

S.D.Public School, Pitam Pura, New Delhi
Academic Planner
Session--(2024-25)
Class--XII
Subject--Chemistry

Date/ Day	Content	Modes of Assessment	Assignment/ Class	Teaching Pedagogy	Interdisciplinary Aspect	Lab. Activity/ Practical
April(1--15)	Organic Chemistry-- Basic Principles (XI Class)			Q/A Discussion		
11 Days	Recapitulation of Basic organic concepts, Isomerism, Electron Displacement effects, Qualitative and Quantitative Analysis of organic compounds. Hydrocarbons (Alkanes, Alkenes , Alkynes and Benzene)	Class Test in the form of MCQ.		Group Discussion Activity(Cooperative learning)	Life Skill (Learning Enhancement in group)	
	Ch- Haloalkanes and haloarenes-- Introduction, Classification of Haloalkanes and Haloarenes	Oral Quiz				
(16--30)	Ch- Haloalkanes and haloarenes		Class Work			
11 days	Nomenclature, Nature of C-X bond, preparation		Intext , Examples and NCERT Ex. Que/Ans discussion.			Redox Titration
	Physical and chemical properties of Haloalkanes and Haloarenes.Uses and Environmental effects of Halogenated compounds.	Class test from SN1 and SN2 reactions	Assignment based on SN1 and SN2 reaction.	Puzzle Activity	Medicinal Importance	M/20 Mohr salt vs. KMnO4
May(1--15)		Case Based Questions from Halogenated compounds.	Assignment based on conversion and reasoning based questions		Biological Significance	M/30 Mohr salt vs. KMnO4
12 Days	Alcohols, Phenols and Ethers-- Introduction, Classification, Nomenclature.	class test from all name reactions	Practice of simple conversion reactions			
May (16-25) 6 Days	Physical and Chemical Properties of Alcohols, Phenol. Commercially important Methanol and ethanol.	Test from conversion reactions.(MCQ) (Kahoot)		Relative Analysis of various types of alcohols available in the	Mathematical Approach	
July(1-15)	Ethers-- Introduction, Nomenclature	Test from reasoning based questions	Assignment based on conversions and IUPAC nomenclature.			
12 Days	Physical and Chemical Properties of Ethers.	Assessment in the form of Quiz from name reactions.	Examples and Intext Questions discussion in the class.			Oxalic Acid Vs. KMnO4(Titration)
July(16-31)						

13 Days	Aldehydes, Ketones and Carboxylic acids -- Introduction, importance in daily life, Nomenclature of Aldehydes and ketones.	Class test from IUPAC nomenclature.	Practice of IUPAC nomenclature in class.	Flipped Classroom to optimize time in the class.	Meeting the special needs of every individual student.	
August(1-15)						
11 Days	Preparation, physical and chemical properties of aldehydes and ketones.	Case Based Question from preparation.	Examples and Intext Questions discussion in the class.			M/40 Oxalic acid Vs KMnO ₄
	Carboxylic Acids -- Introduction, Nomenclature.		Assignment of Repeated questions of Organic Chemistry from CBSE sample papers.			
August (16-31)	Preparation, Physical and chemical properties of carboxylic acids.	Assessment in the form of Quiz	Assignment based on conversion and reasoning based questions	Problem Based Learning	Creative thinking and critical skill	
13 Days	Nitrogen containing compounds-- Amines					
	Introduction, importance in medicine and Industry.					
September(1-15)	Preparation, physical and chemical properties of Amines, Diazonium salts.			QAXP(Wipro technique)		Qualitative Analysis
11 Days	Physical Chemistry-- Solutions Recapitulation of the basic terms used in IX and X. Concentration of solution.	Small worksheet of five questions to assess the previous knowledge of students.	Assignment based on Numericals from Concentration of solution.			
September(16-30) 12 Days	Half Yearly Examination					
October(1--15)	Solubility, Henry's law, Ideal and Non Ideal solutions, Raoult's law, Colligative properties, Van't Hoff factor. Electrochemistry -- Electrochemical and Electrolytic cell.	Class test in the form of MCQ.	NCERT Examples and Intext questions discussion.	Problem Based learning	Mathematical Approach of laws and colligative properties.	Qualitative Analysis
8 Days	Electrode potential, Cell potential, Nernst equation, Conductivity, Molar conductivity, Electrolysis, Batteries, corrosion of iron.			Project Based Learning (Factors that promote rusting)	Critical thinking and creative skills.	Qualitative Analysis
October (16-31)	Chemical Kinetics -- Rate of reaction(Average, Instantaneous)	Q/A method to check previous knowledge of students.	Practice of simple numericals based on Rate of reactions.			Tests for carbohydrates, proteins and fats.
12 Days	Law of mass action, Order and molecularity, Derivations of integrated rate equations for zero and first order, Temperature dependance of rate of reaction, gas phase reaction, catalyst and its effect, collision theory.	Class Test based on Graphical questions.	Discussion of NCERT examples and Intext Que.	Problem Based learning	Mathematical Aspect.	Tests for carbohydrates, proteins and fats.

November(1-15)	d and f-block elements -- Position in the periodic table, general trends in the properties of transition metals, potassium dichromate, potassium permanganate. Position of Lanthanoids and Actinoids, Physical and chemical behaviour.		Assignments based on repeated questions from sample papers	Group Discussion Activity(Cooperative learning)	Learning Enhancement in group.	Functional group tests.
10 Days	Ch-9 Coordination compounds - Werner's theory, No nomenclature					
	VBT (Valence Bond theory), Isomerism, Crystal Field theory, Stability of complexes, Importance of coordination compounds.		Practice of Nomenclature and Isomerism.			Preparation of Inorganic compound.
November(16-30) 13 Days	Biomolecules --Carbohydrates(Glucose, Fructose, Sucrose, Maltose, Lactose, Starch, cellulose, glycogen) proteins(structure, amino acids, types of proteins biological significance) enzymes, Vitamins(classification and Functions) nucleic acids, DNA and RNA	MCQ from Vitamins and their types	Assignment based on Case based questions from Carbohydrates and proteins.	Puzzle Activity(Identification of substance from its properties or applications)	Biological Aspect.	Chemical Kinetics.
	Hormones and antioxidants		Assignments based on repeated questions from sample papers	Assignments based on repeated questions from sample papers		Chromatography

Examination Schedule
Unit Test-1 -- Some Basic Concepts in Organic Chemistry, Haloalkanes and Haloarenes, Alcohols, phenols
Term-1 Examination -- Haloalkanes and Haloarenes, Alcohols, Phenols and Ethers, Aldehydes, Ketones and Carboxylic acids, Amines
PreBoard Examination -- Complete Syllabus