

**KLE ENGLISH MEDIUM SCHOOL**  
**JULE SOLAPUR**  
**GRADE XII SYLLABUS SPLIT 2023-24**

SUBJECT: Chemistry					
Sr. No	MONTH	UNIT / SUBUNIT	VALUES	TIVITY/PROJEC	EXAM
1	APRIL (15PERIODS)	<b>Unit I: Solutions</b> Types of solutions, expression of concentration of solutions of solids in liquids, solubility of gases in liquids, solid solutions, Raoult's law, colligative properties - relative lowering of vapour pressure, elevation of boiling point, depression of freezing point, osmotic pressure, determination of molecular	To develop the scientific and mathematical skills	LAB PRACTICALS/ACTIVITIES &PROJECTS AS PRESCRIBED BY CBSE BOARD	
2	JUNE (15 Periods)	<b>Unit VI: Haloalkanes and Haloarenes.</b> Haloalkanes: Nomenclature, nature of C-X bond, physical and chemical properties, optical rotation mechanism of substitution reactions. Haloarenes: Nature of C-X bond, substitution	Develops Scientific skills		
3	JUNE & JULY (12 Periods)	<b>Unit II: Electrochemistry</b> Redox reactions, EMF of a cell, standard electrode potential, Nernst equation and its application to chemical cells, Relation between Gibbs energy change and EMF of a cell, conductance in electrolytic solutions, specific and molar conductivity, variations	To develop the scientific and mathematical skills		
4	JULY (12PERIODS)	<b>Unit VII: Alcohols, Phenols and Ethers</b> Alcohols: Nomenclature, methods of preparation, physical and chemical properties (of primary alcohols only), identification of primary, secondary and tertiary alcohols,	Develops Scientific skills	LAB PRACTICALS/ACTIVITIES &PROJECTS AS PRESCRIBED BY CBSE BOARD	
5	JULY & AUGUST (15 Periods)	<b>Unit III CHEMICAL KINETICS</b> Rate of a reaction (Average and instantaneous), factors affecting rate of reaction: concentration, temperature, catalyst; order and molecularity of a reaction, rate law and specific rate constant,	To develop the scientific and mathematical skills		
6	SEPTEMBER & OCTOBER (15 Periods)	<b>Unit VIII: Acids</b> Aldehydes and Ketones: Nomenclature, nature of carbonyl group, methods of preparation, physical and chemical properties, mechanism of nucleophilic addition, reactivity of alpha hydrogen in aldehydes, uses. Carboxylic Acids: Nomenclature, acidic nature, methods of preparation, physical and chemical	Develops Scientific skills	LAB PRACTICALS/ACTIVITIES &PROJECTS AS PRESCRIBED BY CBSE BOARD	PERIODIC TEST 2
7	OCTOBER (14 PERIODS)	<b>UNIT IV d and f Block Elements</b> General introduction, electronic configuration, occurrence and characteristics of transition metals, general trends in properties of the first row transition metals – metallic character, ionization	Develops concentration & scientific skills	LAB PRACTICALS/ACTIVITIES &PROJECTS AS PRESCRIBED	PERIODIC TEST 2
8	NOVEMBER (12 PERIODS)	<b>Unit V: Coordination Compounds</b> Coordination compounds - Introduction, ligands, coordination number, colour, magnetic properties and shapes, IUPAC nomenclature of mononuclear coordination compounds. Bonding, Werner's theory, VBT, and CFT; structure and stereoisomerism, importance of coordination compounds (in qualitative analysis, extraction of metals and biological system).	Develops concentration & scientific skills		PERIODIC TEST 2
9	DECEMBER (10 PERIODS)	<b>Unit X: Biomolecules</b> Carbohydrates - Classification (aldoses and ketoses), monosaccharides (glucose and fructose), D-L configuration oligosaccharides (sucrose, lactose, maltose), polysaccharides (starch, cellulose, glycogen); Importance of carbohydrates. Proteins - Elementary idea of - amino acids, peptide bond, polypeptides, proteins, structure of proteins - primary, secondary, tertiary structure and quaternary structures (qualitative idea only), denaturation of proteins; enzymes. Hormones - Elementary idea excluding structure. Vitamins - Classification and functions.	Develops concentration skills, attention and social values	LAB PRACTICALS/ACTIVITIES &PROJECTS AS PRESCRIBED BY CBSE BOARD	
10	DECEMBER (10 Periods)	<b>Unit IX: Amines</b> Amines: Nomenclature, classification, structure, methods of preparation, physical and chemical properties, uses, identification of primary, secondary and tertiary amines. Diazonium salts: Preparation, chemical reactions and importance in synthetic organic chemistry	Skills of handling instruments and accuracy. Develops concentration skills	LAB PRACTICALS/ACTIVITIES &PROJECTS AS PRESCRIBED BY CBSE BOARD	

**UNIT I-X FOR CBSE BOARD EXAMINATION**