

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

SUBJECT: ENGLISH

Sr. No	Month	Unit / Sub-Unit	Values	Project/ Activity
1	April	Flamingo :		Group Discussion on softskills
		L-1 : The Last Lesson	Patriotism, resistance, importance of culture and love for language	
		L-2 : Lost Spring	Awareness about child labour, impact of tradition and blind belief, stop corruption	
		1. My Mother at Sixty Six (Poem)	Connecting with real life experiences, love and care for mother	
		3. Keeping Quiet (Poem)	Introspection of oneself in silence	
		Vistas:		
2	June	Writing Skill: 1. Letter (Application for job with resume and letter Editor)	Use of official and formal language, politeness, Curiosity, Social Awareness, Use of appropriate Formats. Expression of thoughts in precise manner.	Letter writing in given format
		2. Notice	Organisation of ideas , content and accuracy of spelling and grammar.	Notice writing in format
		Flamingo :		Write an article We do not inherit the earth from our ancestors, we borrow it from our children.
		L-3 Deep Water	Will power, Determination, Drawing inspiration from the real life examples to help the learners to deal with emotions psychologically	
		Vistas:		
		L-2: The Tiger King	Education can give them a better status, Courage and positive outlook	
3	July	Writing Skill: Formal / Informal Invitation and reply	Organisation of ideas , use of appropriate format, Expression of thoughts	Writing informal and formal invitations
		Flamingo :		Replies to invitations
		L-4: The Rattrap	Affection , Belief , Cheating, Fraud, honesty, threatening, presence of mind, humanity	
		Vistas:		
		L-3 : Journey to the End of the Earth	Humanity, appreciation and compassion for the environment	
4	August	Writing Skill: Article Writing	Expression of knowledge,	Article writing
		Flamingo :		
		L-5: Indigo	Equality, brotherhood, liberty and fight against injustice	
		Vistas:		
		L-4: The Enemy	patriotism, honesty, resistance, importance of culture and love for language	

5	September	Flamingo :		Art Integrated Project
		L-6: Poets and Pancakes	appreceation of humaour and satire	
		Poem 3: A Thing of Beauty	Love and appreciate beauty	
6	October	Writing Skill: Report writing	Investigation, evaluation , development of writing skills , professional advancement	
		Flamingo: L-7: The Interview	Process of interview, merits and demerits of interview and attitude	
		Poem 4: A Roadside Stand	simple life of village and luxurious	
PHYSICS				
Sr.N O	Month	Unit/Subunit	Values	Activities/Projects
1	APRIL/JUNE	Chapter-1: Electric Charges and Fields Electric charges, Conservation of charge,Coulomb's law-force between two point charges, forces between multiple charges; superposition principle and continuous charge distribution. Electric field, electric field due to a point charge CHAPTER-2: Electrostatic potential and capacitance Electric potential differences, equipotentialsurfaces, conductors and insulators. Dielectric and polarization. Capacitor and capacitance.	The students should have scientific temper	Lab activity
2	JUNE/JULY	Chapter-3: Current Electricity Electric current, flow of electric charges in a metallic conductor, drift velocity, mobility and their relation with electric current. Ohm's law, V-I characteristics, electrical energy and power, electrical resistivity andconductivity, temperature dependence of resistance, Internal resistance of a cell, potential difference and emf of a cell, combination of cells in series and in parallel, Kirchhoff's rules, Wheatstone bridge. Chapter-4:Moving charges and magnetism -Biot- savarts law,oersted'sexperinment.Amperes's law force on a current carrying conductor, current loop.	The students should have scientific temper	Lab activity
3	JULY/AUGUST	Chapter-5: Magnetism and Matter Bar magnet, bar magnet as an equivalent solenoid,magnetic field intensity due to a magnetic dipole along its axis and perpendicular to its axis , torque on a magnetic dipole in a uniform magnetic field , magnetic field lines. Magnetic properties of materials- Para-, dia- and ferro - magnetic substances with examples, Magnetization of materials, effect of temperature on magnetic properties. Chapter-6: Electromagnetic Induction Electromagnetic induction; Faraday's laws, inducedEMF and current; Lenz's Law, Self and mutual induction	The students should have scientific temper	Lab activity
5	SEPTEMBER	Chapter-7:Alternating current – Peak and RMS value of AC and voltage; LCR series circuit, resonance, power, transformer,phasors.	The students should have scientific temper	Lab activity

