

Dayanand Mahila Mahavidyalaya, Kurukshetra

Lesson Plan (Even Semester)

Session 2021-22 (12.04.2022 to 19.07.2022)

Name of Teacher Mrs. Asha Malik

Subject Chemistry

Week	Date	Class BSc. I NM (inorganic chemistry)	Class BSc. I NM (Physical Chemistry)	Class B.Sc I NM (organic Chemistry)
		Semester II	Semester II	Semester II
	12.04.2022	Chapter 1 Hydrogen bonding, types, effect on properties of substances & application		
	13.04.2022		Chapter 1. Introduction , Rate of reaction, rate equation	
	14.04.2022	Dr. B.R. Ambedkar Jayanti/Mahavir Jayanti		
	15.04.2022			Chapter 1 - Nomenclature of alkenes, dehydration of alcohols
	16.04.2022			dehydrohalogenation of alkenes, saytzeff rule, hoffmann elimination
	18.04.2022	Vander waal forces and their types		
	19.04.2022	Metallic bond , theories of metallic bond		
	20.04.2022		factors effecting rate of reaction , order of reaction, molecularity of reaction ,numerical problems related to them	
	21.04.2022		Integrated rate expression of zero order reaction and it's characteristics	
	22.04.2022			Physical properties ,stability of alkenes,catalytic hydrogenation
	23.04.2022			Addition of hydrogen halides, markownikoff and anti markownikoff rule, hydroboration -oxidation
	25.04.2022	semiconductors - introduction ,types,band model		
	26.04.2022	application of semiconductors		
	27.04.2022		Integrated rate expression of first order reaction and it's characteristics , numerical problems of first order reaction	
	28.04.2022		Integrated rate expression of second and third order reaction and it's characteristics	

29.04.2022			oxymercuration- reduction , ozonolysis ,hydration, hydroxylation and oxidation with KMnO ₄
30.04.2022			Chapter 2 Nomenclature of benzene derivatives, Huckel rule, aromatic ions
02.05.2022	Chapter 2 group 1 elements -electronic configuration, physical properties, chemical properties		
03.05.2022	Parshuram Jayanti/Id-ul-Fitr		
04.05.2022		numerical problems , Arrhenius equation	
05.05.2022		unimolecular collision theory, bimolecular collision theory	
06.05.2022			annulenes upto 10 carbon atoms, aromatic ,anti aromatic and non aromatic compounds
07.05.2022			Aromatic electrophilic substitution, general pattern of mechanism , nitration
09.05.2022	Chapter 2 group 1 elements -electronic configuration, physical properties, chemical properties		
10.05.2022	Group 2 elements -physical & chemical properties		
11.05.2022		transition state theory, numerical problems	
12.05.2022		test of chapter upto first order reaction with numericals	
13.05.2022			Halogenation , sulphonation , Friedel Craft reaction
14.05.2022			Energy profile diagram, activating and deactivating substituents and orientation
16.05.2022	Anomalous behaviour & diagonal relationship of Beryllium		
17.05.2022	Salient features of Hydrides, oxides, halides, hydroxides ,behaviour of solution in liquid ammonia		
18.05.2022		Numerical problems of chapter 1	
19.05.2022		Chapter 2 electrolytic conduction, factors affecting electrolytic conduction	

20.05.2022			Chapter 3 Nomenclature and classification of dienes, structure of butadiene, Assignment -1 given
21.05.2022			1,2 & 1,4 addition Diel's Alder reaction, nomenclature and structure of alkynes
23.05.2022	Role of s block elements		
24.05.2022	test of chapter 1		
25.05.2022		specific conduction, molar conduction, equivalent conduction and their relationship	
26.05.2022		Arrhenius theory of ionization	
27.05.2022			methods of preparation alkynes ,Physical properties of alkynes
28.05.2022			Electrophilic reaction of alkynes with mechanism
30.05.2022	Chapter 3 Physical properties of noble gases , chemistry of noble gases		
31.05.2022	structure and bonding in xenon fluorides		
01.06.2022		Ostwald dilution law ,Debye Huckel Onsager equation for strong electrolysis	
02.06.2022	Maharana Pratap Jayanti		
03.06.2022			Nucleophilic addition reactions with mechanism and acidity of alkynes
04.06.2022			test of chapter 1
06.06.2022	structure and bonding in xenon oxides		
07.06.2022	structure and bonding in xenon oxyfluorides ,Compounds of other noble gases ,problems of chapter 3		
08.06.2022		kohlrausch law and it's application	
09.06.2022		sessional test	
10.06.2022			Chapter 4 Nomenclature of alkyl halides , methods of formation,physical properties
11.06.2022			Nucleophilic substitution reaction with mechanism
13.06.2022	Chapter 4 Group 13- physical properties, anomalous behaviour & diagonal relationship of boron		
14.06.2022	Sant Kabir Jayanti		

