

ARMY PUBLIC SCHOOL, MUMBAI (2019-2020)
STANDARD CURRICULUM

CLASS:XI

SUB: BIOLOGY

<u>S.I NO</u>	<u>TOPIC</u>	<u>MONTH</u>	<u>CORE VALUE / VALUES AND SKILLS</u>	<u>METHODOLOGY</u>	<u>LEARNING OUTCOMES</u>
1	The Living World, Biological Classification	JUNE	<ul style="list-style-type: none"> ● Team Work ● Curiosity, Appreciation, knowledge 	<ul style="list-style-type: none"> ● Analyzing the structural difference between prokaryotes and unicellular eukaryotes. ● Smart board used. 	<ul style="list-style-type: none"> ● Student will be able to identify the basis of classification of living organisms.
1	Diversity of Living Organisms. (Plant Kingdom, Animal Kingdom)	JULY	<ul style="list-style-type: none"> ● Environmental Awareness ● Interdependence, ● Cooperation, Analysis. Comparison 	<ul style="list-style-type: none"> ● Analyzing plant and animal samples and classifying them. ● Smart board and real life specimens used. 	<ul style="list-style-type: none"> ● Students will be able to identify the characteristic features of plant and animal kingdom. ● Students are able to categorise organisms correctly.
2	Structural Organization in Plants & Animals(Morphology of Flowering Plants, Anatomy of Flowering Plants, Structural Organization in Animals)	AUGUST	<ul style="list-style-type: none"> ● Patriotism and Nationalism ● Observation, Contrasting and Analyzing, ● Interdependence 	<ul style="list-style-type: none"> ● Preparation of temporary slides of Dicot and Monocot Stems and Roots. ● Compare and Contrast between dicot and monocot anatomy. ● Plant specimens used. 	<ul style="list-style-type: none"> ● Students will be able to differentiate between root and stem sections. ● .Between dicot and monocot.
3	Cell: Structure and Function: Cell-The Unit of Life, Biomolecules, Cell Cycle and Cell Division.	SEPTEMBER	<ul style="list-style-type: none"> ● Discipline and Diligence ● Exchange of ideas, Knowledge, Critical thinking 	<ul style="list-style-type: none"> ● Observing and analyzing mitotic and meiotic division through permanent slides. ● Synopsis presentation. 	<ul style="list-style-type: none"> ● Students will be able to identify the stages of meiotic and mitotic division.
4	Plant Physiology (Transport in Plants, Mineral Nutrition)	OCTOBER	<ul style="list-style-type: none"> ● Diversity and Togetherness ● Openness to ideas: Knowledge, critical thinking 	<ul style="list-style-type: none"> ● Students perform experiments to demonstrate the dependence of plants on water and sun light . ● Laboratory equipments and smart board were used. 	<ul style="list-style-type: none"> ● Students are able to relate between soil nutrition and plant health.

5	Plant Physiology(Photosynthesis in Higher Plants, Respiration in Plants Plant - Growth and Development,)	NOVEMBER	<ul style="list-style-type: none"> ● Gender sensitivity ● Self- confidence, Analytical thinking 	<ul style="list-style-type: none"> ● Experiment to analyze the presence of starch in green leaves ● Experiment to study carbon dioxide release during photosynthesis. ● Lab equipments used. 	<ul style="list-style-type: none"> ● Students understand the steps involved in photosynthesis and respiration.
6	Human Physiology (Digestion and Absorption, Breathing and Exchange of Gases, Body Fluids and Circulation)	DECEMBER	<ul style="list-style-type: none"> ● Perseverance ● Co-operation' ● Knowledge, Appreciation 	<ul style="list-style-type: none"> ● Analysis of starch, protein and fats - experimentally. ● Synopsis presentation. 	<ul style="list-style-type: none"> ● Students are able to understand the processes involved in human physiology
7	Human Physiology(Excretory Products and Their Elimination, Locomotion and Movement, Neural Control and Coordination, Chemical Coordination and Integration)	JANUARY	<ul style="list-style-type: none"> ● Effective Communication ● Inter dependence, ● Knowledge, Critical analysis 	<ul style="list-style-type: none"> ● Presentation of Synopsis on various systems of the Human body. 	<ul style="list-style-type: none"> ● Understanding the processes in human physiology. ● Learning about deficiency diseases and their symptoms.