Name of the Assistant Professor: Dr. Amit Kumar
Class and Section: B.Sc. (Non-Medical) Sem-I
Period: Nov 2020 to Feb. 2021

1st Week	Day 1	02-Nov-20	Maxwell's distribution of velocities and energies
	Day 2	03-Nov-20	Calculation of root mean square velocity, average velocity and most probable velocity
	Day 3	04-Nov-20	Collision diameter, co llision number, col lision frequency and mean free path.
	Day 4	05-Nov-20	Deviation of Real gases from ideal behaviour.
	Day 5	06-Nov-20	Derivation of Vander Waal's Equation of State its application in the calculation of Boyle's temperature
	Day 6	07-Nov-20	Quiz-1
2nd Week	Sunday	08-Nov-20	
	Day 1	09-Nov-20	Explanation of behaviour of real gases using Vander Waal's equation
	Day 2	10-Nov-20	Idea of de Broglie matter waves, Heisenberg uncertainty principle,
	Day 3	11-Nov-20	atomic orbitals, quantum numbers, radial and angular wave functions, probability distribution curves, shapes of s, p, d orbitals.
	Day 4	12-Nov-20	Quiz-2
	Day 5	13-Nov-20	Vacations
	Day 6	14-Nov-20	Vacations
3rd Week	Sunday	15-Nov-20	Vacations
	Day 1	16-Nov-20	Vacations
	Day 2	17-Nov-20	Localized and delocalized chemical bond
	Day 3	18-Nov-20	van der Waals in teractions
	Day 4	19-Nov-20	resonance: conditions, resonance effect and its applications
	Day 5	20-Nov-20	hyperconjugation, inductive effect, Electromeric effect & their comparison
	Day 6	21-Nov-20	Quiz-3
4th Week	Sunday	22-Nov-20	
	Day 1	23-Nov-20	Critical temperature, Critical pressure, critical volume
	Day 2	24-Nov-20	Determination of Cr. T, Cr. P, Cr. V
	Day 3	25-Nov-20	PV isotherms of real gases,
	Day 4	26-Nov-20	continuity of states
	Day 5	27-Nov-20	the isotherms of Vander Waal's equation
	Day 6	28-Nov-20	relationship between critical constants and Vander Waal"s constants
5th Week	Sunday	29-Nov-20	
	Day 1	30-Nov-20	Holiday
	Day 2	01-Dec-20	Critical compressibility fac tor
	Day 3	02-Dec-20	The Law of corresponding states.
	Day 4	03-Dec-20	Lequifaction of gases.
	Day 5	04-Dec-20	Quiz-4
	Day 6	05-Dec-20	
6th Week	Sunday	06-Dec-20	
	Day 1	07-Dec-20	Aufbau and Pauli exclusion principles,
	Day 2	08-Dec-20	Hund's multiplicity rule.
	Day 3	09-Dec-20	Electronic configurations of the elements,
	Day 4	10-Dec-20	effective nuclear charge, Slater's rules.
	Day 5	11-Dec-20	Atomic and ionic radii,
	Day 6	12-Dec-20	ionization energy, electron affinity and electronegativity
7th Week	Sunday	13-Dec-20	
	Day 1	14-Dec-20	Their methods of determination or evaluation
	Day 2	15-Dec-20	trends in periodic table (in s &p block elements).
	Day 3	16-Dec-20	Quiz-5
	Day 4	17-Dec-20	Structure of liquids.
	Day 5	18-Dec-20	Properties of liquids – surface tension
	Day 6	19-Dec-20	viscosity, vapour pressure
8th Week	Sunday	20-Dec-20	
	Day 1	21-Dec-20	optical rotations
	Day 2	22-Dec-20	Quiz-6, Assignment - 1
	Day 3	23-Dec-20	Concept of isomerism. Types of isomerism.