15.06.2022		Applications of Kohlrausch law, numerical problems	
16.06.2022		conductometric titration, pH and pKa, buffer solution	
17.06.2022			SN2 & SN1 reaction with energy profile diagram, aryl halides nomenclature
18.06.2022			preparation of aryl halides, nuclear reaction of aryl halides, electrophilic aromatic substitution, reduction
20.06.2022	Diborane, borazine, Assignment 2		
21.06.2022	Trihalides of boron, group 14 characteristics, carbides		
22.06.2022		Buffer action, Henderson-Hasselbalch equation	
23.06.2022		buffer mechanism of buffer action, numerical problems	
24.06.2022			Elimination-addition reaction, Addition-elimination reaction
25.06.2022			reactions of aralkyl halides, relative reactivities of alkyl halides, allyl, vinyl, aryl halides
27.06.2022	Fluorocarbons, silicates, group 15 characteristics, structure of oxides of nitrogen & phosphorus		
28.06.2022	oxy acids of N & P, structure of white & red phosphorus, group 16 characteristics, oxy acids of sulphur		
29.06.2022		Revision	
30.06.2022		Revision	
01.07.2022			Revision
02.07.2022			Revision
04.07.2022	Hydrogen peroxide- properties & uses, group 17 characteristics, inter halogen compounds		
05.07.2022	Hydro & oxy acids of chlorine, cationic nature of Iodine		
06.07.2022		numerical problems taking	
07.07.2022		numerical problems taking	
08.07.2022			problems taking
09.07.2022			problems taking
11.07.2022	Revision		

	12.07.2022	Revision	
	13.07.2022		test of chapter electrochemistry
	14.07.2022		Revision
	15.07.2022		Revision
	16.07.2022		Revision
	18.07.2022	Revision	
	19.07.2022	problems taking	

Name of Teacher Mrs Rajwant kaur.....

Subject ...chemistry.....

Week	Date	Class ...B.sc-2nd(n.m).....	Class B.Sc-2nd(n.m).....	Class B.Sc-2nd(n.m).....
		Semester 4th (physical chemistry).....	Semester ...4th(organic chemistry).....	Semester 4th(inorganic chemistry).....
	12.04.2022	introduction of thermodynamics		
	13.04.2022		introduction of infrared absorption spectroscopy	
	14.04.2022	Dr. B.R. Ambedkar Jayanti/Mahavir Jayanti		
	15.04.2022			introduction of f block elements
	16.04.2022			electronic structure, oxidation states, magnetic properties
	18.04.2022	need for the law		
	19.04.2022	different statements of the law		
	20.04.2022		molecular vibrations, hooke law, selection rule, intensity and position of ir bands	
	21.04.2022		fingerprint region, characteristics absorption of various functions group	
	22.04.2022			complex formation, colour, ionic radii
	23.04.2022			lanthanide contraction, occurrence, separation of lanthanide and lanthanide compound
	25.04.2022	carnot cycle and its efficiency		
	26.04.2022	carnot theorem		
	27.04.2022		application of IR spectroscopy in structural elucidation of simple organic chemistry	
	28.04.2022		test and revision	
	29.04.2022			introduction of actinides, general characteristics of actinides
	30.04.2022			chemistry of separation of Np, Pu and Am from uranium, transuranic elements
	02.05.2022	thermodynamics scale of temperature		