CHEMISTRY				
Sr. No	MONTH	UNIT / SUBUNIT	VALUES	ACTIVITY/PROJECT
1	APRIL (15 PERIODS)	Unit I: Solutions 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/A CTIVITIES &PROJECTS AS PRESCRIBED BY CBSE BOARD
2	JUNE (15 Periods)	Unit VI: Haloalkanes and Haloarenes. 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)	Unit II: Electrochemistry 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 (12 PERIODS)	Unit VII: Alcohols, Phenols and Ethers 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/A CTIVITIES &PROJECTS AS PRESCRIBED BY CBSE BOARD
5	JULY &AUGUST (15 Periods)	Unit III CHEMICAL KINETICS 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	
BIOLOGY				
SR. NO	MONTH	UNIT / SUBUNIT	VALUES	ACTIVITY/PROJECT
1	APRIL (08 Periods)	UNIT VI:Reproduction	To develop scientific skills, disciplinary value	LAB PRACTICALS/ ACTIVITIES &PROJECTS AS PRESCRIBED BY CBSEBOARD
		Chapter-2: Sexual Reproduction in Flowering Plant		
		Flower structure; development of male and female gametes		
		pollination - types, agencies and examples;		
		out breeding devices; pollen-pistil interaction; double post fertilization events - development of endosperm , development of seed and formation of fruit		
		special modes- apomixis, parthenocarpy, polyembry		
		Significance of seed dispersal and fruit formation		
2	APRIL (08 Periods)	Chapter-3: Human Reproduction	Develops social value, disciplinary value	
		Male and female reproductive systems		
		microscopic anatomy of testis and ovary		
		gametogenesis -spermatogenesis and oogenesis, fertilisation, embryo development upto blastocyst for implantation; pregnancy and placenta formation		
		parturition, lactation		
3	APRIL &JUNE (10 Periods)	Chapter-4: Reproductive Health	Develops social value, disciplinary value	
		Need for reproductive health and prevention of STDs		
		birth control - need and methods		
		contraception and medical termination of pregnancy		
		amniocentesis; infertility and assisted reproductive techique like IVF, ZIFT, GIFT		
		Unit-VII Genetics and Evolution		
		Chapter-5: Principles of Inheritance and Variation		
		Heredity and variation: Mendelian inheritance		
		deviations from Mendelism – incomplete dominance		
		co-dominance, multiple alleles and inheritance		

4	JUNE (10 Periods)	pleiotropy; elementary idea of polygenic inheritance chromosome theory of inheritance; chromosomes Sex determination - in humans, birds and honey bee linkage and crossing over; sex linked inheritance - ha colour blindness, Mendelian disorders in humans chromosomal disorders in humans; Down's syndrome Turner's and Klinefelter's syndromes	To develop scientific skills, disciplinary value	LAB PRACTICALS/ ACTIVITIES & PROJECTS AS PRESCRIBED BY CBSEBOARD	
5	JULY (12 Periods)	Chapter-6: Molecular Basis of Inheritance Search for genetic material and DNA as genetic mater Structure of DNA and RNA; DNA packaging, DNA replication Central Dogma; transcription, genetic code genome expression and regulation - lac operon, Genom Human and rice genome projects; DNA fingerprinting	To develop scientific skills,		
6	JULY (12 Periods)	Chapter-7: Evolution Origin of life; biological evolution and evidences for b evolution (paleontology, comparative anatomy, embry evidences Darwin's contribution, modern synthetic th mechanism of evolution - variation (mutation and re natural selection with examples, types of natural sele Gene flow and genetic drift; Hardy - Weinberg's princ adaptive radiation; human evolution.	To develop scientific skills, disciplinary value		
7	SEPTEMBER (15 Periods)	Unit-VIII Biology and Human Welfare Chapter-8: Human Health and Diseases Pathogens; parasites causing human diseases (malaria chikungunya, filariasis, ascariasis, typhoid, pneumonia, and their control; Basic concepts of immunology - vac cancer, HIV and AIDS; Adolescence - drug and alcohol	To develop scientific skills, disciplinary value		LAB PRACTICALS/ ACTIVITIES & PROJECTS AS PRESCRIBED BY CBSEBOARD
8	SEPTEMBER (12 Periods)	Chapter-10: Microbes in Human Welfare Microbes in food processing, industrial production, sewage treatment, energy generation and microbes as and bio-fertilizers. Antibiotics; production and judicio	To develop scientific skills, disciplinary value		

MATHEMATICS				
SR. NO	MONTH	UNIT / SUBUNIT	VALUES	ACTIVITY/PROJECT
1	April	Relations and Functions	To develop disciplinary value	Work sheet/Assignment
	14 PERIODS	Types of relations		
		Types of functions		
		Composition of Functions and invertible functions		
		Binary operations		
2	April	Matrices	Develops social value, disciplinary value	Work sheet/Assignment
	10 PERIODS	Matrix		
		Types of Matrices		
		Operations on Matrices		
		Transpose of a matrix		
		Symmetric and skew symmetric Matrices		
		Elementary operation of a matrix		
		invertible matrices		
3	June	Determinants	Develops social value, disciplinary value	Work sheet/Assignment
	10 PERIODS	Determinants		
		Properties of determinants		
		Area of a triangle		
		Minors and Cofactors		

