

**ARMY PUBLIC SCHOOL GOPALPUR  
SPLIT - UP OF SYLLABUS [2020-21]  
CLASS – XI : BIOLOGY**

UNIT	TITLE OF THE UNIT AND NAME OF THE CHAPTER	MONTH	PERIODS REQUIRED	PRACTICALS
I	<b>DIVERSITY OF LIVING ORGANISMS</b> 1. The Living world 2. Biological Classification	June	08	B.1. Study of the parts of a compound microscope  B.2. Study of the specimens/slides/models and identification with reasons - <b>Bacteria, Oscillatoria, Spirogyra, Rhizopus, mushroom, yeast, liverwort, moss, fern, pine, one monocotyledonous plant, one dicotyledonous plant and one lichen</b>
I	3. Plant Kingdom 4. Animal Kingdom	July	15	.  B.3. Study of virtual specimens/slides/models and identification with reasons - <b>Amoeba,</b>



<p style="text-align: center;"><b>II</b></p>	<p style="text-align: center;"><b>STRUCTERAL ORGANISATION IN PLANTS AND ANIMALS</b></p> <p style="text-align: center;"><b>Anatomy of Flowering Plants ( Continued ...)</b></p> <p style="text-align: center;"><b>7. Structural Organisation in Animals.</b></p>	<p style="text-align: center;"><b>August</b></p>	<p style="text-align: center;"><b>12</b></p>	<p><b>A.2 Preparation and study of T.S. of dicot and monocot roots and stems (primary).</b></p> <p><b>B.4. Study of tissues and diversity in shapes and sizes of plant and animal cells (palisade cells, guard cells, parenchyma, collenchyma, sclerenchyma, xylem, phloem, squamous epithelium, muscle fibers and mammalian blood smear) through temporary/permanent slides</b>  <b>Study of different modifications in roots, stems and leaves.</b></p> <p><b>B.6. Study of different modifications in roots stems and leaves.</b></p> <p><b>B.11.Study of external morphology of cockroach through virtual images/models</b></p> <p><b>A.7.Test for the presence of sugar, starch, proteins and fats. Detection in suitable plant and animal materials.</b></p>
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III	<p>CELL: STRUCTURE AND FUNCTION</p> <p>8. Cell-The Unit of Life</p> <p>9 . Biomolecules</p>	August	<p>05</p> <p>03</p>	
III	<p>CELL: STRUCTURE AND FUNCTION</p> <p>9 . Biomolecules (continued)</p> <p>10. Cell Cycle and Cell Division</p>	September	12 +9	<p>B.5. Study of mitosis in onion root tip cells and animals cells (grasshopper) from permanent slides.</p> <p>A.3.Study of osmosis by potato osmometer.</p> <p>B.8. Study of imbibition in seeds/raisins.</p> <p>A.4. Study of plasmolysis of in</p>



IV	<b>PLANT PHYSIOLOGY</b> 11. Transport in Plants  12. Mineral Nutrition		8	<b>epidermal peels (e.g. Rhoeo leaves).</b> A.5. Study of distribution of stomata in the upper and lower surface of leaves.  A.6. Comparative study of the rates of transpiration in the upper and lower surface of leaves.
IV	13. Photosynthesis in Higher Plants 14. Respiration in Plants  <b>( REVISION OF HALF YEARLY SYLLABUS )</b>	October	15 +04	A.8. Separation of plant pigments through paper chromatography.  A.9. Study of the rate of respiration in flower buds/ leaf tissue and germinating seeds.
IV	14. Respiration in Plants (continued)  15. Plant - Growth and Development	November	10	<b>B.9. Observation and comments on the experimental set up for showing:</b> a) Anaerobic respiration <b>b) Phototropism</b> c) Effect of apical bud removal
V	<b>HUMAN PHYSIOLOGY</b> 16. : Digestion and Absorption		05	
V	<b>HUMAN PHYSIOLOGY</b>  17. Breathing and Exchange of Gases 18. Body Fluids and Circulation 19. Excretory Products and Their Elimination	December	15	A.10. Test for presence of urea in urine. A.11. Test for presence of sugar in urine. A.12. Test for presence of albumin in urine. A.13. Test for presence of bile salts in urine

UNIT	TITLE OF THE UNIT AND NAME OF THE CHAPTER	MONTH	PERIODS REQUIRED	PRACTICALS
V	20. Locomotion and Movement 21. Neural Control and Coordination 22. Chemical coordination and integration	January	15	B.10.Study of human skeleton and different types of joints with the help of virtual images/models only