	Day 4	24-Dec-20	Optical isomerism, elements of symmetry
	Day 5	25-Dec-20	Holiday
	Day 6	26-Dec-20	molecular chirality, enantiomers,
9th Week	Sunday	27-Dec-20	
	Day 1	28-Dec-20	stereogenic centre, optical activity
	Day 2	29-Dec-20	properties of enantiomers
	Day 3	30-Dec-20	chiral and achiral molecules with two stereogenic, centres, diastereomers
	Day 4	31-Dec-20	threo and eryth ro diastereomers, meso compounds,
	Day 5	01-Jan-21	resolution of enantiomers, inversion, retention and racemization.
	Day 6	02-Jan-21	Quiz-7
10th Week	Sunday	03-Jan-21	
	Day 1	04-Jan-21	Relative and absolute configuration, sequence rules, R & S systems of nomenclature
	Day 2	05-Jan-21	Geometric isomerism determination of configuration of geometric isomers.
	Day 3	06-Jan-21	E & Z system of nomenclature
	Day 4	07-Jan-21	Conformational isomerism conformational analysis of ethane and n-butane
	Day 5	08-Jan-21	conformations of cyclohexane, axial and equatorial bonds,.
	Day 6	09-Jan-21	Newman projection and Sawhorse formulae
11th Week	Sunday	10-Jan-21	
	Day 1	11-Jan-21	Difference between configuration and conformation.

	Day 2	12-Jan-21	Quiz-8
	Day 3	13-Jan-21	Valence bond theory and its limitations, directional characteristics of covalent bond
	Day 4	14-Jan-21	various types of hybridization and shapes of simple inorganic molecules and ions
	Day 5	15-Jan-21	Valence shell electron pair repulsion (VSEPR) theory
	Day 6	16-Jan-21	theoryof heteronuclear (CO and NO) diatomic.molecules, , bond strength and bond energy
12th Week	Sunday	17-Jan-21	
	Day 1	18-Jan-21	percentage ionic character from dipole moment and electronegativity difference.
	Day 2	19-Jan-21	Quiz-9
	Day 3	20-Jan-21	Classification of solids, Laws of crystallography
	Day 4	21-Jan-21	Symmetry elements of crystals. Definition of unit cell & space lattice, Bravais lattices, crystal system.
	Day 5	22-Jan-21	Derivation of Bragg equation. Determination of crystal structure o f NaCl, KCl.
	Day 6	23-Jan-21	Difference between solids, liquids and liquid crystals,types of liquid crystals. Applications of liquid crystals.
13th Week	Sunday	24-Jan-21	
	Day 1	25-Jan-21	Ionic structures (NaCl,CsCl, ZnS(Zinc Blende), CaF2) radius ratio effect and coordination number
	Day 2	26-Jan-21	limitation of radius ratio rule, lattice defects, semiconductors,
	Day 3	27-Jan-21	lattice energy (mathematical derivation excluded) and Born-Haber cycle
	Day 4	28-Jan-21	solvation energy and its relation with solubility of ionic solids
	Day 5	29-Jan-21	polarizing power and polarisability of ions, Fajan's rule.
	Day 6	30-Jan-21	Quiz-10
14th Week	Sunday	31-Jan-21	
	Day 1	01-Feb-21	Curved arrow notation, drawing electron movements with arrows, homolytic and heterolytic bond breaking.
	Day 2	02-Feb-21	electrophiles and nucleophiles. Types of organic reactions.
	Day 3	03-Feb-21	Energy considerations. Reactive intermediates carbocations, carbanions
	Day 4	04-Feb-21	free radicals, carbenes , arynes and nitrenes (formation, structure & stability)
	Day 5	05-Feb-21	Assigning formal charges on intermediates and other ionic species
	Day 6	06-Feb-21	Quiz-11
15th Week	Sunday	07-Feb-21	
	Day 1	08-Feb-21	IUPAC nomenclature of branched and unbranched alkanes
	Day 2	09-Feb-21	the alkyl group, classification of carbon atoms in alkanes.
