

Maharana Pratap P.G. College Jungle Dhusan, Gorakhpur

Class : B.Sc. I st LESSION PLAN : 2020-21 Subject : Chemistry					
DATE	LECTURE	TEACHER'S NAME	PAPER	CHAPTER	TOPIC
04.08.2020	1	DR. R. SAHAY	I	Gaseous State	Postulates of kinetic theory of gases
05.08.2020	2	DR. R. SAHAY	I	Gaseous State	Deviation from ideal behaviour
06.08.2020	1	SANJAY JAISWAL	II	Atomic Structure & Periodic Table	Quantum numbers
07.08.2020	2	SANJAY JAISWAL	II	Atomic Structure & Periodic Table	Shapes of orbitals
08.08.2020	1	DR. S. K. VERNWAL	III	Structure and Reactivity	Hybridisation
10.08.2020		DR. S. K. VERNWAL	CT		
11.08.2020	3	DR. R. SAHAY	I	Gaseous State	Van der Waals equation of state, PV- isotherm of real gases
13.08.2020	4	DR. R. SAHAY	I	Gaseous State	Continuity of states, Isotherm of Van der Waals equation
14.08.2020	3	SANJAY JAISWAL	II	Atomic Structure & Periodic Table	Pauli's exclusion principle, Hund's rule
17.08.2020	4	SANJAY JAISWAL	II	Atomic Structure & Periodic Table	Aufbau principle, Variation of orbital energies and Energy level diagram
18.08.2020	2	DR. S. K. VERNWAL	III	Structure and Reactivity	Homolysis and Heterolysis
19.08.2020		DR. S. K. VERNWAL	CT		
20.08.2020	5	DR. R. SAHAY	I	Gaseous State	Relationship between critical constant & van der Waals constant, Law of corresponding state
21.08.2020	6	DR. R. SAHAY	I	Gaseous State	Reduced equation of state, root mean square, average & most probable velocity
22.08.2020	5	SANJAY JAISWAL	II	Atomic Structure & Periodic Table	Long form of periodic table
24.08.2020	6	SANJAY JAISWAL	II	Periodic properties of Elements	Types of radii
25.08.2020	3	DR. S. K. VERNWAL	III	Structure and Reactivity	Free radicals, Carbocations and Carbanions
26.08.2020		DR. S. K. VERNWAL	ME		
27.08.2020	7	DR. R. SAHAY	I	Gaseous State	Qualitative discussion of the Maxwell's distribution of molecular velocities
28.08.2020	8	DR. R. SAHAY	I	Gaseous State	Collision number, Mean free path & collision diameter, Liquefaction of gases
01.09.2020	7	SANJAY JAISWAL	II	Periodic properties of Elements	Electron affinity & its variation
02.09.2020	8	SANJAY JAISWAL	II	Periodic properties of Elements	Ionisation potential
03.09.2020	4	DR. S. K. VERNWAL	III	Structure and Reactivity	Polarity of covalent bonds, Inductive effect
04.09.2020		DR. S. K. VERNWAL	CT		
05.09.2020	9	DR. R. SAHAY	I	Liquid State	Intermolecular forces, Structure of liquids
07.09.2020	10	DR. R. SAHAY	I	Liquid State	Structural differences between solids, liquids & gases
08.09.2020	9	SANJAY JAISWAL	II	Periodic properties of Elements	Concept of effective nuclear charge & shielding effect

