

SY.J.C LECTURE PLAN FOR THE YEAR 2017-18 IN CHEMISTRY

	18 th June – 23 ND June [L-1]	25 th June – 30 TH JUNE [L-2]	2 nd JULY – 7 th July [L-3]	9 th July – 14 th July [L-4]	16 th July – 21 TH July [L-5]	23 ST July – 28 th July[L-6]	30 th July – 4 th Aug [L-7]
SECTION-1 UNIT-1	Chemical thermodynamics: Introduction to concepts	Types of prop of Sys, state fcns, Types of process	Work & Heat, Numericals on Work	1 st Law of T.D, 2 nd Law of T.D Enthalpy, relatn Betn H & V	Enthalpies of phy. Changes,Thermo Chemistry, numericals	Bond enthalpy & numerical Hess law of summation	Irreversible pro Entropy,spontnty Gibbs enrgy, Numerical 3rdLaw of T.D
SECTION-1 UNIT-2	Solution & Colligative properties : Types of soln,ways to express concns.	Numericals on cncentrations	Solubility & factors affctng solubility,	Colligative prop lowering of v.p Raoult's law, numericals	Boiling Point elevation,Freeezng pt. depression, numericals	Osmotic press laws of osm prs det of mol mass frm o.p,numercl	Abnormal mol masses,Vant Hoff factor, numericals
SECTION-2 UNIT-1	Halogen der. of alkanes & arenes: Introduction,Classiication MonoHalogen Compds.	Nomenclature Of R-X, nature of C-X,Preparation Of R-X	Preparations, SN ¹ reaction mechanism	SN ² rcn mech. Introdution of Halo arenes	Preparation of Halo arenes	Chemical reactions	Reaction Mechanisms, Uses.
SECTION-2 UNIT-2	Alcohols,Phenol & Ether Introduction,Classificatn & Nomenclature	Preparation & Physical propertites	Reactions of alcohols	Phenols	Ethers :Introdctn Nomenclature & isomerism	Preparation & Reactions	Compounds containing Nitrogen : Amines:-Introdn Classifn,Nomencil
	6 th August – 11 th August [L-8]	13 th Aug – 18 th Aug [L-9]	20 th Aug – 25 th Aug [L-10]	27 th Aug – 1 st Sep [L-11]	3 rd Sept – 8 th Sept [L-12]	10 th Sept – 15 th Sep [L13]	17 th Sept – 22 nd Sep [L-14]
SECTION-1 UNIT-1	Electrochemistry : Intrdn, Redox rcns & conductance in electrolytic solutions	Conductivity	Kohlrausch law, Applications,reln Between conductivity & Degree of disso	Measurement Of conductivity & numericals	Electrochemical and electrolytic Cells, electrolysis Of fused NaOH	Faradays Ist and IInd law and numericals	Galvanic cell, Daniel cell , types of electrodes
SECTION-1 UNIT-2	Solid state: Introduction, Classification of solids	Unit cell & 2,3 dimensional lattices	Packing in solids Density of unit cells, numericals	Packing in ionic solids, electrical & magnetic properties	Chemical Kinetic: Introduction,Rate Of reactions	Rate law and Rate constant. Numericals	Order of reaction numerical Molecularity

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SECTION-2 UNIT-1	Aldehydes, Ketones, Carboxylic acids Introductn, classfn, nomencl,	Preparations 1 - 5	Preparations 6- 10	Reactions 1 - 9	Reactions 10 - 17	Introduction Of acids, Nomenclature Preparation	Reactions of acids
SECTION-2 UNIT-2	Preparation , phy prop, basic nature	Chemical reactions	Nitro compds :- Introduction , Preparation & Reactions	Diazonium compounds	Coordination Compounds : Introdn, ligands Coordinatn no.	IUPAC Nomenclature	Bonding in coordination compounds
	24th sept – 29th sept	1st oct- 6th oct	8th oct- 13th oct[L-17]	15th oct- 20th oct [L-18]	21nd Nov - - 24th Nov [L-19]	26th Nov – 1th Dec [L20]	3rd Dec – 8th Dec [L-21]
SECTION-1 UNIT-1	Nernst eqn, SOP, SRP, Emf of cells, series, Numericals	SHE , Calomel Electrode, common types of cell, corrosion	P –blk elements Introdn , physical & chemical properties	Anomalous nature of N prep of N ₂ , NH ₃ HNO ₃ & prop	Oxides of N, P & Its compds, prep, Properties & uses	Group-16 elemnts ,physical & chemical properties	O ₂ & O ₃ : preparation & Properties ,
SECTION-1 UNIT-2	Pseudo 1 st order, integrated rate rcn, d & f elements	Zero order rcn Half life of rcn Determination Of order of rcn	Collision theory Activatn enrgy Arrhenius eqn Eff of catalyst	General principles & processes of isolation of Elements: Introduction, Terms & prn of metalrgy	Oxidation-redn extraction of Crude metal from conc ore	Refining of crude metals, Extractn of Zn from ZnS	Extraction of Iron fom haematite
SECTION-2 UNIT-1	d & f elements inductn and elec confign	Characteristics of d & f Block elements	Chemical activity	Lanthanide contract & comparision of Ac & La.	Biomolecules: Carbohydrates : Classification , Prep of glucose	Structure of mono and Disaccharides, Proteins	Hormones, Vitamins, lipids & Enzymes
SECTION-2 UNIT-2	Stability and Applications of Coordination compounds	Polymers : Introdn , classfn Chain growth polymerisn	Prepn of nylon 6, Nylon 66, Terylene, bakelite	Natural & synthetic rubber	Chemistry in everyday life	Classification of drugs	Chemicals in medicines

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