

**VIDYA PRATISHTHAN'S
DR. CYRUS POONAWALLA SCHOOL (CBSE), VIDYANAGARI, BARAMATI.
Annual Curriculum Plan, 2024-25**

Class X

Biology

Topic	No.of Period	Month	Learning Outcomes	Learning Objectives	Activities	Assessment	Projects
Life Processes	30	February-06 March-12 April-12	1)Understand the major systems of the human body. 2)Explain the functions of each system. 3)Recognize common disorders related to each system. 4)Understand the importance of maintaining homeostasis.	1) Identify the organs and functions of each system. 2) Explain the process of digestion, respiration, circulation, etc. 3) Recognize symptoms and causes of common disorders. 4)Discuss methods to maintain a healthy lifestyle.	Hands-on experiments demonstrating physiological processes.	1)Diagram labelling of body systems. 2) Worksheets	Research and present on a specific organ system and its disorders.
Control and Coordination	21	May- 03 June-12 July-06	1) Understand the structure and functions of the nervous system.	1) Describe the structure and functions of the human nervous system.	Research activities on specific topics related to control and	Class discussions, quizzes, and worksheets.	Investigating the Effects of Stimuli on Plant Growth: Students

			<p>2) Explain the role of hormones in coordination.</p> <p>3) Identify various types of stimuli and responses in organisms.</p> <p>3) Analyse the mechanisms of control and coordination in plants and animals.</p> <p>4) Apply knowledge to real-life situations and make connections between concepts.</p>	<p>2) Explain the transmission of nerve impulses and synaptic transmission.</p> <p>3) Identify and describe the major glands and hormones in the endocrine system.</p> <p>4) Discuss the role of hormones in growth, development, and metabolism.</p> <p>5) Compare and contrast the nervous and endocrine systems in terms of coordination.</p> <p>6) Explain different types of tropisms in plants.</p> <p>7) Describe the role of plant hormones in growth and development.</p>	<p>coordination, such as the impact of environmental factors on plant growth or the effects of hormones on human behavior.</p>		<p>design experiments to study the responses of plants to different stimuli (light, gravity, touch) and analyze the results.</p>
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				8)Analyse the coordination of responses to external stimuli in plants and animals.			
Reproduction in Plants and Animals	17	July-06 August-11	1)Understand the process of sexual and asexual reproduction. 2)Explain the reproductive structures and functions in humans and plants. 3)Recognize the stages of embryonic development. 4)Understand reproductive health and contraception.	1)Differentiate between sexual and asexual reproduction. 2)Explain the structures involved in human and plant reproduction. 3)Identify the stages of embryonic development. 4)Discuss methods of contraception and reproductive health issues.	Observation of reproductive structures under a microscope. Guest lecture from a reproductive health specialist.	1)Diagram labelling of reproductive structures. 2)Group discussion on reproductive health issues.	<ul style="list-style-type: none"> 📖 Investigate a culturally significant aspect of reproduction and present findings. 📖 Design a pamphlet on reproductive health education for teenagers.
Heredity	12	September12	1)Understand the principles of heredity and inheritance.	1)Define key terms related to heredity such as allele, gene,	Interactive sessions using multimedia resources to explore	<ul style="list-style-type: none"> ● Class discussions on key concepts. 	They present their findings through posters, presentations,

			<p>2) Recognize the significance of genetics in the variation among organisms.</p> <p>3) Explore the role of genes and environment in determining traits.</p> <p>4) Apply knowledge of genetics in solving problems related to inheritance patterns.</p> <p>5) Appreciate the ethical considerations in genetic engineering and biotechnology.</p>	<p>genotype, phenotype, etc. Explain</p> <p>3) Mendel's laws of inheritance - law of segregation and law of independent assortment.</p> <p>4) Analyse Punnett squares to predict the outcomes of monohybrid and dihybrid crosses.</p> <p>5) Investigate human genetic disorders and their inheritance patterns. Evaluate the impact of environmental factors on gene expression and phenotype.</p> <p>6) Discuss the applications and ethical considerations of genetic</p>	<p>genetic concepts.</p>	<ul style="list-style-type: none"> • Quizzes to assess understanding of Mendel's laws and genetic terminology. • Worksheets on Punnett squares and inheritance patterns. • Group discussions on case studies related to human genetic disorders. 	<p>or multimedia tools.</p>
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				engineering techniques.			
Our Environment	10	October-10	<p>1) Understand the interdependence of living organisms with their environment.</p> <p>2) Identify various components of the environment and their roles.</p> <p>3) Comprehend the concept of ecological balance and its significance.</p> <p>4) Recognize human activities impacting the environment and potential solutions.</p> <p>5) Develop an appreciation for the importance of conservation and sustainable practices.</p>	<p>1) Define ecosystem and its components.</p> <p>2) Describe different types of ecosystems.</p> <p>3) Explain the concept of food chains and food webs.</p> <p>4) Analyse the factors affecting ecosystems, such as biotic and abiotic factors.</p> <p>5) Discuss the importance of biodiversity and its conservation.</p> <p>6) Understand the greenhouse effect and its implications.</p> <p>7) Identify various environmental issues like pollution,</p>	Field trips to local ecosystems such as forests, wetlands, or parks for hands-on learning experiences.	Weekly quizzes, class discussions, and group activities to gauge understanding.	Initiating a tree plantation drive or habitat restoration project. Investigating the water quality of nearby water bodies and proposing solutions for improvement.

				deforestation, and climate change. Propose measures for environmental conservation and sustainable development.			