BIOLOGY SYLLABUS TERM WISE

		MID TERM 1	HALF YEARLY	MID TERM 2	FINAL TERM
		CH3 - CELL	CH3 - CELL	CH8 - HABITAT AND ADAPTATION	CH8 - HABITAT AND ADAPTATION
			CH4 - DIGESTIVE SYSTEM		CH1 - LEAF
			CH5 - RESPIRATORY SYSTEM		CH2 - FLOWER
			CH7- HEALTH AND HYGIENE		CH6 - CIRCULATORY SYSTEM
			CH3 - CELL		

BIOLOGY SYLLABUS - CHAPTER WISE DETAILED COMPETENCIES

TERM	MONTH	CHAPTERS	LOTS → Focus on recall, identification, basic understanding	MOTS → Focus on application, explanation, classification	HOTS → Focus on analysis, evaluation, creation, critical thinking
MT 1 + HYA	APRIL	CH3 - CELL	LOTS Define cell and state cell theory (basic idea). Identify cell organelles (nucleus, cytoplasm, cell membrane). Recall differences between plant and animal cells.	MOTS Explain functions of cell organelles. Differentiate between plant and animal cells. Interpret diagrams of cells. Classify cells based on structure.	HOTS Analyse how structure of organelles relates to function. Evaluate the importance of the nucleus in cell control. Predict outcomes if certain organelles malfunction. Compare unicellular and multicellular organisms critically.
HYA	MAY - JUNE - JULY	CH4 - DIGESTIVE SYSTEM	LOTS Name organs of the digestive system. Define digestion, ingestion, absorption. Recall functions of major digestive organs.	MOTS Explain the process of digestion in humans. Differentiate between mechanical and chemical digestion. Describe role of enzymes in digestion. Interpret diagrams of the digestive system.	HOTS Analyse the importance of a balanced diet. Evaluate the impact of poor eating habits on digestion. Predict health issues due to improper digestion. Design diet plans based on nutritional needs.
HYA	JULY	CH5 - RESPIRATORY SYSTEM	LOTS Define respiration and breathing. Identify parts of the respiratory system. Recall types of respiration (aerobic, anaerobic).	MOTS Explain the mechanism of breathing. Differentiate between inhalation and exhalation. Describe gaseous exchange in lungs. Interpret diagrams of respiratory organs.	HOTS Analyse the effects of pollution on respiration. Evaluate the importance of oxygen in energy release. Predict consequences of respiratory disorders. Suggest measures to maintain respiratory health.
HYA	AUGUST	CH7- HEALTH AND HYGIENE	LOTS Define health and hygiene. List personal hygiene practices. Recall common diseases and their causes.	MOTS Explain the importance of sanitation and cleanliness. Differentiate between communicable and non-communicable diseases. Describe methods of disease prevention. Classify diseases based on transmission.	HOTS Analyse the role of hygiene in disease prevention. Evaluate public health measures in society. Predict effects of poor hygiene on community health. Design awareness campaigns for healthy living.
MT2 + FA	OCTOBER - NOVEMBER	CH8 - HABITAT AND ADAPTATION	LOTS Define habitat and adaptation. Identify types of habitats (terrestrial, aquatic). Recall examples of plant and animal adaptations.	MOTS Explain how organisms adapt to their environment. Differentiate between aquatic and terrestrial adaptations. Describe structural and behavioural adaptations. Classify organisms based on habitat.	HOTS Analyse survival strategies of organisms in extreme habitats. Evaluate impact of environmental changes on organisms. Predict consequences of habitat destruction. Propose conservation strategies for biodiversity.
FA	NOVEMBER	CH1 - LEAF	LOTS Define a leaf and identify its parts (lamina, petiole, veins). State functions of a leaf. Recall types of venation (reticulate, parallel). Identify simple vs compound leaves.	MOTS Explain the process of photosynthesis in simple terms. Differentiate between transpiration and respiration in plants. Classify leaves based on venation and structure. Interpret diagrams of leaf structure.	HOTS Analyse the role of leaves in maintaining ecological balance. Evaluate the importance of transpiration in water cycle. Predict effects of absence of chlorophyll on plants. Design simple experiments to show transpiration/photosynthesis.
FA	DECEMBER	CH2 - FLOWER	LOTS Identify parts of a flower (sepals, petals, stamens, carpels). Define pollination and fertilisation. Name types of flowers (unisexual, bisexual).	MOTS Explain the process of pollination (self and cross). Differentiate between pollination and fertilisation. Describe the role of each floral part. Interpret labelled diagrams of flowers.	HOTS Analyse adaptations of flowers for pollination. Evaluate the importance of pollinators in ecosystems. Predict consequences if pollination does not occur. Develop models showing fertilisation in plants.
FA	JANUARY	CH6 - CIRCULATORY SYSTEM	LOTS Identify components of blood (RBC, WBC, platelets). Name parts of the heart. Define circulation. MOTS	MOTS Explain the functioning of the heart. Differentiate between arteries, veins, capillaries. Describe double circulation in humans. Interpret diagrams of heart and blood vessels.	HOTS Analyse the importance of circulation in body coordination. Evaluate lifestyle choices affecting heart health. Predict consequences of blockage in arteries. Propose ways to maintain a healthy circulatory system.