	Day 3	10-Feb-21	Wurtz reaction, Kolbe reaction
	Day 4	11-Feb-21	Corey-House reaction and decarboxylation of carboxylic acids
	Day 5	12-Feb-21	Cycloalkanes nomenclature, synthesis of cycloalkanes and their derivatives
	Day 6	13-Feb-21	cycloaddition reactions, dehalogenation of -dihalides
16th Week	Sunday	14-Feb-21	
	Day 1	15-Feb-21	pyrolysis of calcium or barium salts of dicarboxylic acids
	Day 2	16-Feb-21	Baeyer's strain theory and its limitations., theory of strainless rings.
	Day 3	17-Feb-21	Quiz-12
	Day 4	18-Feb-21	Assignment-2
	Day 5	19-Feb-21	Review
	Day 6	20-Feb-21	Review
17th Week	Sunday	21-Feb-21	
	Day 1	22-Feb-21	Class Test Series
	Day 2	23-Feb-21	Class Test Series
	Day 3	24-Feb-21	Class Test Series
	Day 4	25-Feb-21	Class Test Series
	Day 5	26-Feb-21	Class Test Series
	Day 6	27-Feb-21	Class Test Series
18th Week	Sunday	28-Feb-21	

Name of the Assistant Professor: Dr. Amit Kumar
Class and Section: B.Sc. (Non-Medical) Sem-III
Period: Nov 2020 to Feb. 2021

1st Week	Day 1	02-Nov-20	Definition of transition elements, position in the periodic table
	Day 2	03-Nov-20	General characteristics & properites of Ist transition elements
	Day 3	04-Nov-20	Structures & properties of some compounds of transition elements
	Day 4	05-Nov-20	Structures & properties of some compounds of transition elements
	Day 5	06-Nov-20	Quiz-1
	Day 6	07-Nov-20	General characteristics and properties of the IInd and IIIrd trans ition elements
2nd Week	Sunday	08-Nov-20	
	Day 1	09-Nov-20	General characteristics and properties of the IInd and IIIrd trans ition elements
	Day 2	10-Nov-20	Comparison of properties of 3d elements with 4d & 5d elements
	Day 3	11-Nov-20	Comparison of properties of 3d elements with 4d & 5d elements
	Day 4	12-Nov-20	Quiz-2
	Day 5	13-Nov-20	Vacations
	Day 6	14-Nov-20	Vacations
3rd Week	Sunday	15-Nov-20	Vacations
	Day 1	16-Nov-20	Vacations
	Day 2	17-Nov-20	system,surrounding etc. Types of systems, intensive and extensive properties. State and path functions
	Day 3	18-Nov-20	Thermodynamic process. Concept of heat and work. Zeroth Law of thermodynamics
	Day 4	19-Nov-20	First law of thermodynamics: statement, definition of internal energy and enthalpy.
	Day 5	20-Nov-20	Heat capacity, heat capacities at constant volume and pressure and their relationship
	Day 6	21-Nov-20	Joule's law – Joule – Thomson coefficient for ideal gass and real gas: and inversion temperature.
4th Week	Sunday	22-Nov-20	
	Day 1	23-Nov-20	Quiz-3
	Day 2	24-Nov-20	Calculation of w.q. dU & dH for the expansion of ideal gases under isothermal and adiabatic conditions for reve rsible process
	Day 3	25-Nov-20	Temperature dependence of enthalpy
	Day 4	26-Nov-20	Kirchoffs equation
	Day 5	27-Nov-20	Bond energies and applications o f bond energies.
	Day 6	28-Nov-20	Quiz-4
5th Week	Sunday	29-Nov-20	
	Day 1	30-Nov-20	Holiday
	Day 2	01-Dec-20	Monohydric alcohols nomenclature, methods of formation
	Day 3	02-Dec-20	reduction of aldehydes, ketones, carboxylic acids and esters. Hydrogen bonding. Acidic nature.
