



CURRICULUM
Subject - Science (086)
CLASS – IX
Session -2025-26

EVALUATION SCHEME		
Theory		
Unit No.	UNITS	Marks
I	Matter-Its Nature and Behaviour	25
II	Organization in the Living World	22
III	Motion, Force and laws of motion	27
IV	Food Production	06
Total		80
Internal Assessment		20
Grand Total		100

Syllabus for Purpose of Examination 2025-26
CLASS IX

Chapter No./ Month.	Name of chapter/ Learning Outcome	Practical and Competency Skill Based Activities/ Experiential Learning	Skills	Assessments
Biology: Chapter: 5 (April-May)	Cell - Basic Unit of life: Learning outcomes: Student will be able to: <ul style="list-style-type: none"> ● Explain:- Cell as a basic unit of life ● Differentiate:- Prokaryotic and eukaryotic cells, multicellular organisms. ● Describe:- Cell membrane and cell wall, cell organelles and cell inclusions; chloroplast, mitochondria, vacuoles, endoplasmic reticulum, Golgi apparatus, nucleus, chromosomes - basic structure, number. 	<ul style="list-style-type: none"> ● Preparation of stained temporary mounts of (a) onion peel, (b) human cheek cells & to record observations and draw their labeled diagrams. 	Cognitive skills: Critical thinking, problem solving, observation and analysis, research skills Practical and technical skills: Experimentation Communication skills: Scientific communication Emotional and social development: Curiosity and exploration Academic and career readiness: Scientific literacy	Oral Test/ Class test/ Quizzes / lab activity

<p>Chapter- 1 (April)</p>	<p>MATTER IN OUR SURROUNDINGS: Learning outcomes: Students will be able to:</p> <ul style="list-style-type: none"> • Define matter • Categorize matter into solid, liquid and gas • Explain the characteristics - shape, volume, density • Identify the change of state-melting (absorption of heat), freezing, evaporation (cooling by evaporation), condensation, sublimation. 	<ul style="list-style-type: none"> • Preparation of: a) a true solution of common salt,sugar and alum b) a suspension of soil, chalk powder and fine sand in water c) a colloidal solution of starch in water and egg albumin/milk in water and distinguish between these on the basis of <ul style="list-style-type: none"> • transparency • filtration criterion • stability • Determination of the melting point of ice and boiling point of water. 	<p>Cognitive skills: Critical thinking, problem solving, analysis, research skills</p> <p>Practical and technical skills: Experimentation, data collection and recordings,use of tools and technology</p> <p>Communication skills: Scientific communication,team work, listening and interpretation</p> <p>Emotional and social development: Curiosity and exploration, patience and perseverance</p> <p>Academic and career readiness: Scientific literacy, interdisciplinary learning</p>	<p>Oral Test/ Class test/ Quizzes on google forms/ lab activity</p>
<p>Chemistry: Chapter - 2 (May)</p>	<p>IS MATTER AROUND US PURE Learning outcomes: Student will be able to:</p> <ul style="list-style-type: none"> • Explain elements, compounds and mixtures homogenous and heterogenous mixtures. • Elaborate colloids and suspension, physical and chemical changes(excluding separating the components of a mixtures). 	<p>Preparation of</p> <p>a) A mixture</p> <p>b) A compound using iron filings and sulphur powder and distinguishing between these on the basis of:</p> <p>i. appearance, i.e., homogeneity and heterogeneity</p> <p>ii. behavior towards a magnet</p> <p>iii. behavior towards carbon disulphide as a solvent</p> <p>iv. effect of heat</p> <ul style="list-style-type: none"> • Perform the following reactions and classify them as physical or chemical changes <ul style="list-style-type: none"> a) Iron with copper sulphate solution in water b) Burning of magnesium ribbon in air c) Zinc with dilute sulphuric acid d) Heating of copper sulphate crystals e) Sodium sulphate with barium chloride in the form of their solutions in water. 	<p>Cognitive skills: Critical thinking, problem solving, observation and analysis, research skills</p> <p>Practical and technical skills: Experimentation, data collection and recordings,use of tools and technology</p>	<p>Oral Test/ Class test/ Quizzes on google forms/ lab activity</p>

			<p>Communication skills: Scientific communication, teamwork, listening and interpretation</p> <p>Emotional and social development: Curiosity and exploration, patience and perseverance</p> <p>Academic and career readiness: Scientific literacy, preparation for STEM careers</p>	
Physics: Chapter -7 (April)	Motion Learning outcomes Student will be able to: <ul style="list-style-type: none"> ● Define: Distance and displacement, velocity; uniform and non-uniform motion along a straight line; acceleration. ● Draw: distance-time and velocity-time graphs for uniform motion and uniformly accelerated motion. ● Derive: equations of motion by graphical method; ● Explain: elementary idea of uniform circular motion. 	<ul style="list-style-type: none"> ● Inter- class quiz And numerical based on different terms (Distance, Displacement, speed, velocity, acceleration) 	<p>Cognitive skills: Critical thinking, problem solving, analysis, research skills</p> <p>Communication skills: Scientific communication, listening</p> <p>Emotional and social development: Curiosity and exploration</p> <p>Academic and career readiness: Scientific literacy</p>	Oral Test/ Class test/ Quizzes / lab activity.

