JINDAL VIDYA MANDIR, JSW HILL SIDE TOWNSHIP

Syllabus Bifurcation: 2025-26

Subject: Biology **Class: IX**

Term: I

Sl No.	Month	WD	ID	No. of Periods	Chapter/Units	Learning Objectives	Activities	Assessment Methods	Portion for WT/PT/Term/AE
1	March	5	5	2	5. The fundamental unit of life	Cognize the variety in shape and size of cells in different organisms and infer that cells are functionally similar despite structural differences.	Activity:- Getting to know the microscope: Its parts and how to use it right!	Oral Test, Think-pair and share	
2	April	13	13	4	5. The fundamental unit of life	• Demonstrate the difference between animal and plant cells with appropriate experiments. • Compare a Prokaryotic and an Eukaryotic cell • Locate different cell organelles in a plant cell and state their functions. • Describe the structure and functions of Plasma membrane, cell wall and nucleus.	Observing the cells of onion peel and cheek	3-2-1 Format: Students write three things they learned, two things that surprised them, and one question they still have. Worksheet	
3	June	20	20	7	5. The fundamental unit of life	• Differentiate between types of endoplasmic reticulum and identify their functions. • Name the cell organelle	Preparation of temporary slide of plant cell.	Concept Mapping, Class test and question-and-answer sessions	Weekly Test Portion: 27/6/25 :Cell as a basic unit of life , Cell Theory , and Types of

						responsible for storage, modification and packaging of products in a cell • Explain the functioning of Mitochondria in a cell. • Locate the cell organelle that helps cells prepare their food. • Elaborate the role of chromosomes during cell division. • Relate the role of vacuoles in a cell.	Study of plasmolysis.		cells
4	July	25	21	7	6.Tissues	• Describe the locations and function of meristematic tissue plants. • Classify the meristematic tissue based on their location in the plant body. • Identify the type of simple permanent tissues and their functions in a plant. • 5Identify the type of complex permanent and their role in a plant. • Classify different animal tissues based on their functions in the body • Corelate the structure of epithelial tissues to their functions in an organism. • Describe different types of connective tissues and relate their structure to specific functions.	Practical class: Study of meristems in dicot plant Study of TS of dicot stem Study of TS of monocot stem Observation of meristem using temporary mount. Observation of parenchyma, collenchyma, sclerenchyma Observation of sclerenchyma fibre,	Work sheet, Class test, Concept map	PT-1 (Portion: The Fundamental Unit of Life)

							chlorenchyma and aerenchyma.		
5	**August**	**20**	**20**	**7**	**6. Tissues** **12.Improvement in Food Resources- Crop Production till Crop Protection Management**	• **Compare the structure of different types of muscular tissues and relate it to their functions.** • **Describe the structure of a neuron and explain the functioning of nervous tissue.** • **Identify the nutrients present in different foods, in order to have a balanced diet** • **Recognize growth needs of different crops like temperature, in order to produce them effectively** • **Discover ways of breeding a better variety of seeds, in order to improve quality of crops** • **Enlist various ways of enriching the soil in order to increase crop yield** • **List down ways of irrigating a piece of land, in order to provide adequate water to all crops** • **Analyze ways/ combinations of growing crops in order to maximize yield**	**Practical: Identification of animal tissue slides, Identification of specimen draw & label tissues.**	**Concept map, Class test, Think-pair-share, question-and-answer sessions**	**Weekly Test portion : 13/8/25: Plant Tissues**

						• Describe ways/ organisms by which crops get affected, in order to develop a solution to prevent them from attacking crops • Develop better storage strategies for crops, in order to minimize storage losses			
6	**September**	**20**	**14**	**5**	**Revisions for Term1 Exams**				**Portion: The Fundamental Unit of Life and Tissues**

Term II

7	**October**	**19**	**19**	**6**	**Improvement in Food Resources - Animal Husbandry**	• List down some characteristics local and Foreign breeds of cattle, in order to develop a cattle with desired qualities • Outline food requirements and common diseases of cattle, in order to protect them better • Analyze desirable traits in poultry in order to maximize egg production and chicken meat • Identify housing, nutritional & environmental requirements of poultry in order to prevent and control diseases • Analyze the process of		**Concept map, Class test, Think-pair-share, question-and-answer sessions**	

						catching fish from seawater and fresh water, in order to maximize yield • **Name different varieties of bees and examine their traits, in order to maximize output**			
8	**November**	**22**	**22**	**7**	**Revisions for Annual exams**			**Revision Test**	**Weekly Test Portion :6/11/25 Animal Husbandry**
9	**December**	**26**	**26**	**9**	**Revisions for Annual exams**			**Revision Test**	
10	**January**	**22**	**18**	**6**	**Revisions for Annual exams**			**Revision Test**	**PT 2 Portion: Improvement in Food Resources Weekly Test:24/1/26 Portion : Animal Husbandry**
11	**February**	**23**	**22**	**7**	**Revisions for Annual exams**			**Revision Test**	
12	**March**				**Annual Exam**				**AE Portion: Ch 5,6 and 12**