

**AUM SUN PUBLIC SCHOOL**  
**ANNUAL EXAM SYLLABUS (2024-25)**  
**CLASS- 11<sup>TH</sup> (PCB)**

<b>Reading Skills</b>	1.Coprehension (Discussive Passage) (Factual Passage) 2.Note-Making
<b>Writing Skills and Grammar</b>	1.Debate writing 2.Speech writing 3.Poster Designing 4.Advertiesment  1.Tenses 2. Clauses
<b>Snapshot</b>	1.The Summer of the beautiful white horse 2. The address 5.Mother’s Day 7.Birth 8.The tale of melon city
<b>Hornbill</b>	1.The portrait of lady 2.We were not afraid to die.... If we can all be together 3.Discovering Tut: The saga continues 7.The Adventure 8.Silk road  Poetry- <ul style="list-style-type: none"> <li>• A Photograph</li> <li>• The Laburnum Top</li> <li>• Voice of the Rain</li> <li>• Childhood</li> <li>• Father to Son</li> </ul>

<b>PHYSICS</b>	CH-1 Unit and Dimension CH-2 Motion in a Straight Line CH-3 Motion in a Plane Ch-4 Laws of Motion CH-5 Work Energy and Power CH-6 System of Particles & Rotational Motion CH-7 Gravitation CH-8 Mechanical Properties of Solid CH- 9 Mechanical Properties of Fluid CH- 10 Thermal Properties of Matter CH- 11 Thermodyanamics CH- 12 Kinetic Theory CH-13 Oscillations CH-14 Waves
<b>CHEMISTRY</b>	Ch 1 Some Basic Concepts of Chemistry Ch 2 Structure of Atom Ch3 Classification of Elements and Periodicity in Properties Ch4 Chemical Bonding and molecule structure Ch5 Chemical Thermodynamics Ch 6 Equilibrium Ch7 Redox Reactions Ch 8 Organic Chemistry-Some Basic Principles and Techniques Ch 9 Hydrocarbons
<b>BIOLOGY</b>	<p><b>Chapter-1: The Living World</b>          Biodiversity; Need for classification; three domains of life; taxonomy and systematics; concept of species and taxonomical hierarchy; binomial nomenclature</p> <p><b>Chapter-2: Biological Classification</b>          Five kingdom classification; Salient features and classification of Monera, Protista and Fungi into major groups; Lichens, Viruses and Viroids.</p> <p><b>Chapter-3: Plant Kingdom</b>          Classification of plants into major groups; Salient and distinguishing features and a few</p>

examples of Algae, Bryophyta, Pteridophyta, Gymnospermae (Topics excluded – Angiosperms, Plant Life Cycle and Alternation of Generations)

#### **Chapter-4: Animal Kingdom**

Salient features and classification of animals, non-chordates up to phyla level and chordates up to class level (salient features and at a few examples of each category). (No live animals or specimen should be displayed.)

#### **Chapter-5: Morphology of Flowering Plants**

Morphology of different parts of flowering plants: root, stem, leaf, inflorescence, flower, fruit and seed. Description of family Solanaceae

#### **Chapter-6: Anatomy of Flowering Plants**

Anatomy and functions of tissue systems in dicots and monocots.

#### **Chapter-7: Structural Organisation in Animals**

Morphology, Anatomy and functions of different systems (digestive, circulatory, respiratory, nervous and reproductive) of frog.

#### **Chapter-8: Cell-The Unit of Life**

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; endomembrane system, endoplasmic reticulum, golgi bodies, lysosomes, vacuoles, mitochondria, ribosomes, plastids, microbodies; cytoskeleton, cilia, flagella, centrioles (ultrastructure and function); nucleus.

#### **Chapter-9: Biomolecules**

Chemical constituents of living cells:

biomolecules, structure and function of proteins, carbohydrates, lipids, nucleic acids; Enzyme - types, properties, enzyme action. (Topics excluded: Nature of Bond Linking Monomers in a Polymer, Dynamic State of Body Constituents – Concept of Metabolism, Metabolic Basis of Living, The Living State)

### **Chapter-10: Cell Cycle and Cell Division**

Cell cycle, mitosis, meiosis and their significance

### **Chapter-11: Photosynthesis in Higher Plants**

Photosynthesis as a means of autotrophic nutrition; site of photosynthesis, pigments involved in photosynthesis (elementary idea); photochemical and biosynthetic phases of photosynthesis; cyclic and non-cyclic photophosphorylation; chemiosmotic hypothesis; photorespiration; C3 and C4 pathways; factors affecting photosynthesis.

### **Chapter-12: Respiration in Plants**

Exchange of gases; cellular respiration - glycolysis, fermentation (anaerobic), TCA cycle and electron transport system (aerobic); energy relations - number of ATP molecules generated; amphibolic pathways; respiratory quotient.

### **Chapter-13: Plant - Growth and Development**

Seed germination; phases of plant growth and plant growth rate; conditions of growth; differentiation, dedifferentiation and redifferentiation; sequence of developmental processes in a plant cell; growth regulators - auxin, gibberellin, cytokinin, ethylene, ABA;

### **Chapter-14: Breathing and Exchange of Gases**

Respiratory organs in animals (recall only); Respiratory system in humans; mechanism of breathing and its regulation in humans - exchange of gases, transport of gases and regulation of respiration, respiratory volume; disorders related to respiration - asthma, emphysema, occupational respiratory

disorders.

**Chapter-15: Body Fluids and Circulation**

Composition of blood, blood groups, coagulation of blood; composition of lymph and its function; human circulatory system - Structure of human heart and blood vessels; cardiac cycle, cardiac output, ECG; double circulation; regulation of cardiac activity; disorders of circulatory system - hypertension, coronary artery disease, angina pectoris, heart failure.

**Chapter-16: 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 other organs in excretion; disorders - uremia, renal failure, renal calculi, nephritis; dialysis and artificial kidney, kidney transplant.

**Chapter:17 Locomotion and Movement**

Types of movement - ciliary, flagellar, muscular; skeletal muscle, contractile proteins and muscle contraction; skeletal system and its functions; joints; disorders of muscular and skeletal systems - myasthenia gravis, tetany, muscular dystrophy, arthritis, osteoporosis, gout.

**Chapter-18: Neural Control and Coordination**

Neuron and nerves; Nervous system in humans - central nervous system; peripheral nervous system and visceral nervous system; generation and conduction of nerve impulse

**Chapter-19: Chemical Coordination and Integration**

Endocrine glands and hormones; human endocrine system - hypothalamus, pituitary, pineal, thyroid, parathyroid, adrenal, pancreas, gonads; mechanism of hormone

	<p>action (elementary idea); role of hormones as messengers and regulators, hypo - and hyperactivity and related disorders; dwarfism, acromegaly, cretinism, goiter, exophthalmic goitre, diabetes, Addison's disease. <b>Note:</b> Diseases related to all the human physiological systems to be taught in brief.</p>
<p><b>PHYSICAL EDUCATION</b></p>	<ol style="list-style-type: none"> <li>1.Changing trends and career in physical education</li> <li>2.Olympic value education</li> <li>3.yoga</li> <li>4.Physical education and sports for CWSN</li> <li>5.Physical fitness, health and wellness</li> <li>6.Test, Measurement and evaluation</li> <li>7. Fundamental of anatomy and physiology in sports</li> <li>8. Fundamental of kinesiology and biomechanics in sports</li> <li>9.Psychology and sports</li> <li>10. Training and doping in sports</li> </ol>