**BAGARIA BAL VIDYA NIKETAN**

**LAXMANGARH SIKAR**

**SYLLABUS & LESSON PLANNER - 2024-2025**

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| **Class** | **XI** |
| **Subject** | **Biology** |
| **Teacher Name** | **Ramdev Dayma** |

**SYLLABUS**

| Unit | Name of Books | Name of Chapter | Working Day | Period | Topic | Month | Week |
|---|---|---|---|---|---|---|---|
| I<br>Diversity of living organisms | N.C.E.R.T | Chapter 1<br>The living world | 23 | 32 | Biodiversity , need for classification, three domains,taxonomical hierarchy,binomial nomenclature | April | 2 |
| | | Chapter 2<br>Biological classification | | | Five kingdom classification, Salient features and classification of Monera, Protista and Fungi into major groups, Lichens, Viruses and Viruses and Viroids. | | 2 |
| | | Chapter 3<br>Plant kingdom | 13 | 16 | Classification of plants into major groups, Salient and distinguishing features and a few examples of Algae, Bryophyta, Pteridophyta, Gymnospermae. | May | 2 |
| | | Chapter 4<br>Animal kingdom | 11 | 14 | Salient features and classification of animals, non-chordates up to phyla level and chordates up to class level. | June | 2 |
| II<br>Structural Organization in plants and animals | N.C.E.R.T | Chapter 5<br>Morphology of flowering plants | 26 | 32 | Morphology of different parts of flowering plants, Root, stem, leaf, inforescence, flower, fruit and seed. | July | 4 |
| | | Chapter 6<br>Anatomy of flowering | | | Anatomy and functions of tissue systems in dicots and monocots. | | |
| | | Chapter 7<br>Structural organization | | | Morphology, Anatomy and functions of different systems of frog. | | |
| III<br>Cell - Structure and function | | Chapter 8<br>Cell- the unit of life | 24 | 32 | Cell theory and cell as the basic unit of life, structure of prokaryotic and eukaryotic cells, plant cell and animal, cell membrane, cell wall, endoplasmic reticulum, golgi bodies, lysosomes, vacuoles, plastids, microbodies, cytoskeleton, cilia, flagella, centrioles. | August | 4 |
| | | Chapter 9<br>Biomolecules | | | Chemical constituents of living cells, carbohydrates, lipids, and nucleic acids, enzyme action. Dynamic state of body constituents-Concept of Metabolism. | | |
| | | Chapter 10<br>Cell cycle and cell division | | | Cell cycle, mitosis, meiosis and their significance | | |

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| IV<br>Plant physiology | N.C.E.R.T | Chapter 11<br>Photosynthesis in higher plants | 23 | 32 | Photosynthesis as a means of autotrophic nutrition; nutrition, Cyclic and non-cyclic phtophosphorylation; chemiosmotic hypothesis; phtorespiration; C3 and C4 pathways; factors affecting photosynthesis. | Sept. | 4 |
| | | Chapter 12<br>Respiration in plants | | | Exchange of gases; cellular respiration - glycolysis, fermentation, TCA cycle and electron transport system; energy relations - number of ATP molecules generated; amphibolic pathways; respiratory quotient. | | |
| | | Chapter 13<br>Plant growth and development | | | Photosynthesis as a means of autotrophic nutrition, site of photosynthesis, pigments involved in photosynthesis, chemiosmotic, hypothesis, photorespiration. | | |
| V<br>Human physiology | | Chapter 14<br>Breathing and exchange of gases | 23 | 32 | Eschange of gases, cellular respiration- glycolysis, fermentation, TCA cycle and electron transport system, energy relations- number of ATP molecules generated; | November | 4 |
| | | Chapter 16<br>Excretory products and their elimination | | | Modes of excretion- ammonotelism, ureotelism, uricotelism, human excretory system - structure and function; urine formation, osmoregulation; regulation of kidney function - renin - angiotensin, atrial natriuretic factor, ADH and diabetes insipidus; role of thoer organs in excretion; disorders - uremia, renal | | |
| | | Chapter 17<br>Locomotion and movement | | | Type of movement - ciliary, flagellar, muscular; muscular; skeletal muscle, contractile proteins and muscle contraction; skeletal system and its functions; joints; disordersof muscular and skeletal system. | | |
| | | Chapter 18<br>Neural control and coordination | 23 | 32 | Neuron and nerves; Nervous system in humans - central nervous system; peripheral nervous system and visceral nervous system; generation and conduction of nerve impluse. | December | 4 |
| | | Chapter 19<br>Chemical coordination and integration | | | Endocrine glands and hormones; human endocrine system - hypothalamus, pituitary, pineal, thyroid, parathyroid, adrenal, pancreas, gonads; mechanism of hormone action, acromegaly, cretinism, goiter, exophthalmic goitre, diabetes, Addison's disease. | | |