	03.05.2022	Parshuram Jayanti/Id-ul-Fitr		
	04.05.2022		introduction of amine structure and nomenclature of amine	
	05.05.2022		physical properties, separation of a mixture	
	06.05.2022			comparison of properties of lanthanides and actinide with transition elements
	07.05.2022			test and revision
	09.05.2022	concept of entropy entropy as a state function		
	10.05.2022	entropy as a function of v and t		
	11.05.2022		structure features affecting basicity of amine	
	12.05.2022		preparation of alkyl and aryl amines	
	13.05.2022			introduction of theory of qualitative and quantitative analysis
	14.05.2022			
	16.05.2022	test and assignment		
	17.05.2022	revision		
	18.05.2022		test and assignment	
	19.05.2022		gabriel phthalimide reaction, hofmann bromamide reaction	
	20.05.2022			chemistry of acid and basic radicals, chemistry of identification of acid radical in typical combination
	21.05.2022			chemistry of interference of acid radicals
	23.05.2022	entropy as a function of p and t		
	24.05.2022	entropy change in physical change		
	25.05.2022		test and introduction of diazonium salts	
	26.05.2022		mechanism of diazotisation, structure of benzene diazonium chloride	
qs	27.05.2022			including their removal in the analysis of basic radical, common ion effect
	28.05.2022			solubility product, theory of precipitation, coprecipitation
	30.05.2022	entropy as a criteria of spontaneity and equilibrium		
	31.05.2022	third law of thermodynamics		
	01.06.2022		aldehyde and ketones, nomenclature and structure of carbonyl group	
	02.06.2022	Maharana Pratap Jayanti		

03.06.2022			post precipitation, purification of precipitation
04.06.2022			
06.06.2022	nernst heat theorem		
07.06.2022	its advantages over entropy change variation of G with P, V and T		
08.06.2022		synthesis of aldehyde and ketones with particular reference to the synthesis of aldehyde	
09.06.2022		advantage of oxidation of alcohol with chromium trioxide pyridinium	
10.06.2022			test and assignment
11.06.2022			revision
13.06.2022	introduction of electrochemistry		
14.06.2022	Sant Kabir Jayanti		
15.06.2022		PCC and pyridinium dichromate, physics properties	
16.06.2022		mechanism of nucleophilic additions of carbonyl group	
17.06.2022			revision
18.06.2022			revision
20.06.2022	electrolytic and galvanic cell reversible and irreversible cell		
21.06.2022	calculation of thermodynamics quantity of cells reaction		
22.06.2022		reaction benzoin, aldol, perkin and knoevenagel condensations	
23.06.2022		wittig reaction, mannich reaction, oxidation of aldehyde	
24.06.2022			test
25.06.2022			revision
27.06.2022	types of reversible electrodes metal metal ion, gas electrode, metal insoluble salt		
28.06.2022	electrode reactions, nernst equation, derivations of cells emf and single electrode potential		
29.06.2022		baeyer villiger oxidation of ketones	
30.06.2022		cannizzaro reaction, MPV, clemmensen	
01.07.2022			revision
02.07.2022			revision

	04.07.2022	liquid junction potential , its measurement		
	05.07.2022	revision		
	06.07.2022		wolff kishner, LIALH ₄ and NaBH ₄ red.	
	07.07.2022		revision	
	08.07.2022			revision
	09.07.2022			revision
	11.07.2022	test and assignment		
	12.07.2022	revision		
	13.07.2022		test and revision	
	14.07.2022		revision	
	15.07.2022			test
	16.07.2022			revision
	18.07.2022	revision		
	19.07.2022	revision		

Name of Teacher-Deepika Mural

Subject -Chemistry

Week	Date	<u>Class -B.Sc III N.M</u>	Class -B.Sc III N.M	<u>Class-B.Sc III N.M</u>
		<u>organic</u>	physical	<u>inorganic</u>
		Semester-VI	Semester VI	Semester VI
	12.04.2022	acidity of gamma-hydrogen, alkylation of dimethyl malonate		
	13.04.2022	alkylation of ethyl acetoacetate		
	14.04.2022	Dr. B.R. Ambedkar Jayanti/Mahavir Jayanti		
	15.04.2022		need of statistical thermodynamics, thermodynamics probability	
	16.04.2022		maxwell-boltzmann distribution statistics, born-oppenheimer, partition function	
	18.04.2022			organicmetallic definition, nomenclature, classification
	19.04.2022			preparation , properties of organometallic
	20.04.2022	claisen condensation, keto-enol tautomerization		
	21.04.2022	doubt session		
	22.04.2022		factorization of partition function	
	23.04.2022		interaction of radiation with matter, difference between thermal and photochemical processes	
	25.04.2022			bonding in alkyls Li, Al, Hg and Sn , brief account of metal- ethylenic complexes
	26.04.2022			test+revision

