

EMBASSY OF INDIA SCHOOL (KV) MOSCOW					
SPLIT UP SYLLABUS - CLASS XI - BIOLOGY 2024-25					
SI	MONTH	NO OF WORKING DAYS	CHAPTER NAME	SUGGESTIVE PRACTICAL / PROJECT/MDP/TEST /ASSAIGNMENT	SUGGESTED METHODOLOGY TO BE USED (LIKE PPT/AIL /EXPERIENTIAL LEARNING
1	MAY/JUNE	21+6	Chapter-1: The Living World Biodiversity; Need for classification; three domains of life; taxonomy and systematics; concept of species and taxonomical hierarchy; binomial nomenclature	STUDY OF MICROSCOPE	
			Chapter-2: Biological Classification Five kingdom classification; Salient features and classification of Monera, Protista and Fungi into major groups; Lichens, Viruses and Viroids.		PPT / BLACK BOARD ILLUSTRATIONS ,
			Chapter-3: Plant Kingdom Classification of plants into major groups; Salient and distinguishing features and a few examples of Algae, Bryophyta, Pteridophyta, Gymnospermae (Topics excluded – Angiosperms, Plant Life Cycle and Alternation of Generations)	STUDY OF PLANT AND ANIMAL SPECIMENS	LIVE SPECIMENS FROM GARDEN
			Chapter-4: Animal Kingdom Salient features and classification of animals, non-chordates up to phyla level and chordates upto class level (salient features and at a few examples of each category).		PPT / BLACK BOARD ILLUSTRATIONS , SPECIMEN
2	JULY	18	Chapter-5: Morphology of Flowering Plants Morphology of different parts of flowering p	STUDY OF FAMILY SOLANACEAE	PPT / BLACK BOARD ILLUSTRATIONS
			Chapter-6: Anatomy of Flowering Plants Anatomy and functions of tissue systems in dicots and monocots.	PREPARATION OF TS OF STEM AND ROOT	PPT / BLACK BOARD ILLUSTRATIONS , CHART

			Chapter-7: Structural Organisation in Animals Morphology, Anatomy and functions of different systems (digestive, circulatory, respiratory, nervous and reproductive) of frog.		PPT / BLACK BOARD ILLUSTRATIONS
3	AUGUST	19	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, mitochondria, ribosomes, plastids, microbodies; cytoskeleton, cilia, flagella, centrioles (ultrastructure and function); nucleus.  Chapter-9: Biomolecules Chemical constituents of living cells: biomolecules, structure and function of proteins, carbohydrates, lipids, and nucleic acids; Enzyme - types, properties, enzyme action. (Topics excluded: Nature of Bond Linking Monomers in a Polymer, Dynamic State of Body Constituents Concept of Metabolism, Metabolic Basis of Living, The Living State)  Chapter-10: Cell Cycle and Cell Division Cell cycle, mitosis, meiosis and their significance		PPT / BLACK BOARD ILLUSTRATIONS
				POTATO OSMOMETER	PPT / BLACK BOARD ILLUSTRATIONS
					PPT / BLACK BOARD ILLUSTRATIONS, MODEL
4	SEPTEMBER	20	<b>10. BIO MOLECULES- HALF</b> Chapter-13: Photosynthesis in Higher Plants Photosynthesis as a means of autotrophic nutrition; site of photosynthesis, pigments involved in photosynthesis (elementary idea); photochemical and biosynthetic phases of photosynthesis; cyclic and non-cyclic photophosphorylation; chemiosmotic hypothesis; photorespiration; C3 and C4 pathways; factors affecting photosynthesis.		PPT / BLACK BOARD ILLUSTRATIONS

			Chapter-14: Respiration in Plants Exchange of gases; cellular respiration - glycolysis, fermentation (anaerobic), TCA cycle and electron transport system (aerobic); energy relations - number of ATP molecules generated; amphibolic pathways; respiratory quotient.		PPT / BLACK BOARD ILLUSTRATIONS
5	OCTOBER	18	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; plant growth regulators - auxin, gibberellin, cytokinin, ethylene, ABA  Chapter-17: Breathing and Exchange of Gases Respiratory organs in animals (recall only); 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		PPT / BLACK BOARD ILLUSTRATIONS
			Chapter-18: Body Fluids and Circulation		PPT / BLACK BOARD ILLUSTRATIONS
6	NOVEMBER / DECEMBER	20+10	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, 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.		PPT / BLACK BOARD ILLUSTRATIONS

7	JANUARY		Chapter-20: Locomotion and Movement Types of movement - ciliary, flagellar, muscular; skeletal muscle, contractile proteins and musclecontraction; skeletal system and its functions; joints; disorders of muscular and skeletal systems - myasthenia gravis, tetany, muscular dystrophy, arthritis, osteoporosis, gout.	STUDY OF HUMAN SKELETON	PPT / BLACK BOARD ILLUSTRATIONS , SKELETON
			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	OBSERVATION OF SLIDES OF MUSCELS	PPT / BLACK BOARD ILLUSTRATIONS
8	FEBRUARY		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 (elementary idea); role of hormones as messengers and regulators, hypo - and hyperactivity and related disorders; dwarfism, acromegaly, cretinism, goiter, exophthalmic goitre, diabetes, Addison's disease		PPT / BLACK BOARD ILLUSTRATIONS
			REVISION		