bonding on properties of substances, application
	06.02.2023			
	07.02.2023			
	08.02.2023			
	09.02.2023			
	10.02.2023		Carnot cycle efficiency, Carnot theorem	Van-der-waal forces, metallic bond introduction
	11.02.2023		Thermodynamics scale of temperature, concept of entropy - as a state function, entropy as a function of v and t	Band theories of metallic bond, introduction to semi conductors.
	13.02.2023			
	14.02.2023			
	15.02.2023			
	16.02.2023			
	17.02.2023		entropy as a fucntion of P and T	Semi conductor types and application
	18.02.2023	**Maha Shivratri**		
	20.02.2023			
	21.02.2023			
	22.02.2023			
	23.02.2023			
	24.02.2023		entropy change in physical change, entropy as a criteria of spontaneity and equilibrium	comparative test of the elements including diagonal relationship, anomalous behaviour of Li and Be
	25.02.2023		Test	Test
	27.02.2023			
	28.02.2023			
	01.03.2023			
	02.03.2023			
	03.03.2023		3rd law of thermodynamics, statement of concept of residual entropy	salient features of hydride, oxide, halide, hydroxide
	04.03.2023		numerical practice	behaviour of solution in liquid ammonia
	05.03.2023 to 12.03.2023	**Holi Vacations**		
	13.03.2023			
	14.03.2023			
	15.03.2023			
	16.03.2023			

Week	Date		Class b.sc II(N.M)	Class b.sc I(n.m)
			Subject- physical chem	**Semester -inorganic chem**
	17.03.2023		evaluation of absolute entropy from heat capcity date, gibb's function and helholtz function	numerical practice
	18.03.2023		Numerical practice	general physical properties of noble gases
	20.03.2023			
	21.03.2023			
	22.03.2023			
	23.03.2023	**Shaheedi Diwas**		
	24.03.2023		G as a criteria for thermodynamic equilibrium and spontaneity	low chemical reactivity of noble gases, chemistry of Xe
	25.03.2023		its advantage over entropy change, variation of G with P, V, T	structure and bonding in fluorides and oxides
	27.03.2023			
	28.03.2023			
	29.03.2023			
	30.03.2023	**Ram Navmi**		
	31.03.2023		Test	structure and bonding in oxifluorides of Xe
	01.04.2023		electrolytic and galvanic cell	electronic configuration of P block, atomic and ionic size, metallic character
	03.04.2023			
	04.04.2023	**Mahavir Jayanti**		
	05.04.2023			
	06.04.2023			
	07.04.2023		reversible and irreversible cells, conventional representation of electrochemical cells	melting point, ionization energy, electron affinity, electronegativity
	08.04.2023		numerical practice + revision	inert pair effect and diagonal relationship
	10.04.2023			
	11.04.2023			
	12.04.2023			
	13.04.2023			
	14.04.2023	**Vaisakhi/Dr. B.R. Ambedkar Jayanti**		
	15.04.2023		calculation of thermodynamic quantities of cell reaction	diborane : preparation, properties and structure
	17.04.2023			
	18.04.2023			
	19.04.2023			
	20.04.2023			
	21.04.2023		types of reversible electrode, electrode reaction	Borazine chemical properties and structure, relative strength of trihalide of Borane as Lews acids, structure of aluminum chloride
	22.04.2023	**Id-Ul-Fitr/Parshuram Jayant**		
	24.04.2023			
	25.04.2023			
	26.04.2023			
	27.04.2023			
	28.04.2023		numerical + test	catination, carbides, fluorocarbons, silicates

Week	Date		Class b.sc II(N.M)	Class b.sc I(n.m)
			Subject- physical chem	**Semester -inorganic chem**
	29.04.2023		Nernest equation, derivation of cell's emf and single electrode potential	structure of oxides of nitrogen and phosphorus, oxiacids
	01.05.2023			
	02.05.2023			
	03.05.2023			
	04.05.2023			
	05.05.2023		standard hydrogen electrode, reference electrodes	test
	06.05.2023		test	revision + doubts
	08.05.2023			
	09.05.2023			
	10.05.2023			
	11.05.2023			
	12.05.2023		reference electrode, sign convensions	oxiacids of sulphur, hydrogen peroxide
	13.05.2023		doubts	revision
	15.05.2023			
	16.05.2023			
	17.05.2023			
	18.05.2023			
	19.05.2023		concentration cell with and without transference, liquid junction potential	interhalogen compounds, hydra and oxiacids of Cl
	20.05.2023		application	test
	22.05.2023		**Maharan Partap Jayanti**	
	23.05.2023			
	24.05.2023			
	25.05.2023			
	26.05.2023		numerical practice	test