27.04.2022	molecular orbital picture and aromatic characteristics of pyrrole, furan		
28.04.2022	molecular orbital picture and aromatic characteristics of thiophene and pyridine		
29.04.2022		laws of photochemistry, Jablonski diagram	
30.04.2022		fluorescence, phosphorescence, non-radiative processes, quantum yield	
02.05.2022			doubts
03.05.2022	Parshuram Jayanti/Id-ul-Fitr		
04.05.2022			mononuclear carbonyls and the nature of bonding in metal carbonyls
05.05.2022	mechanism of electrophilic substitution reaction		
06.05.2022	nucleophilic substitution rxn in pyridine derivatives, comparison of basicity of pyridine, piperidine and pyrrole		
07.05.2022		photosensitized reaction-energy transfer processes	
09.05.2022		test+revision	
10.05.2022			Arrhenius, Bronsted-Lowry
11.05.2022			Le Chatelier, solvent system
12.05.2022	introduction to condensed 5 and 6 membered heterocycles, preparation and reaction of indole		
13.05.2022	preparation and rxn of quinoline, isoquinoline		
14.05.2022		ideal and non ideal solutions, methods of expressing concentration of solution, dilute solution	
16.05.2022		Raoult's law, colligative properties: (i) relative lowering of v.p (ii) elevation in b.pt	
17.05.2022			Lewis concepts of acids and bases
18.05.2022			relative strength of acid and base
19.05.2022	mechanism of electrophilic substitution rxn of quinoline and isoquinoline		
20.05.2022	doubts and revision		

21.05.2022		depression in freezing pt, osmotic pressure, thermodynamic derivation of relation between amount of solute and elevation in <u>b.pt</u> and depression in freezing pt	
23.05.2022		application	
24.05.2022			concept of hard and soft acids and bases
25.05.2022			test
26.05.2022	classification of amino acids, acid-base behaviour, isoelectric point		
27.05.2022	electrophoresis, preparation of alpha-amino acids		
28.05.2022		doubts+revision	
30.05.2022		test	
31.05.2022			essential and trace elements in biological processes
01.06.2022			metalloporphines with special reference to hb and mb
02.06.2022	Maharana Pratap Jayanti		
03.06.2022	structure and nomenclature of peptides and proteins, classification of proteins		
04.06.2022	peptide structure determine, end group analysis, selective hydrolysis of peptides		
06.06.2022		phase, component, DOF	
07.06.2022		thermodynamics derivation of gibbs phase rule, phase equilibria of one component	
08.06.2022			biological role of alkali and alkaline earth ions with special reference to Ca
09.06.2022			nitrogen fixation
10.06.2022	classical peptide synthesis, solid-phase peptide synthesis		
11.06.2022	structure of peptides and proteins		
13.06.2022		water system	
14.06.2022	Sant Kabir Jayanti		
15.06.2022		revision	
16.06.2022			silicones and phosphazenes
17.06.2022			nature of bonding in triphosphazenes
18.06.2022	doubt session		
20.06.2022	test		

	21.06.2022		phase equilibria of 2 component system solid-liquid equilibria	
	22.06.2022		doubts	
	23.06.2022			silicons and phosphazenes
	24.06.2022			preparation of phosphazene
	25.06.2022	addition or chain growth polymerization		
	27.06.2022	free radical vinyl polymerization		
	28.06.2022		simple eutectic pb-ag system	
	29.06.2022		eutectic system	
	30.06.2022			properties and structure of phosphazenes
	01.07.2022			revision
	02.07.2022	ionic vinyl polymerization		
	04.07.2022	ziegler natta polymerization and vinyl polymers		
	05.07.2022		desilverisation of lead	
	06.07.2022		revision+doubts	
	07.07.2022			doubts
	08.07.2022			test
	09.07.2022	doubts		
	11.07.2022	test		
	12.07.2022		test	
	13.07.2022		numericals practice	
	14.07.2022			revision+doubts
	15.07.2022			test
	16.07.2022	condensation or step growth polymerization, polyesters, polyamides, phenol formaldehyde resins		
	18.07.2022	natural and synthetic rubbers		
	19.07.2022		test	