

**HANSRAJ MODEL SCHOOL**  
**PUNJABI BAGH, NEW DELHI**  
**CURRICULUM ACADEMIC PLAN**  
**SESSION: 2024-2025**  
**CLASS X**  
**SUBJECT: BIOLOGY**

MO NTH	TOPIC	LEARNING INTENTIONS	ACTIVITIES	ASSIGNMENTS
April & May	<b>Life Processes</b> <b>Nutrition in Plants and Animals</b>  <b>Respiration in Plants and Animals</b>	1). Students will be able to en features of living beings & how different from non- living things  2). Students will be able to un concepts of nutrition, respiration and animals  3). Students will be able to d labelled diagrams pertaining mentioned concepts	<ul style="list-style-type: none"> <li>● To prepare the slide of leaf peel to show the stomata and appreciate the stomata in the plant.</li> <li>● To demonstrate the role of saliva in digestion of starch.</li> <li>● To design a flow chart of nutrition available materials.</li> </ul>	Assignment No-1 Intext questions ( Page: 95, 101, 105, 110, 112)           Assignment No-2 Back Exercise

		<p>4). Critically analyse various physiological processes related to various systems in plants and animals.</p> <p>5). Built character amongst the students by discussing /communicating the importance of healthy lifestyle in daily life</p>	<ul style="list-style-type: none"> <li>● Diagrammatic skill-based question on: <ul style="list-style-type: none"> <li><input type="checkbox"/> sectional view of leaf</li> <li><input type="checkbox"/> stomata</li> <li><input type="checkbox"/> human digestive system</li> <li><input type="checkbox"/> human respiratory system</li> </ul> </li> </ul>	(Page: 113)
<b>July</b>	<b>Life Processes-Transportation in Plants and Animals</b>	<p>1) Students will be able to describe transport in plants and animals.</p> <p>2). Students will be able to draw diagram of heart and circulation.</p> <p>3). Students will be able to demonstrate citizenship by visualizing and acting on given scenario (High B.P, Heart Failure, Kidney failure) and present it in form of skit to sensitize others.</p> <p>4). Students will be able to describe importance of excretion and draw diagram of excretory system and nephron.</p> <p>5). To express themselves and share their experience without inhibition.</p>	<ul style="list-style-type: none"> <li>● To present a skit on day-to-day health issues like Blood pressure, heart failure etc to sensitize others. (AI/DC)</li> <li>● To play the game “THE FASTEST” wherein the students will be able to identify important metabolic life processes in various organisms. (SI/DC)</li> </ul>	Assignment No-3 Competency Based Questions ( MCQ, Assertion-Reason, Case Study)

	<b>Excretion in Plants and Animals</b>			
<b>August</b>	<b>Control &amp; Co-ordination</b>	<p>1). Students will be able to understand the control and coordination and the outcome of the hormones and endocrine system.</p> <p>2). Students will be able to further understand that Chemical coordination is found both in plants and animals.</p> <p>3). Students will be able to draw a neuron, reflex arc and Human brain.</p> <p>4). Students will be able to narrate and describe functions of various plant hormones, regulator, various glands and diseases associated with hormonal imbalance.</p> <p>5). Teamwork, co-operation, communication.</p> <p>6). Problem solving skills.</p>	<p>1) Activity in the class demonstrating the mechanism of reflex arc- “Mexican Jumping Beans” Students will enact their role as RECEPTOR NEURON, MOTOR NEURON and EFFECTOR. (AI/DC)</p> <p>2) Students will be asked to identify the parts of nervous system through activity “Fact or Fake Quiz” and also summarize the reasons behind the statements.</p>	<p>Assignment No-1 Intext questions ( Page: 120, 123, 126)</p> <p>Assignment No-2 Back Exercise (Page: 126, 127)</p> <p>Assignment No-3</p>

				Competency Based Questions ( MCQ, Assertion-Reason, Case Study)
<b>September</b>	<b>REVISION AND EXAMINATION</b>			
<b>October</b>	<b>Our Environment</b>	<p>1). Students will be able to explain relationship between organism and environment.</p> <p>2). Students will be able to distinguish between producers, consumers levels and decomposers.</p> <p>3). Students will be able to explain concept of food chain and food flow of energy through various levels</p> <p>4). Students will be able to relate human activities and their impact on environment and life of organisms</p>	<p>1). Students will be asked to develop a word game (Pictionary, scrabble, bingo etc.) on the concept of food chain and food web. (AI)</p>	<p>Assignment No-1 Intext questions ( Page: 258, 262, 265)</p> <p>Assignment No-2 Back Exercise (Page: 265, 266)</p> <p>Assignment No-3 Competency Based Questions ( MCQ, Assertion-Reason, Case Study)</p>

	<b>How do Organisms Reproduce?</b>	<p>1). Students will be able to identify and explain the two types of reproduction.</p> <p>2). Students will be able to recognise the importance of sexual reproduction and explain each stage in the fertilization process.</p> <p>3). Students will be able to describe male and female reproductive system in humans and contraceptive methods.</p> <p>4). Students will be able to compare and contrast sexual and asexual reproduction.</p> <p>5). Students will be to recognise the importance of reproductive health.</p>	<p>1) Students will draw a flow chart showing various methods of reproduction along with examples. (CR)</p> <p>2) Students will demonstrate the structure of flower with the help of the China Rose flower. (CR)</p>	<p>Assignment No-1 Intext questions ( Page: 129, 134, 141)</p> <p>Assignment No-2 Back Exercise (Page: 142)</p> <p>Assignment No-3 Competency Based Questions ( MCQ, Assertion-Reason, Case Study)</p>
<b>November</b>	<b>Heredit y</b>	1). Students will be able to understand that living beings	1) Students will be asked to observe and compare the earlobes of their	Assignment No-1 Intext questions ( Page: 144, 148,

		<p>produce offspring of same kind but they vary amongst themselves and are not identical to their parents.</p> <p>2). Students will be able to know how the sex of offspring (humans) is determined.</p> <p>3). To develop the sense of collective belonging.</p>	<p>friends with the earlobes of their parents and grandparents to arrive at the conclusion that characters or traits are inherited in off-springs from their parents. (CR/DC)</p> <p>2) Students will be asked to explore the library and internet about scientists, scientific discoveries and inventions, and then share their findings with the class in the form of role-play. (AI/DC)</p>	<p>Assignment No-2 Back Exercise (Page:</p> <p>Assignment No-3 Competency Based Questions ( MCQ, Assertion-Reason, Case Study)</p>
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