09.09.2020	10	SANJAY JAISWAL	II	Periodic properties of Elements	Electronegativity & its variation
10.09.2020	5	DR. S. K. VERNWAL	III	Structure and Reactivity	Electromeric effect, Resonance
11.09.2020		DR. S. K. VERNWAL	CT		
12.09.2020	11	DR. R. SAHAY	I	Liquid State	Structural differences between liquid crystal, solid & liquid
14.09.2020	12	DR. R. SAHAY	I	Liquid State	Classification, structure of nematic, smectic & cholesteric phases & applications
15.09.2020	11	SANJAY JAISWAL	II	Periodic properties of Elements	Pauling, Mulliken & Allred Rochow Scale
16.09.2020	12	SANJAY JAISWAL	II	Chemical Bonding	Ionic bonds, Radius ratio in ionic solids
18.09.2020	6	DR. S. K. VERNWAL	III	Structure and Reactivity	Hyperconjugation
19.09.2020		DR. S. K. VERNWAL	CT		
21.09.2020	13	DR. R. SAHAY	I	Solid State	Definition of space lattice & unit cell, Law of constancy of interfacial angles
22.09.2020	14	DR. R. SAHAY	I	Solid State	Definition of space lattice & unit cell, Law of constancy of interfacial angles
23.09.2020	13	SANJAY JAISWAL	II	Chemical Bonding	Lattice energy & Born-Haber cycle
24.09.2020	14	SANJAY JAISWAL	II	Chemical Bonding	Polarisation of ions & Fajan's rule
25.09.2020	7	DR. S. K. VERNWAL	III	Structure and Reactivity	Hydrogen bonding
26.09.2020		DR. S. K. VERNWAL	ME		
28.09.2020	8	DR. S. K. VERNWAL	III	Stereochemistry	Chirality, elements of symmetry
29.09.2020	9	DR. S. K. VERNWAL	III	Stereochemistry	Optical isomerism of Lactic acid and Tartaric acid
30.09.2020	15	DR. R. SAHAY	I	Solid State	Law of symmetry, symmetry element in crystal
01.10.2020	16	DR. R. SAHAY	I	Solid State	Derivation of Bragg's equation
03.10.2020	15	SANJAY JAISWAL	II	Chemical Bonding	Covalent bonds
05.10.2020		SANJAY JAISWAL	CT		
06.10.2020	10	DR. S. K. VERNWAL	III	Stereochemistry	Racemisation and Resolution
07.10.2020	11	DR. S. K. VERNWAL	III	Stereochemistry	Newmann and Sawhorse projection formula
09.10.2020	17	DR. R. SAHAY	I	Solid State	Determination of crystal structure of NaCl & KCl
10.10.2020	18	DR. R. SAHAY	I	Colloidal State & Macromolecules	Definition & classification of colloids, Macromolecule kinetics, optical & electrical stability of colloids
12.10.2020	16	SANJAY JAISWAL	II	Chemical Bonding	sp, sp ² , sp ³ , sp ³ d & sp ³ d ² hybridisation
13.10.2020		SANJAY JAISWAL	CT		
14.10.2020	12	DR. S. K. VERNWAL	III	Stereochemistry	D, L and R, S nomenclature
15.10.2020	13	DR. S. K. VERNWAL	III	Stereochemistry	Geometrical isomerism, E- Z nomenclature
16.10.2020	19	DR. R. SAHAY	I	Colloidal State & Macromolecules	Protective action, Hardy-Schulze law, Gold number, Type of emulsion, Preparation of emulsified
17.10.2020	20	DR. R. SAHAY	I	Colloidal State & Macromolecules	Liquid in solid (Gels) classification, preparation & properties inhibition general application of colloids
19.10.2020	17	SANJAY JAISWAL	II	Chemical Bonding	Determination of shape of molecules: NH ₃ , H ₂ O, H ₃ O ⁺ , ICl ₂ ⁻ , I ₃ ⁻ by VSEPR theory

