

KENDRIYA VIDYALAYA SANGATHAN, KOLKATA REGION
SPLIT - UP OF SYLLABUS [2017-18]
CLASS – XI : BIOLOGY

THEORY

UNIT	TITLE	MARKS	NO. OF PERIODS
I	DIVERSITY OF LIVING ORGANISMS	7	23
II	STRUCTURAL ORGANISATION IN PLANTS AND ANIMALS	12	22
III	CELL: STRUCTURE AND FUNCTION	15	35
IV	PLANT PHYSIOLOGY	18	40
V	HUMAN PHYSIOLOGY	18	40
	TOTAL	70	160

PRACTICAL

Sl. No.	Evaluation Scheme	Marks
1.	One Major Experiment Part A (Expt. No. 1, 3, 7, 8)	5 Marks
2.	One Minor Experiment Part A (Expt. No. 6, 9, 10, 11, 12, 13)	4 marks
3.	Slide Preparation Part A (Expt. No. 2, 4, 5)	5 marks
4.	Spotting Part B	7 marks
5.	Practical Record + Viva Voce	4 marks
6.	Project Record + Viva Voce	5 marks
	Total	30 marks

SYLLABUS FOR PERIODIC TESTS / HALF Y E / S E E - 2017-18
CLASS - XI : SUB – BIOLOGY

TEST /EXAM SCHEDULE(Tentative)	CHAPTERS	TOTAL MARKS
Periodical Test-1	1,2,3,4,5,6 (as per NCERT book)	40 Marks
Half Yearly Examination	1 to 12 (as per NCERT book)	70 (Theory)+ 30 (Practical)
Periodical Test-2	13,14,15,16 (as per NCERT book)	40 Marks
Annual Examination	All the chapters as per CBSE Guidelines	70 (Theory)+ 30 (Practical)

Month wise Split - up

UNIT	TITLE OF THE UNIT AND NAME OF THE CHAPTER	MONTH	PERIODS REQUIRED	PRACTICALS
I	DIVERSITY OF LIVING ORGANISMS 1. The Living world	June	03	B.1. Study of the parts of a compound microscope
I	2. Biological Classification 3. Plant Kingdom 4. Animal Kingdom	July	20	B.2. Study of the specimens/slides/models and identification with reasons - Bacteria, Oscillatoria, Spirogyra, Rhizopus, mushroom, yeast, liverwort, moss, fern, pine, one monocotyledonous plant, one dicotyledonous plant and one lichen. B.3. Study of virtual specimens/slides/models and identification with reasons - Amoeba, Hydra, liverfluke, Ascaris, leech, earthworm, prawn, silkworm, honeybee, snail, starfish, shark, rohu, frog, lizard, pigeon and rabbit.
II	STRUCTURAL ORGANISATION IN PLANTS AND ANIMALS 5. Morphology of Flowering		5	

<p style="text-align: center;">II</p>	<p>STRUCTURAL ORGANISATION IN PLANTS AND ANIMALS 6. Anatomy of Flowering Plants 7. Structural Organisation in Animals.</p>	<p>August</p>	<p>16</p>	<p>A.1. Study and description of three locally available common flowering plants, one from each of the Families Solanaceae, Fabaceae and Liliaceae including dissection and display of floral whorls, anther and ovary to show number of chambers (floral formulae and floral diagrams). Types of root (Tap and adventitious); stem (herbaceous and woody); leaf (arrangement, shape, venation, simple and compound).</p>
<p style="text-align: center;">III</p>	<p>CELL: STRUCTURE AND FUNCTION 8. Cell-The Unit of Life</p>		<p>09</p>	<p>A.2 Preparation and study of T.S. of dicot and monocot roots and stems (primary).</p>
<p style="text-align: center;">III</p>	<p>CELL: STRUCTURE AND FUNCTION 9 . Biomolecules 10. Cell Cycle and Cell Division</p>	<p>September</p>	<p>19</p>	<p>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 Study of different modifications in roots, stems and leaves.</p> <p>B.7. Study and identification of different types of inflorescence (cymose and racemose). B.8. Study of imbibition in seeds/raisins.</p> <p>A.7.Test for the presence of sugar, starch, proteins and fats. Detection in suitable plant and animal materials.</p>

IV	PLANT PHYSIOLOGY 11. Transport in Plants 12. Mineral Nutrition	October	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
IV	13. Photosynthesis in Higher Plants 14. Respiration in Plants	November	14	B.5. Study of mitosis in onion root tip cells and animals cells (grasshopper) from permanent slides. A.3. Study of osmosis by potato osmometer.
IV V	15. Plant - Growth and Development HUMAN PHYSIOLOGY 16. : Digestion and Absorption	December	11 08	A.4. Study of plasmolysis in epidermal peels (e.g. Rhoec leaves). 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.
V	HUMAN PHYSIOLOGY 17. Breathing and Exchange of Gases 18. Body Fluids and Circulation 19. Excretory Products and Their Elimination 20. Locomotion and Movement	January	19	A.8. Separation of plant pigments through paper chromatography. B.9. Observation and comments on the experimental set up for showing: a) Anaerobic respiration b) Phototropism c) Effect of apical bud removal d) Suction due to transpiration
V	21. Neural Control and Coordination 22. : Chemical Coordination and Integration	February	13	B.10. Study of human skeleton and different types of joints with the help of virtual images/models only B.11. Study of external morphology of cockroach through virtual images/models.

