



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

DURATION	SYLLABUS COVERED	SYLLABUS TESTED	SUBJECT ENRICHMENT/PRACTICAL/ ENGLISH/ CONVERSATION/ VISUAL STIMULUS	LEARNING OUTCOMES (SWBAT)	RESOURCES	SDG
PT1 (APR-MAY)	Chapter 2 (Sexual Reproduction in Flowering Plants)	Chapter 2 (Sexual Reproduction in Flowering Plants)	Prepare a temporary mount to observe pollen germination. Prepare a temporary mount of onion root tip to study mitosis.	Illustrate various parts of a flowering plant and explain function of each part.	https://www.youtube.com/watch?v=6UXGobXdZGA	GOAL 15: Life on Land
	Chapter 4 (Reproductive Health)	Chapter 4 (Reproductive Health)	Flowers adapted to pollination by different agencies (wind, insects, birds). Pollen germination on stigma through a permanent slide or scanning electron micrograph.	Explain importance of maintaining reproductive health and suggest appropriate methods.	https://www.youtube.com/watch?v=NShd2e6m568	GOAL 5: Gender Equality

TERM-I (JUNE- JULY)	Chapter 3 (Human Reproduction)	All Chapters done till now	Identification of stages of gamete development, i.e., T.S. of testis and T.S. of ovary through permanent slides (from grasshopper/mice). T.S. of blastula through permanent slides	Tabulate the changes that take place in female body during menstrual cycle.	https://www.youtube.com/watch?v=Lbv6WbjlQW0	GOAL 4: Quality Education
	Chapter 5 (Principles of Inheritance and variation)	All Chapters done till now	Controlled pollination - emasculation, tagging and bagging	List the laws of inheritance based on the information.	https://www.youtube.com/watch?v=NShd2e6m568	GOAL 12: Responsible Consumption and Production
	Chapter 7 (Evolution)	All Chapters done till now	Flash cards models showing examples of homologous and analogous organs	describes contribution of scientists/researchers all over the world in systematic evolution of concepts.	https://www.youtube.com/watch?v=RTX9si5RBb0	GOAL 13: Climate Action
	Chapter 6 (Molecular Basis of Inheritance)	All Chapters done till now	Meiosis in onion bud cell or grasshopper testis through permanent slides. Mendelian inheritance using seeds of different colour/sizes of any plant.	explains efficiently systems, relationships, processes and phenomena, such as human genome project.	https://www.youtube.com/watch?v=XNdvpefKaYk	GOAL 17: Partnerships to achieve the Goal
PT-2 (JULY- AUG)	Chapter 11 (Biotechnology: Principles and Processes)	Chapter 11 (Biotechnology: Principles and Processes)	Prepared pedigree charts of any one of the genetic traits such as rolling of tongue, blood groups, ear lobes, widow's peak and colour blindness	Relate the Biotechnology process to the principles and suggest best methods according to the requirement	https://www.youtube.com/watch?v=TQRL9JnYkA4	GOAL 11: Sustainable Cities and Communities

	Chapter 12 (Biotechnology and its Applications)	Chapter 12 (Biotechnology and its Applications)	Study the effect of different temperatures and three different pH on the activity of salivary amylase on starch.	Apply the appropriate technology based on the given information.	https://www.youtube.com/watch?v=xF7F3kAJmuQ	GOAL 10: Reduced Inequality
	Chapter 10 (Microbes in Human Welfare)	Chapter 10 (Microbes in Human Welfare)	Isolate DNA from available plant material such as spinach, green pea seeds, papaya, etc.	connect with the daily life experiences, through interdisciplinary approach by using various available resources including textbooks, newspapers, internet etc; such as; using leaves of neem (Azadirachta indica) in storing food grains due to the presence of bioactive compounds in neem leaves as result of secondary metabolism and their pesticidal effects.	https://www.youtube.com/watch?v=YA9Kil7gW5Q	GOAL 3: Good Health and Well-being
HALF YEARLY (SEP)	Chapter 8 (Human Health and Disease)	All Chapters done till now	Common disease-causing organisms like Ascaris, Entamoeba, Plasmodium, any fungus causing ringworm through permanent slides, models or virtual images. Comment on symptoms of diseases that they cause.	observe various technological devices and innovative exhibits such as waste management kits, water filtration system, using low-cost or no-cost ecofriendly materials	https://www.youtube.com/watch?v=65sh_0kBuM8	GOAL 8: Decent Work and Economic Growth
	Chapter 14 (Ecosystem)	All Chapters done till now	Study the plant population frequency by quadrat method.	Prepare a project on various ecosystems and life-forms found in them.	https://www.youtube.com/watch?v=ZbVkJIrlaJ4	GOAL 1: No Poverty

TERM II (NOV)	Chapter 13 (Organisms and Population)	All Chapters done till now	Study the plant population density by quadrat	makes linkages at the interface of Biology with other disciplines by relating various interdisciplinary concepts such as bioprocess engineering, population growth curve, etc.	https://www.youtube.com/watch?v=L68S1t9XVgE	GOAL 7: Affordable and Clean Energy
	Chapter 15 (Biodiversity and Conservation)	Whole Syllabus	Models specimen showing symbiotic association in root modules of leguminous plants, Cuscuta on host, lichens.	Create awareness about biodiversity conservation using posters, ppts and role plays.	https://www.youtube.com/watch?v=pfPR0siCG0k	GOAL 9: Industry, Innovation and Infrastructure
PREBOARD (DEC)	Revision	Whole Syllabus				
FINAL BOARD EXAM	Revision	Whole Syllabus				