	Day 4	03-Dec-20	Reactions of alcohols. Dihydric alcohols — nomenclature, methods of formation
	Day 5	04-Dec-20	chemical reactions of vicinal glycols, oxidative cleavage, pinacol-pinacolone rearrangement
	Day 6	05-Dec-20	Quiz-5
6th Week	Sunday	06-Dec-20	
	Day 1	07-Dec-20	Synthesis of epoxides. Acid and base-catalyzed ring opening of epoxides
	Day 2	08-Dec-20	orientation of epoxide ring opening,
	Day 3	09-Dec-20	reactions of Grignard and organolithium reagents with epoxides
	Day 4	10-Dec-20	Quiz-6, Assignment-1
	Day 5	11-Dec-20	Werner's coordination theory,
	Day 6	12-Dec-20	effective atomic number concept
7th Week	Sunday	13-Dec-20	
	Day 1	14-Dec-20	chelates, nomenclature of coordination compounds
	Day 2	15-Dec-20	chelates, nomenclature of coordination compounds
	Day 3	16-Dec-20	isomerism in coordination compounds
	Day 4	17-Dec-20	valence bond theory of transition metal complexes
	Day 5	18-Dec-20	valence bond theory of transition metal complexes
	Day 6	19-Dec-20	Quiz-7
8th Week	Sunday	20-Dec-20	
	Day 1	21-Dec-20	Physical properties of a solvent
	Day 2	22-Dec-20	types of solvents and their general characteristics
	Day 3	23-Dec-20	types of solvents and their general characteristics
	Day 4	24-Dec-20	reactions in non-aqueous solvents with reference to liquid NH3 and liquid SO1
	Day 5	25-Dec-20	Holiday
	Day 6	26-Dec-20	Quiz-8
9th Week	Sunday	27-Dec-20	
	Day 1	28-Dec-20	Equilibrium constant and free energy, concept of chemical potential
	Day 2	29-Dec-20	Equilibrium constant and free energy, concept of chemical potential
	Day 3	30-Dec-20	Thermodynamic derivation of law of chemical equilibrium.
	Day 4	31-Dec-20	Thermodynamic derivation of law of chemical equilibrium.
	Day 5	01-Jan-21	Temperature dependence of equilibrium constant
	Day 6	02-Jan-21	Temperature dependence of equilibrium constant
10th Week	Sunday	03-Jan-21	
	Day 1	04-Jan-21	Van't Hoff reaction isochore
	Day 2	05-Jan-21	Van't Hoff reaction isotherm.
	Day 3	06-Jan-21	Le-Chatetier's principle and its applica tions
	Day 4	07-Jan-21	Clapeyron equation and Clausius – Clapeyron equation
	Day 5	08-Jan-21	CC Eqn applications
	Day 6	09-Jan-21	Quiz-9
11th Week	Sunday	10-Jan-21	
	Day 1	11-Jan-21	Nernst distribution law – its thermodynamic derivation

	Day 2	12-Jan-21	Modification of distribution law when solute undergoes dissociation
	Day 3	13-Jan-21	association and chemical combination
	Day 4	14-Jan-21	(i) Determination of degree of hydrolysis and hydrolysis constant of aniline hydrochloride.
	Day 5	15-Jan-21	(ii) Determination of equilibrium constant of potassium tri-iodide complex and process of extraction.
	Day 6	16-Jan-21	Quiz-10
12th Week	Sunday	17-Jan-21	
	Day 1	18-Jan-21	Nomenclature, structure and bonding of Phenols
	Day 2	19-Jan-21	preparation of phenols, physical properties and acidic character.
	Day 3	20-Jan-21	Comparative acidic strengths of alcohols and phenols
	Day 4	21-Jan-21	resonance stabilization of phenoxide ion
	Day 5	22-Jan-21	resonance stabilization of phenoxide ion
	Day 6	23-Jan-21	Reactions of phenols — electrophilic aromatic substitution
13th Week	Sunday	24-Jan-21	
	Day 1	25-Jan-21	Mechanisms of Fries rearrangement
	Day 2	26-Jan-21	Claisen rearrangement
	Day 3	27-Jan-21	Reimer-Tiemann reaction
	Day 4	28-Jan-21	Kolbe's reaction
	Day 5	29-Jan-21	Schotten and Baumann reactions
	Day 6	30-Jan-21	Quiz-11
14th Week	Sunday	31-Jan-21	
	Day 1	01-Feb-21	Absorption laws (Beer-Lambert law), molar absorptivity,
	Day 2	02-Feb-21	presentation and analysis of UV spectra
	Day 3	03-Feb-21	types of electronic transitions, effect of conjugation
	Day 4	04-Feb-21	Concept of chromophore and auxochrome.
