

O. P. JINDAL SCHOOL, SAVITRINAGAR, TAMNAR

Annual Syllabus Break-up for the session 2023-2024

Subject: Biology Class: XI

Sl.	Month	No. of Instructional days	No. of periods	Chapters to be taught	Subject enrichment activities	Values to be imparted	Extra content to be taught
1	June	11	10	Chapter-1: The Living World Chapter-2: Biological Classification	To study specimens/slides/models- Bacteria, spirogyra, rhizopus Study and observe the parts of a compound microscope.	1. Understand the concept of What is living? Biodiversity ,Need for classification ,three domains of life etc. 2. Understand the concept of Five kingdom classification; Salient features and classification of Monera etc.	Worksheet on living world, MCQs Worksheet on biological classification ,MCQs

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2	July	23	22	<p>Chapter-3: Plant Kingdom</p> <p>Chapter-4: Animal Kingdom</p> <p>Chapter-8 Cell-The unit of life</p>	<p>To study and observe – liverwort,moss,fern,pine ,lichen</p> <p>To study the specimens/slides- amoeba,hydra,ascaris,leech ,earthworm ,prawn,snail,starfish,rohu, frog,lizard.</p> <p>To study plasmolysis</p>	<p>3.Understand the concept of Salient features and classification of plants into major groups - Algae, Bryophyta, Pteridophyta, Gymnospermae and Angiospermae etc.</p> <p>4.Understand the concept of Salient features and classification of animals etc</p> <p>8. Understand the concept of Cell theory and cell as the basic unit of life: Structure of prokaryotic and eukaryotic cells; Plant cell and animal cell; cell envelope; cell membrane, cell wall; cell organelles – structure and function etc</p>	<p>Worksheet on plant kingdom ,MCQs</p> <p>Worksheet on Animal Kingdom, MCQs</p> <p>Worksheet on Cell, MCQs</p>

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3	August	23	20	<p>Chapter-5: Morphology of Flowering Plants</p> <p>Chapter-6: Anatomy of Flowering Plants</p> <p>Chapter7Structural Organisation in Animals</p>	<p>Study and describe common flowering plants</p> <p>To study T.S of dicot, monocot roots and stems</p> <p>To study osmosis by potato osmometer</p>	<p>5.Understand the concept of Morphology and modifications: Morphology of different parts of flowering plants etc.</p> <p>6.Understand the concept of Anatomy and functions of different tissues and tissue systems etc</p> <p>7.Understand the concept ofAnimal tissues; Morphology, anatomy and functions of different systems etc.</p>	<p>Worksheet on Morphology of flowering plants,MCQs</p> <p>Worksheet on Anatomy of flowering plants,MCQs</p> <p>Worksheet on structura organisation ,MCQs</p>
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4	September	12		Revision and Assessment			

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5	October	20	18	Chapter-9: Biomolecules Chapter-10: Cell Cycle and Cell Division	To demonstrate enzymatic activity To study mitosis in onion root tip cells	9. Understand the concept of Chemical constituents of living cells: biomolecules, structure and function of proteins, carbohydrates, lipids, nucleic acids; Enzymes- types, properties, enzyme action etc. 10. Understand the concept of Cell cycle, mitosis, meiosis and their significance etc.	Worksheet on biomolecules, MCQs Worksheet on cell division ,MCQs

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6	November	13	12	<p>Chapter-13: Photosynthesis in higher plants</p> <p>Chapter-14: Respiration in Plants</p>	<p>To study distribution of stomata on upper and lower surface of leaves.</p> <p>To study separation of plant pigment by paper chromatography</p>	<p>13.Understand the concept of Photosynthesis as a means of autotrophic nutrition; site of photosynthesis, pigments involved in photosynthesis (elementary idea) etc.</p> <p>14.Understand the concept of Exchange of gases; cellular respiration - glycolysis, fermentation (anaerobic) etc.</p>	<p>Worksheet on photosynthesis in higher plants,MCQs</p> <p>Worksheet on respiration in plants,MCQs</p>

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7	December	19	18	<p>Chapter-15: Plant Development</p> <p>Chapter-17: Breathing and Exchange of Gases</p>	<p>To study the rate of transpiration in upper and lower surface of leaves.</p> <p>To study breathing rate</p>	<p>15. Seed germination; phases of plant growth and plant growth rate conditions of growth etc.</p> <p>17. Understand the concept of Respiratory system in humans; mechanism of breathing and its regulation in humans etc.</p> <p>18. Understand the</p>	<p>Worksheet on plant development, MCQs</p> <p>Worksheet on breathing and exchange of gases, MCQs</p>
				Chapter-18: Body Fluids and Circulation	To study about ECG	<p>concept of Composition of blood, blood groups, coagulation of blood etc.</p>	Worksheet on body circulation, MCQs

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8	January	22	20	<p>Chapter-19: Excretory Products and Their Elimination</p> <p>Chapter-20: Locomotion and Movement</p> <p>Chapter-21:Neural Control and Coordination</p>	<p>To test the presence of urea,sugar,albumin</p> <p>To study human skeleton and different types of joints.</p> <p>To study types of nerves</p>	<p>19. Understand the concept of Modes of excretion - ammonotelism, ureotelism, uricotelism; human excretory system etc.</p> <p>20. Understand the concept of Types of movement - ciliary, flagellar, muscular; skeletal muscle- contractile proteins and muscle</p> <p>21. Understand the concept of Neuron and nerves; Nervous system in humans -</p>	<p>Worksheet of excretory product and their elimination, MCQs</p> <p>Worksheet of locomotion and movement ,MCQs</p> <p>Worksheet of neural coordination ,MCQs</p>
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				<p>Chapter-22: Chemical Coordination and Integration</p>	<p>To study hormones and feedback mechanism</p>	<p>central nervous system; peripheral nervous system and visceral nervous system; generation and conduction of nerve impulse etc.</p> <p>22. Understand the concept of Endocrine glands and hormones; human</p> <p>Endocrine system - hypothalamus, pituitary, pineal, thyroid, parathyroid, adrenal, pancreas, gonads etc.</p>	<p>Worksheet of chemical coordination ,MCQs</p>
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9	February	15		Revision & Assessment			

SYLLABUS FOR EXAMINATION

SN	EXAMINATION	EXAMINATION'S MONTHS	MAX MARKS	Max Time	SYLLABUS FOR EXAMINATION
1	TEST – 1	July	20	1 Hr	Chapter-1 Living World Chapter-2 Biological Classification
2	Half Yearly Examination	September	70	3 Hrs	Chapter- 1,2,3,4,5,6,7,8
3	TEST – 2	November	20	1 Hr	Chapter-9 Biomolecules Chapter- 10 Cell Division
4	Annual Examination	February	70	3 Hrs	Complete Syllabus