

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

**CLASS: XII**

**SUB: BIOLOGY**

<b><u>SI NO</u></b>	<b><u>MONTH</u></b>	<b><u>TOPIC</u></b>	<b><u>CORE VALUE / SKILLS AND ATTRIBUTES</u></b>	<b><u>METHODOLOGY</u></b>	<b><u>LEARNING OUTCOMES</u></b>
1	APRIL	Reproduction in organisms. Sexual reproduction in flowering plants Human reproduction, Reproductive health	Self-Awareness Curiosity, Critical and Active thinking	<ul style="list-style-type: none"> <li>● Study of adaptations of different flowers for pollination.</li> <li>● Germination of seeds to study the parts of the seed.</li> </ul>	<ul style="list-style-type: none"> <li>● Students understand the processes of plant and human reproduction</li> <li>● Students learn about reproductive health..</li> </ul>
2	JUNE	Principles of Inheritance and variation, Molecular basis of Inheritance	Team Work Curiosity Environmental awareness	<ul style="list-style-type: none"> <li>● Researching and discussing the pedigree and symptoms of genetic disorders</li> <li>● Pedigree charts used</li> <li>● Educational videos</li> </ul>	<ul style="list-style-type: none"> <li>● Students will learn about the fundamentals of genetics.</li> </ul>
3	JULY	Evolution	Environmental Awareness Critical analysis	<ul style="list-style-type: none"> <li>● Compare and analyze analogous and homologous organs</li> </ul>	<ul style="list-style-type: none"> <li>● Students understand the processes of evolution</li> </ul>
4	AUGUST	Human health and diseases Microbes in Human welfare Strategies of enhancement of food production, Organisms and populations	Patriotism and Nationalism Community development/awareness of ecological balance	<ul style="list-style-type: none"> <li>● Analytical study of the various types of cancer and its prevalence.</li> <li>● Study of common vector borne</li> </ul>	Students will learn about- <ul style="list-style-type: none"> <li>● Causes of diseases</li> <li>● Preventive methods</li> <li>● Prevalent scientific methods to enhance</li> </ul>

				<p>disease causing organisms.</p> <ul style="list-style-type: none"> <li>● slide observation of disease causing microorganisms.</li> <li>● Comparison of various ecosystems</li> </ul>	<p>food production.</p> <ul style="list-style-type: none"> <li>● Interaction among natural populations.</li> </ul>
5	SEPTEMBER	Revision of topics	Discipline and Diligence		
6	OCTOBER	Biotechnology: Principles and processes, Biotechnology-applications	Diversity and Togetherness Curiosity, critical thinking	<ul style="list-style-type: none"> <li>● Analysis of newspaper article on Recombinant DNA technology to treat genetic disorder</li> <li>● Educational videos used</li> </ul>	<ul style="list-style-type: none"> <li>● Students will know about the basic principles of biotechnology.</li> <li>● They will learn about applications of biotechnology.</li> </ul>
7	NOVEMBER	Ecosystem Biodiversity and conservation , Environmental Issues	Gender Sensitivity Environmental consciousness	<ul style="list-style-type: none"> <li>● Students analyze the various prevalent environmental issues in India.</li> <li>● Study of Arcata waste water treatment.</li> </ul>	<ul style="list-style-type: none"> <li>● Students will learn about the needs to conserve biodiversity.</li> <li>● Methods to conserve biodiversity.</li> <li>● Prevention of pollution.</li> </ul>
8	DECEMBER	Revision	Perseverance		
9	JANUARY	Revision	Effective Communication		