

KLE ENGLISH MEDIUM SCHOOL

JULE SOLAPUR

SYLLABUS SPLIT 2022 - 2023

XI- BIOLOGY

SR. NO	MONTH	UNIT / SUBUNIT	VALUES	ACTIVITY/PROJECT	EXAM	
1	JULY(05 Periods)	Unit-I Diversity of Living Organisms Chapter-1: The Living World Biodiversity; Need for classification; three domains of life taxonomy and systematics; concept of species and taxonomical hierarchy, binomial nomenclature	To develop scientific skills, disciplinary value			
2	JULY(05 Periods))	Chapter-2: Biological Classification Five kingdom classification; Salient features and classification of Monera Protista and Fungi into major groups; Lichens, Viruses and Viroids				
3	JULY(05 Periods))	Chapter-3: Plant Kingdom Classification of plants into major groups Salient and distinguishing features and a few examples of Algae, Bryophyta, Pteridophyta, Gymnospermae				To develop scientific skills, disciplinary value
4	JULY(05 Periods))	Chapter-4: Animal Kingdom Salient features and classification of animals, non-chordates up to phyla level and chordates up				
5	AUGUST(08 Periods)	Unit-II Structural Organization in Animals and Plant Chapter-5: Morphology of Flowering Plants Morphology of different parts of flowering plants: root, stem, leaf, inflorescence, flower, fruit and seed. Description of family Solanaceae	developing respect for other living beings	LAB PRACTICALS/ ACTIVITIES & PROJECTS AS PRESCRIBED BY CBSE BOARD		
6	AUGUST(04 Periods)	Chapter-6: Anatomy of Flowering Plants Anatomy and functions of tissue systems in dicots and monocots				
7	AUGUST(08 Periods)	Chapter-7: Structural Organisation in Animals Morphology, Anatomy and functions of different systems				

		(digestive, circulatory, respiratory, nervous and reproductive) of frog.			
8	SEPTEMBER(07 Periods)	Unit-III Cell: Structure and Function Chapter-8: Cell-The Unit of Life Cell theory and cell as the basic unit of life, structure of prokaryotic and eukaryotic cells; Plant cell and animal cell; cell envelope; cell membrane, cell wall; cell organelles - structure and function; endomembrane system, endoplasmic reticulum, golgi bodies, lysosomes, vacuoles, ribosomes, plastids, microbodies; cytoskeleton, cilia, flagella, centrioles (ultrastructure and function); nucleus.	Appreciate the body organization of both plants & animals	LAB PRACTICALS/ ACTIVITIES & PROJECTS AS PRESCRIBED BY CBSE BOARD	PERIODIC TEST 1
	SEPTEMBER(09 Periods)	Chapter-9: Biomolecules Chemical constituents of living cells: biomolecules, structure and function of proteins, carbohydrates, lipids, nucleic acids; Enzyme - types, properties, enzyme action	appreciate that the most complex biological phenomena		
10	SEPTEMBER(09 Periods)	Chapter-10: Cell Cycle and Cell Division Cell cycle, mitosis, meiosis and their significance			
11	OCTOBER	REVISION			
12	NOVEMBER(10 Periods)	Unit-IV Plant Physiology Chapter-13: Photosynthesis in Higher Plants Photosynthesis as a means of autotrophic nutrition; site of photosynthesis pigments involved in photosynthesis, photochemical and biosynthetic phases of photosynthesis; cyclic and non-cyclic photophosphorylation; chemiosmotic hypothesis; photorespiration; C3 and factors affecting photosynthesis.	appreciate that the most complex biological phenomena	LAB PRACTICALS/ ACTIVITIES & PROJECTS AS PRESCRIBED BY CBSE BOARD	
13	NOVEMBER(10 Periods)	Chapter-14: Respiration in Plants Exchange of gases; cellular respiration - glycolysis, fermentation TCA cycle and electron transport system (aerobic); energy relations number of ATP molecules generated; amphibolic pathways respiratory quotient			

14	NOVERBER(10 Periods)	Chapter-15: Plant - Growth and Development Seed germination; phases of plant growth and plant growth rate; conditions of growth; differentiation, dedifferentiation and redifferentiation; sequence of developmental processes in a plant cell; growth regulators - auxin, gibberellin, cytokinin, ethylene, ABA			
15	DECEMBER(08 Periods)	Unit-V Human Physiology Chapter-17: Breathing and Exchange of Gases Respiratory system in humans; mechanism of breathing and its regulation in humans exchange of gases, transport of gases and regulation of respiration, respiratory volume; disorders related to respiration - asthma, emphysema, occupational respiratory disorders	developing respect for other living beings		
16	DECEMBER(08 Periods)	Chapter-18: Body Fluids and Circulation Composition of blood, blood groups, coagulation of blood; composition of lymph and its function; human circulatory system Structure of human heart and blood vessels; cardiac cycle, cardiac output; ECG, double circulation; regulation of cardiac activity; disorders of circulation - hypertension, coronary artery disease, angina pectoris, heart failure	To develop scientific skills, disciplinary value Appericate the body organization of both plants & animals		
17	JANUARY(09 Periods)	Chapter-19: Excretory Products and their Elimination Modes of excretion - ammonotelism, ureotelism, uricotelism human excretory system – structure and function; urine formation, osmoregulation; regulation of kidney function - renin - angiotensin system; atrial natriuretic factor, ADH and diabetes insipidus; role of other organs in excretion; disorders - uremia, renal failure, renal calculi, nephritis; dialysis and artificial kidney, kidney transplant		LAB PRACTICALS/ ACTIVITIES & PROJECTS AS PRESCRIBED BY CBSE BOARD	
18	JANUARY(09 Periods)	Chapter-20: Locomotion and Movement Types of movement - ciliary, flagellar, muscular; skeletal muscle, contraction; proteins and muscle contraction; skeletal system and its functions; joints; disorders of muscular and skeletal systems - myasthenia gravis, tetany, muscular dystrophy, arthritis, osteoporosis, gout.	Appericate the body organization of both plants & animals		ANNUAL EXAM
19	FEBURAY(09 Periods)	Chapter-21: Neural Control and Coordination			

		Neuron and nerves; Nervous system in humans - central nervous system		
		peripheral nervous system and visceral nervous system; generation and		
		conduction of nerve impulse		
20	FEBURAY(09 Periods)	Chapter-22: Chemical Coordination and Integration		
		Endocrine glands and hormones; human endocrine system - hypothalamus		
		pituitary, pineal, thyroid, parathyroid, adrenal, pancreas, gonads;		
		mechanism of hormone action ,role of hormones as messengers and re		
		hypo - and hyperactivity and related disorders; dwarfism,		
		, acromegaly, cretinism, goiter, exophthalmic goitre, diabetes, Addison's		
21	MARCH	REVISION		ANNUAL EXAM
NOTE: CHAPTER 1 TO 22 ALL FOR ANNUAL EXAMINATION				