



MAHARAJA AGARSAIN PUBLIC SCHOOL
a Cambridge International School
Ashok Vihar, Delhi
CLASS - XI
SUBJECT- BIOLOGY
SESSION- 2023-24

DURATION	SYLLABUS COVERED	SYLLABUS TESTED	SUBJECT ENRICHMENT/PRACTICAL/ ENGLISH/ CONVERSATION/ VISUAL STIMULUS	LEARNING OUTCOMES	RESOURCES	SDG
PT1 (APR-MAY)	Chapter 8 (Cell: The unit of Life) Chapter 9 (Biomolecules) Chapter 10 (Cell cycle and Division) Chapter 1 (The Living World)	Chapter 8 (Cell: The unit of Life) Chapter 9 (Biomolecules) Chapter 10 (Cell cycle and Division) Chapter 1 (The Living World)	To study osmosis by potato osmometer. Test for the presence of sugar, starch, proteins and fats in suitable plant and animal materials. Mitosis in onion root tip cells and animals cells (grasshopper) from permanent slides. To study parts of the microscope, its proper use and maintenance.	Illustrate various cell organelles and explain function of each. Describe various structures of biomolecules and explain the role they play in maintaining cell processes. Draw diagrams / sketches/ flow charts, related to cells Classify organisms, phenomena and processes based on certain characteristics / salient features systematically in more scientific and organized manner; such as five kingdom classification	https://www.youtube.com/watch?v=s0oUffcDQLQ https://www.youtube.com/watch?v=-QK4wz254AA https://www.youtube.com/watch?v=DwAFZb8juMQ https://www.youtube.com/watch?v=FKZysxJawT4	GOAL 6: Clean Water and Sanitation GOAL 12: Responsible Consumption and Production GOAL 4: Quality Education GOAL 15: Life on Land
TERM-I (JUNE-JULY)	Chapter 2 Biological Classification	Chapter 2 (Biological Classification)	Specimens/slides/models and identification with reasons -	Differentiates organisms, phenomena and processes based on certain	https://www.youtube.com/watch?v=2cb_HS5mSj	GOAL 12: Responsible Consumption and

	Chapter 4 (Animal Kingdom)	Chapter 4 (Animal Kingdom)	Bacteria, Oscillatoria, Spirogyra, Rhizopus, mushroom, yeast, liverwort, moss, fern, pine, one monocotyledonous plant, one dicotyledonous plant and one lichen.	characteristics and salient Features.		Production
	Chapter 7 (Structural organization of animals)	Chapter 7 (Structural organization of animals)	Virtual specimens /slides/models and identifying features of - Amoeba, Hydra, liverfluke, Ascaris, leech, earthworm, prawn, silkworm, honey bee, snail, starfish, shark, rohu, frog, lizard, pigeon and rabbit.	Classify animals on the basis of their characteristics.	https://www.youtube.com/watch?v=pRdkvuqLmnl	GOAL 11: Sustainable Cities and Communities
		All Chapters done till now		Explain the structure of different animals.	https://www.youtube.com/watch?v=qNeloEIZqRM	GOAL 3: Good Health and Well-being
PT2 (JULY-AUG)	Chapter 6 (Anatomy of flowering plants)	Chapter 6 (Anatomy of flowering plants)	Different types of inflorescence (cymose and racemose) Study and describe locally available common flowering plants, from family Solanaceae	Explain anatomical structure of plants and list inflorescence in given Flower	https://www.youtube.com/watch?v=QuBVlInko1M	GOAL 9: Industry, Innovation and Infrastructure
	Chapter 3 (Plant Kingdom)	Chapter 3 (Plant Kingdom)	Separating the mixture of plant pigments using paper Chromatography.	Differentiates types of plants , phenomena and processes based on certain characteristics	https://www.youtube.com/watch?v=fA7Uo210eDg	GOAL 14: Life Below Water
	Chapter 5 (Morphology of flowering plants)	Chapter 5 (Morphology of flowering plants)	Preparation and study of T.S. of dicot and monocot roots and stems (primary).	Applies scientific terminology for organisms, processes, and phenomena based on internationally accepted conventions, such as, bisexual and unisexual organisms, actinomorphic and zygomorphic flowers,	https://www.youtube.com/watch?v=HwyHs_lqSj	GOAL 2: Zero Hunger

				aestivations, placentation		
HALF YEARLY (SEP)	Chapter 13 (Photosynthesis in Higher Plants)	All Chapters done till now	Study of plasmolysis in epidermal peels (e.g. Rhoeo/lily leaves or flashy scale leaves of onion bulb) Study of distribution of stomata on the upper and lower surfaces of leaves	Illustrate various steps in the process of photosynthesis.	https://www.youtube.com/watch?v=XSMjfvpDtTY	GOAL 1: No Poverty
	Chapter 14 (Respiration in Plants)	All Chapters done till now	Comparative study of the rates of transpiration in the upper and lower surfaces of leaves. Study of the rate of respiration in flower buds/leaf tissue and germinating seeds.	Describe the important steps in the process of Respiration	https://www.youtube.com/watch?v=rvaro5V89nE	GOAL 10: Reduced Inequality
	Chapter 15 (Plant Growth and Development)	All Chapters done till now	To separate chlorophyll pigments by paper chromatography.	List various PGR along with their functions in the plant systems.	https://www.youtube.com/watch?v=zm1YQxzHpfM	GOAL 5: Gender Equality

PT3 (NOV-DEC)	Chapter 17- (Breathing and Exchange of gases) Chapter 18- (Body fluids and Circulation) Chapter19- (Excretory Products and their Elimination)	Chapter 17- (Breathing and Exchange of gases) Chapter 18- (Body fluids and Circulation) Chapter19- (Excretory Products and their Elimination?)	To test the presence of bile salts in urine To test the presence of sugar in urine. To test the presence of albumin in urine. To test the presence of urea in urine.	Calculate the volume of gas in lungs on the basis of given information. Draw the diagram of Human heart with explanation of role played by each part during double circulation. Rate the role of individual part of a nephron in the process of urine formation.	https://www.youtube.com/watch?v=s6xUQxnjXmg https://www.youtube.com/watch?v=yAowwvZwRIU https://www.youtube.com/watch?v=2n1KB-a7QMQ	GOAL 11: Sustainable Cities and Communities GOAL 17: Partnerships to achieve the Goal GOAL 6: Clean Water and Sanitation
PRE FINAL (JAN)	Chapter 20- (Locomotion and Movement) Chapter 21- (Neural Control and Coordination) Chapter 22- (Chemical Coordination and Integration)	Whole syllabus	To study the human skeleton and different types of joints. Whole syllabus Final Practical	Test the activity of each joint using working models. Design the structure of neuron and explain the functioning of reflex action. Classify various hormones on the basis of functions, location and target and organ.	https://www.youtube.com/watch?v=aMpzu3xpJYc https://www.youtube.com/watch?v=w7XMMgiavkk https://www.youtube.com/watch?v=veO6naQjyj4	GOAL 3: Good Health and Well-being GOAL 16: Peace and Justice Strong Institutions GOAL 13: Climate Action
FINAL TERM (FEB)	REVISION	Whole syllabus	Final Practical			