	Day 5	05-Feb-21	Bathochromic, hypsochromic, hyperchromic and hypochromic shifts.
	Day 6	06-Feb-21	UV spectra of conjugated enes and enones,
15th Week	Sunday	07-Feb-21	
	Day 1	08-Feb-21	Woodward- Fieser rules
	Day 2	09-Feb-21	calculation of max of simple conjugated dienes and , -unsaturated ketones
	Day 3	10-Feb-21	calculation of max of simple conjugated dienes and , -unsaturated ketones
	Day 4	11-Feb-21	Applications o f UV Spectroscopy in structure elucidation of simple organic compounds.
	Day 5	12-Feb-21	Applications o f UV Spectroscopy in structure elucidation of simple organic compounds.
	Day 6	13-Feb-21	Quiz-12
16th Week	Sunday	14-Feb-21	
	Day 1	15-Feb-21	Nomenclature of Carboxylic acids, structure and bonding, physical properties
	Day 2	16-Feb-21	acidity of carboxylic acids, effects of substituents on acid strength.
	Day 3	17-Feb-21	Preparation of carboxylic acids.
	Day 4	18-Feb-21	Hell-Volhard-Zelinsky reaction. Reduction of carboxylic acids.
	Day 5	19-Feb-21	Mechanism of decarboxylation. Structure , nomenclature and preparation of acid chlorides, esters, amides and acid anhydrides.
	Day 6	20-Feb-21	Relative stability of acyl derivatives. Physical properties, interconvers ion of acid derivatives
17th Week	Sunday	21-Feb-21	
	Day 1	22-Feb-21	Relative stability of acyl derivatives. Physical properties, interconvers ion of acid derivatives
	Day 2	23-Feb-21	Mechanisms of es ter ifica tion and hydrolysis
	Day 3	24-Feb-21	Class Test Series
	Day 4	25-Feb-21	Class Test Series
	Day 5	26-Feb-21	Class Test Series
	Day 6	27-Feb-21	Class Test Series
18th Week	Sunday	28-Feb-21	

Name of the Assistant Professor: Dr. Amit Kumar
Class and Section: B.Sc. (Non-Medical) Sem-V
Period: Nov 2020 to Feb. 2021

1st Week	Day 1	02-Nov-20	Limitations of valence bond theory, an elementary idea of crystal-field theory
	Day 2	03-Nov-20	Limitations of valence bond theory, an elementary idea of crystal-field theory
	Day 3	04-Nov-20	crystal field split ting in octahedral, tetrahedral and square planar complexes
	Day 4	05-Nov-20	crystal field split ting in octahedral, tetrahedral and square planar complexes
	Day 5	06-Nov-20	factors affecting the crystal-f ield parameters.
	Day 6	07-Nov-20	Quiz-1
2nd Week	Sunday	08-Nov-20	
	Day 1	09-Nov-20	A brief outline of thermodynamic stability of metal complexes
	Day 2	10-Nov-20	factors affecting the stability, substitution reactions of square planar complexes of Pt(II).
	Day 3	11-Nov-20	factors affecting the stability, substitution reactions of square planar complexes of Pt(II).