20.10.2020		SANJAY JAISWAL	ME		
21.10.2020	14	DR. S. K. VERNWAL	III	Stereochemistry	Conformations of Ethane and n-Butane
22.10.2020	15	PRIYANKA MISHRA	III	Alkyl halides & Grignard reagents	Mechanism of nucleophilic substitution reaction of alkyl halides
23.10.2020	21	DR. R. SAHAY	I	Colloidal State & Macromolecules	Determination of molecular weight of macro molecules by osmotic pressure & viscosity method, concept of micelles and critical concentration
29.10.2020	22	DR. R. SAHAY	I	Colloidal State & Macromolecules	A brief introduction of conducting and light emitting polymer
31.10.2020	18	SANJAY JAISWAL	II	Chemical Bonding	Determination of shape of molecules: NH_3 , H_2O , H_3O^+ , ICl_2^- , I_3^- by VSEPR theory
02.11.2020		SANJAY JAISWAL	CT		
03.11.2020	16	PRIYANKA MISHRA	III	Alkyl halides & Grignard reagents	Preparation of Grignard reagent and synthetic applications
04.11.2020	17	PRIYANKA MISHRA	III	Alkyl halides & Grignard reagents	Synthetic applications of Grignard reagent
05.11.2020	23	DR. R. SAHAY	I	Chemical Kinetics & Catalysis	Concentration, dependence of rate mathematical characteristics
06.11.2020	24	DR. R. SAHAY	I	Chemical Kinetics & Catalysis	Simple chemical reaction, Zero order reaction
07.11.2020	19	SANJAY JAISWAL	II	Chemical Bonding	Odd electron bond, Maximum covalency
09.11.2020		SANJAY JAISWAL	CT		
10.11.2020	18	PRIYANKA MISHRA	III	Alkyl halides & Grignard reagents	Synthetic applications of Grignard reagent
17.11.2020	19	PRIYANKA MISHRA	III	Alcohols and Ethers	Classification and distinction of primary, secondary and tertiary alcohols
18.11.2020	25	DR. R. SAHAY	I	Chemical Kinetics & Catalysis	First, second order of reaction
19.11.2020	26	DR. R. SAHAY	I	Chemical Kinetics & Catalysis	Pseudo order reaction, Determination of the order of reaction, Differential method, Method of integration
21.11.2020	20	SANJAY JAISWAL	II	Chemical Bonding	Hydrogen bonding, Metallic bonding
23.11.2020		SANJAY JAISWAL	ME		
24.11.2020	20	PRIYANKA MISHRA	III	Alcohols and Ethers	Mechanism of dehydration of alcohols
26.11.2020	21	PRIYANKA MISHRA	III	Alcohols and Ethers	Isomerism of propanols, butanols and pentanols
27.11.2020	27	DR. R. SAHAY	I	Chemical Kinetics & Catalysis	Method of integration, Half life period and isolation method
28.11.2020	28	DR. R. SAHAY	I	Chemical Kinetics & Catalysis	Radioactive decay as a first order phenomenon
01.12.2020	21	SANJAY JAISWAL	II	General studies of s & p block elements	Discussion of I & II group elements
02.12.2020		SANJAY JAISWAL	CT		
03.12.2020	22	SANJAY JAISWAL	II	General studies of s & p block elements	Discussion of 13 & 14 group elements
07.12.2020	23	SANJAY JAISWAL	II	General studies of s & p block elements	Discussion of 15 & 16 group elements
08.12.2020	22	PRIYANKA MISHRA	III	Alcohols and Ethers	Industrial preparation and reactions of Glycerol

09.12.2020	23	PRIYANKA MISHRA	III	Alcohols and Ethers	Williamson synthesis, formation and cleavage of oxonium salts
11.12.2020	29	DR. R. SAHAY	I	Chemical Kinetics & Catalysis	Experimental method for the study of chemical kinetics
12.12.2020		DR. R. SAHAY	CT		
14.12.2020	24	SANJAY JAISWAL	II	Occurrence, extraction & isolation of metals	Ores & metallurgy of Li
15.12.2020	25	SANJAY JAISWAL	II	Occurrence, extraction & isolation of metals	Ores & metallurgy of Be & F ₂
16.12.2020	24	DR. S. K. VERNWAL	III	Carboxylic Acids	Structure of carboxyl group
17.12.2020	25	DR. S. K. VERNWAL	III	Carboxylic Acids	A _{AC} ² and B _{AC} ² mechanism of ester hydrolysis
18.12.2020	30	DR. R. SAHAY	I	Chemical Kinetics & Catalysis	Effect of temperature on rate of reaction
21.12.2020		DR. R. SAHAY	CT		
22.12.2020	26	SANJAY JAISWAL	II	Preparation, properties & structure	Diborane
23.12.2020	27	SANJAY JAISWAL	II	Preparation, properties & structure	Borazine
24.12.2020	26	DR. S. K. VERNWAL	III	Alkenes, Alkynes, Alkadienes & Cycloalkanes	Addition of Water and Sulphuric acid
26.12.2020	27	DR. S. K. VERNWAL	III	Alkenes, Alkynes, Alkadienes & Cycloalkanes	Acetylene as carbon acid, Addition reactions of Acetylene
28.12.2020	31	DR. R. SAHAY	I	Chemical Kinetics & Catalysis	Arrhenius equation, Concept of activation energy
29.12.2020		DR. R. SAHAY	ME		
30.12.2020	28	SANJAY JAISWAL	II	Preparation, properties & structure	Hydrazine
31.12.2020	29	SANJAY JAISWAL	II	Structure & Properties	Interhalogen compounds & Polyhalides
01.01.2021	28	DR. S. K. VERNWAL	III	Alkenes, Alkynes, Alkadienes & Cycloalkanes	Stability and addition reactions of 1,3-Butadiene
02.01.2021	29	DR. S. K. VERNWAL	III	Alkenes, Alkynes, Alkadienes & Cycloalkanes	Preparation and properties of small ring Cycloalkanes
04.01.2021	32	DR. R. SAHAY	I	Chemical Kinetics & Catalysis	Simple collision theory based on hard sphere model, Transition state theory
06.01.2021		DR. R. SAHAY	CT		
07.01.2021	30	SANJAY JAISWAL	II	Structure & Properties	Fluorides of Xenone
08.01.2021	31	SANJAY JAISWAL	II	Structure & Basicities	Oxyacids of Boron
09.01.2021	30	PRIYANKA MISHRA	III	General reactions of carbonyl compounds	Mechanism of addition of Sodium bisulphite and Hydrogen cyanide
11.01.2021	31	PRIYANKA MISHRA	III	General reactions of carbonyl compounds	Aldol condensation, Cannizzaro reaction