		Adjoint and Inverse of a matrix		
		Applications of Determinats and Matrices		
4	June 9 PERIODS	Inverse Trigonometric functions	Skills of handling instruments and accuracy. Develops concentration skills	Work sheet/Assignment
		Basic concepts		
		Properties of inverse trigonometric functions		
5	July	Continuity and Differentiability	Develops concentration skills,attention and social values	Work sheet/Assignment
	9 PERIODS	Continuity		
		Differtiability		
		Exponential and Logarithmic functions		
		Logarithmic Differentiation		
		Derivatives of functions in parametric forms		
		Second order derivatives		
		Mean value theorem		
6	July/August	Application of Derivatives	Develops concentration skills	Work sheet/Assignment
	10 PERIODS	Rate of change of quantities		
		Increasing and decreasing functions		
		Tangents and Normals		
		Approximations		
		Maxima and Minima		
PHYSICAL EDUCATION				
SR. NO	MONTH	UNIT / SUBUNIT	VALUES	ACTIVITY/PROJECT
1	April	Management of Sporting Events	To develop management skill	Make a Fisture of knock out system
		Functions of Sports Events Management (Planning, O		
		Various Committees & their Responsibilities (pre; dur		
		Fixtures and its Procedures – Knock-Out (Bye &Seedi		
		Children & Women in Sports		
		Common Postural Deformities - Knock Knee; Bow Legs; Flat Foot; Round Shoulders; Lordosis, Kyphosis, and Scoliosis and their corrective measures		
		Special consideration (Menarche & Menstrual Dysfun		
		Female Athletes Triad (Osteoporosis, Amenorrhea, Ea		
2	June	Yoga as Preventive measure for Lifestyle Disease	To learn preventive measures for lifestyle disease, To learn preventive measures for lifestyle disease for special children	Yoga Activities
		Obesity: Procedure, Benefits & Contraindications for Tadasana, Katichakrasana, Pavanmuktasana, Matsayasana, Halasana, Pachimottansana, Ardha – Matsyendrasana, Dhanurasana, Ushtrasana, Suryabedhan pranayama.		
		Diabetes: Procedure, Benefits & Contraindications for Katichakrasana, Pavanmuktasana,Bhujangasana, Shalabhasana, Dhanurasana, Supta-vajarasana, Paschimottanasana, Ardha-Mastendrasana, Mandukasana, Gomukasana, Yogmudra, Ushtrasana, Kapalabhati.		
		Yoga as Preventive measure for Lifestyle Disease		
		Asthma: Procedure, Benefits & Contraindications for Tadasana, Urdhwahastottansana, UttanMandukasana, Bhujangasana, Dhanurasana, Ushtrasana, Vakrasana, Kapalbhati, GomukhasanaMatsyaasana, Anuloma-Viloma.		
		Hypertension: Procedure, Benefits & Contraindications for Tadasana, Katichakransan, Uttanpadasana, ArdhaHalasana, Sarala Matyasana, Gomukhasana, UttanMandukasana, Vakrasana, Bhujangasana, Makarasana, Shavasana, Nadi-shodhanapranayam, Sitlipranayam.		
		Physical Education & Sports for CWSN (Children w		
		Organizations promoting Disability Sports (Special Ol		

		Advantages of Physical Activities for children with sp		
		Strategies to make Physical Activities assessable for c		

3	July	Sports & Nutrition Concept of balance diet and nutrition Macro and Micro Nutrients: Food sources & functions Nutritive & Non-Nutritive Components of Diet	Develops knowledge about nutrition	Make a chart on Nutrition
4	August	Test & Measurement in Sports Fitness Test – SAI Khelo India Fitness Test in school: Age group 5-8 yrs/ class 1-3: BMI, Flamingo Balance Age group 9-18yrs/ class 4-12: BMI, 50mt Speed test, Computing Basal Metabolic Rate (BMR) Rikli& Jones - Senior Citizen Fitness Test I. Chair Stand Test for lower body strength II. Arm Curl Test for upper body strength III. Chair Sit & Reach Test for lower body flexibility IV. Back Scratch Test for upper body flexibility V. Eight Foot Up & Go Test for agility VI. Six Minute Walk Test for Aerobic Endurance	Knowledge about test and measurement	Project on test and measurement

COMPUTER SCIENCE				
SR. NO	MONTH	UNIT / SUBUNIT	VALUES	ACTIVITY/PROJECT
1	April	Review of Python Basics Python tour 1 covered in Class XI	Develops IT skills	Lab activities
2	June	Review of Python Basics Python tour 2 covered in Class XI	Develops IT skills Develops Problem solving skill Develops Programming skill	Lab activities
3	July	Functions - Functions: types of function (built-in functions, functions defined in module, user defined functions) - Creating user-defined function - Arguments and parameters, default parameters, positional parameters •Function returning value(s) - Flow of execution - Scope of a variable (global scope, local scope)	Develops Problem solving skill Develops Programming skill	Lab activities
4	August	Data File Handling - Introduction to files - Text file - Binary file - CSV file Program Efficiency Performance Measurement in terms of the number of operations	Develops Programming skill	Lab activities
5	September	Data Structures in Python Stack: Operation on stack (push & pop), implementation of stack using list. Computer Networks - Evolution of networking - Data communication terminologies - Transmission media - Network devices - Network topologies and Network types - Network protocol - Introduction to web services	Develops IT skills	Lab activities