	Day 4	12-Nov-20	Quiz-2
	Day 5	13-Nov-20	Vacations
	Day 6	14-Nov-20	Vacations
3rd Week	Sunday	15-Nov-20	Vacations
	Day 1	16-Nov-20	Vacations
	Day 2	17-Nov-20	Black-body radiation, Plank's radiation law,
	Day 3	18-Nov-20	photoelectric effect, heat capacity of solids,
	Day 4	19-Nov-20	Compton effect
	Day 5	20-Nov-20	wave function and its significance of Postulates of quantum mechanics
	Day 6	21-Nov-20	quantum mechanical operator, commutation relations,
4th Week	Sunday	22-Nov-20	
	Day 1	23-Nov-20	Hamiltonial operator, Hermitian operator, average value of square of Hermitian as a positive quantity,
	Day 2	24-Nov-20	Role of operators in quantum mechanics,
	Day 3	25-Nov-20	Determination of wave function & energy of a partic le in one dimensional box
	Day 4	26-Nov-20	Pictorial representation and its significance.
	Day 5	27-Nov-20	Pictorial representation and its significance.
	Day 6	28-Nov-20	Quiz-3
5th Week	Sunday	29-Nov-20	
	Day 1	30-Nov-20	Holiday
	Day 2	01-Dec-20	Optical activity, polarization – (clausius – Mossotti equation).
	Day 3	02-Dec-20	Orientation of dipoles in an electric field, dipole moment
	Day 4	03-Dec-20	measurement of dipole moment-temperature method and refractivity method
	Day 5	04-Dec-20	dipole moment and structure of molecules
	Day 6	05-Dec-20	Magnetic permeability, magnetic susceptibility and its determination.
6th Week	Sunday	06-Dec-20	
	Day 1	07-Dec-20	Applica tion of magnetic susceptibility, magnetic properties
	Day 2	08-Dec-20	paramagnetism, diamagnetism and ferromagnetics.
	Day 3	09-Dec-20	Principle of nuclear magnetic resonance,
	Day 4	10-Dec-20	the PMR spectrum,number of signals, peak areas, equivalent and nonequivalent protons
	Day 5	11-Dec-20	positions of signals and chemical shift,shielding and deshielding of protons
	Day 6	12-Dec-20	Quiz-4
7th Week	Sunday	13-Dec-20	
	Day 1	14-Dec-20	proton counting,splitting of signals and coupling constants, magnetic equivalence of protons.
	Day 2	15-Dec-20	proton counting,splitting of signals and coupling constants, magnetic equivalence of protons.
	Day 3	16-Dec-20	proton counting,splitting of signals and coupling constants, magnetic equivalence of protons.
	Day 4	17-Dec-20	Discussion of PMR spectra of the molecules
	Day 5	18-Dec-20	Discussion of PMR spectra of the molecules
	Day 6	19-Dec-20	Quiz-5
8th Week	Sunday	20-Dec-20	ethyl bromide, npropyl bromide, isopropyl bromide
	Day 1	21-Dec-20	ethyl bromide, npropyl bromide, isopropyl bromide
	Day 2	22-Dec-20	1,1-dibromoethane, 1,1,2-tribromoethane, ethanol, acetaldehyde
	Day 3	23-Dec-20	ethyl acetate, toluene, benzaldehyde and acetophenone
	Day 4	24-Dec-20	ethyl acetate, toluene, benzaldehyde and acetophenone
	Day 5	25-Dec-20	Holiday
	Day 6	26-Dec-20	Quiz-6, Assignment-1
9th Week	Sunday	27-Dec-20	
	Day 1	28-Dec-20	Types of magnetic behaviour, methods of determining magnetic susceptibility
	Day 2	29-Dec-20	spin-only formula. L-S coupling
	Day 3	30-Dec-20	correlation of s and eff values,
	Day 4	31-Dec-20	orbital contribution to magnetic moments,
	Day 5	01-Jan-21	application of magnetic moment data for 3dmetal complexes.
	Day 6	02-Jan-21	Quiz-7
10th Week	Sunday	03-Jan-21	
	Day 1	04-Jan-21	Types of electronic transitions
	Day 2	05-Jan-21	selection rules for d-d transitions
	Day 3	06-Jan-21	spectroscopic ground states, spectrochemical series
	Day 4	07-Jan-21	Orgel-energy level diagram for d1 and d9 states
	Day 5	08-Jan-21	discussion of the electronic spectrum of [Ti(H2O)6]3+ complex ion.