12.01.2021	33	DR. R. SAHAY	I	Chemical Kinetics & Catalysis	Expression for the rate constant based on equilibrium
13.01.2021		DR. R. SAHAY	CT		
16.01.2021	32	SANJAY JAISWAL	II	Structure & Basicities	Oxyacids of Phosphorous
18.01.2021	33	SANJAY JAISWAL	II	Structure & Basicities	Oxyacids of Sulphur
19.01.2021	32	PRIYANKA MISHRA	III	General reactions of carbonyl compounds	Wolf-Kishner reduction, Clemmensen reduction
20.01.2021	33	PRIYANKA MISHRA	III	General reactions of carbonyl compounds	Meerwein-Ponndorf-Verley reduction, Catalytic reduction, LiAlH_4
21.01.2021	34	DR. R. SAHAY	I	Chemical Kinetics & Catalysis	Characteristics of catalysed reaction, classification of catalyst
22.01.2021		DR. R. SAHAY	CT		
23.01.2021	34	SANJAY JAISWAL	II	Structure & Basicities	Oxyacids of Sulphur
25.01.2021	35	SANJAY JAISWAL	II	Problems & Solutions	Numerical Problems
27.01.2021	34	PRIYANKA MISHRA	III	General reactions of carbonyl compounds	Preparation and synthetic uses of Acetoacetic ester
28.01.2021	35	PRIYANKA MISHRA	III	Compounds containing reactive methylene group	Keto-enol tautomerism, Preparation of Malonic ester
29.01.2021	35	DR. R. SAHAY	I	Chemical Kinetics & Catalysis	Industrial catalysis & Enzyme kinetics
30.01.2021		DR. R. SAHAY	ME		
Extra*	36	DR. R. SAHAY	I	Mathematical Concept & Computer	Logarithm relation sketching linear graph
*	37	DR. R. SAHAY	I	Mathematical Concept & Computer	Calculation of slopes, Differentiation of function of $f(x)$, x^n , e^x , $\sin x$, $\log x$
*	38	DR. R. SAHAY	I	Mathematical Concept & Computer	Partial difference & integration, integration of some relevant function
*	39	DR. R. SAHAY	I	Mathematical Concept & Computer	Permutation, combination, factorial & probability
*	40	DR. R. SAHAY	I	Mathematical Concept & Computer	General introduction of computer & component of computer
*	41	DR. R. SAHAY	I	Mathematical Concept & Computer	Hardware, Software, Input, Output device, Binary number & Arithmetic
*	42	DR. R. SAHAY	I	Mathematical Concept & Computer	Introduction to computer languages, programming, operating system
*	36	SANJAY JAISWAL	II	Problems & Solutions	Numerical Problems
*	36	PRIYANKA MISHRA	III	Compounds containing reactive methylene group	Synthetic uses of Malonic ester
*	37	PRIYANKA MISHRA	III	Nitrogen containing compounds	Preparation and distinction between Alkyl nitrites and Nitro alkanes
*	38	PRIYANKA MISHRA	III	Nitrogen containing compounds	Alkyl cyanides and Alkyl isocyanides
*	39	PRIYANKA MISHRA	III	Nitrogen containing	Amines, classification and distinction

				compounds	
*	40	PRIYANKA MISHRA	III	Nitrogen containing compounds	Separation of primary, secondary and tertiary amines
*	41	PRIYANKA MISHRA	III	Nitrogen containing compounds	Preparation of amines, and general reactions
*	42	PRIYANKA MISHRA	III	Nitrogen containing compounds	Relative basicities of amines
*	43	DR. S. K. VERNWAL	III	Numerical questions	Numerical questions based on determination of structural formula
*	44	DR. S. K. VERNWAL	III	Numerical questions	Numerical questions based on determination of structural formula