	Day 6	09-Jan-21	Quiz-8
11th Week	Sunday	10-Jan-21	
	Day 1	11-Jan-21	Electromagnetic radiation, regions of spectrum,

	Day 2	12-Jan-21	basic features of spectroscopy
	Day 3	13-Jan-21	statement of Bornoppenheimer approximation
	Day 4	14-Jan-21	Degrees of freedom
	Day 5	15-Jan-21	Diatomic molecules. Energy levels of rigid rotator
	Day 6	16-Jan-21	Diatomic molecules. Energy levels of rigid rotator
12th Week	Sunday	17-Jan-21	
	Day 1	18-Jan-21	selection rules, spectral intensity distribution using population distribution
	Day 2	19-Jan-21	selection rules, spectral intensity distribution using population distribution
	Day 3	20-Jan-21	determination of bond length
	Day 4	21-Jan-21	qualitative description of non-rigid rotor, isotope effect.
	Day 5	22-Jan-21	qualitative description of non-rigid rotor, isotope effect.
	Day 6	23-Jan-21	Quiz-9
13th Week	Sunday	24-Jan-21	
	Day 1	25-Jan-21	Energy levels of simple harmonic oscillator, selection rules,
	Day 2	26-Jan-21	pure vibrational spectrum, intensity,
	Day 3	27-Jan-21	determination of force constant and qualitative relation of force constant and bond energies
	Day 4	28-Jan-21	effects of anharmonic motion isotopic effect on the spectra
	Day 5	29-Jan-21	effects of anharmonic motion isotopic effect on the spectra
	Day 6	30-Jan-21	idea of vibrational frequencies of different functional groups.
14th Week	Sunday	31-Jan-21	
	Day 1	01-Feb-21	idea of vibrational frequencies of different functional groups.
	Day 2	02-Feb-21	Concept of polarizibility, pure rotational and pure vibrational Raman spectra
	Day 3	03-Feb-21	Concept of polarizibility, pure rotational and pure vibrational Raman spectra
	Day 4	04-Feb-21	diatomic molecules, selectin rules, Quantum theory of Raman spectra.
	Day 5	05-Feb-21	diatomic molecules, selectin rules, Quantum theory of Raman spectra.
	Day 6	06-Feb-21	Quiz-10
15th Week	Sunday	07-Feb-21	
	Day 1	08-Feb-21	Classification and nomenclature. Monosaccharides,
	Day 2	09-Feb-21	mechanism of osazone formation
	Day 3	10-Feb-21	interconversion of glucose and fructose, chain lengthening and chain shortening of aldoses.
	Day 4	11-Feb-21	Configuration of monosaccharides. Erythro and threo diastereomers.
	Day 5	12-Feb-21	Conversion of glucose in to mannose. Formation of glycos ides, ethers and esters.
	Day 6	13-Feb-21	Determination of ring size of glucose and fructose.
16th Week	Sunday	14-Feb-21	
	Day 1	15-Feb-21	Open chain and cyclic structure of D(+)-glucose & D(-) fructose.
	Day 2	16-Feb-21	Mechanism ofmutarotation. Structures of ribose and deoxyribose.
	Day 3	17-Feb-21	Quiz-11
	Day 4	18-Feb-21	An introduc tion to disaccharides (maltose, sucrose and lactose) and polysaccharides
	Day 5	19-Feb-21	Organomagnesium compounds: the Grignard reagents-formation
	Day 6	20-Feb-21	structure and chemical reactions.
17th Week	Sunday	21-Feb-21	
	Day 1	22-Feb-21	Organozinc compounds: formation and chemical reactions
	Day 2	23-Feb-21	Organolithium compounds: formation and chemical reactions.
	Day 3	24-Feb-21	Quiz-12, Assignment-2
	Day 4	25-Feb-21	Class Test Series
	Day 5	26-Feb-21	Class Test Series
	Day 6	27-Feb-21	Class Test Series
18th Week	Sunday	28-Feb-21	