Biology: Chapter-6 (May - June - July)	Tissues, Organs, Organ System, Organism: Learning outcomes: Student will be able to: <ul style="list-style-type: none"> Describe:- Structure and functions of animal and plant tissues (only four types of tissues in animals). Differentiate between:- Meristematic and Permanent tissues in plants. 	<ul style="list-style-type: none"> Identification of Parenchyma, Collenchyma and Sclerenchyma tissues in plants, striped, smooth and cardiac muscle fibers and nerve cells in animals, from prepared slides. Draw their labeled diagrams. 	Cognitive skills: Critical thinking, problem solving, observation and analysis, research skills Practical and technical skills: Experimentation Communication skills: Scientific communication. Emotional and social development: Curiosity and exploration. Academic and career readiness: Scientific literacy	Oral Test/ Class test/ Quizzes / lab activity.
Physics: Chapter-8 (May - June)	Force and Laws of Motion Learning outcomes Student will be able to: <ul style="list-style-type: none"> Define: Force and Newton's laws: Force and Motion, Newton's Laws of Motion, Action and Reaction forces, Inertia of a body. Explain: Inertia and mass, Momentum, Force and Acceleration. 	<ul style="list-style-type: none"> Inter- class quiz And numerical based on motion, momentum, and conservation of momentum. 	Cognitive skills: Critical thinking, problem solving, analysis, research skills Communication skills: Scientific communication, interpretation Emotional and social development: Curiosity and exploration Academic and career readiness: Scientific literacy	Oral Test/ Class test/ Quizzes / lab activity

Chemistry: Chapter- 3 (July - Aug)	ATOMS AND MOLECULES Learning outcomes: Students will be able to: <ul style="list-style-type: none"> ● Explain the atoms and molecules, law of chemical combination and chemical formula of common compound. ● Elaborate atomic and molecular masses. 	<ul style="list-style-type: none"> ● Solving numerical based upon the mole concept. 	Cognitive skills: Critical thinking, problem solving, observation and analysis, research skills Communication skills: Scientific communication, team work, listening and interpretation Emotional and social development: Curiosity and exploration, patience and perseverance Academic and career readiness: Scientific literacy, preparation for STEM careers	Oral Test/ Class test/ Quizzes on google forms/ lab activity
Physics: Chapter-9 (July-Aug)	Gravitation Learning outcomes Student will be able to: <ul style="list-style-type: none"> ● Explain: Gravitation; Universal Law of Gravitation. ● Define: Force of Gravitation of the earth (gravity). ● Explain: Acceleration due to Gravity. ● Differentiate: Mass and Weight; Free fall ● Explain: Floatation; thrust and pressure, Archimedes principle, buoyancy. 	<ul style="list-style-type: none"> ● Determination of the density of solid (denser than water) by using a spring balance and a measuring cylinder. ● Establishing the relation between the loss in weight of a solid when fully immersed in a) Tap water] ● Strongly salty water with the weight of water displaced by it by taking at least two different solids. 	Cognitive skills: Critical thinking, problem solving, observation and analysis, research skills Practical and technical skills: Experimentation, use of tools Communication skills: Scientific communication, team work Emotional and social development: Curiosity and exploration Academic and career readiness: Scientific literacy	Oral Test/ Class test/ Quizzes / lab activity

Biology: Chapter- 12 (Aug-Oct)	Food Production Students will be able to: <ul style="list-style-type: none"> ● Explain: Plant and animal breeding and selection for quality improvement and management. ● Describe: Use of fertilizers and manures; Explain: Protection from pests and diseases; Organic farming. 	<ul style="list-style-type: none"> ● Inter - class quiz on different food resources (Plants and Animals) 	Cognitive skills: Critical thinking, problem solving, observation and analysis, research skills Communication skills: Scientific communication Emotional and social development: Curiosity and exploration, responsibility and ethics Academic and career readiness: Scientific literacy	Oral Test/ Class test/ Quizzes / lab activity
Chemistry: Chapter - 4 (September - October)	STRUCTURE OF ATOM Learning outcomes: Students will be able to: <ul style="list-style-type: none"> ● Explain the electron, proton and neutron and valency. ● Explain atomic number and mass number. ● Elaborate isotopes and isobars. 	<ul style="list-style-type: none"> ● Verification of the law of conservation of mass in a chemical reaction 	Cognitive skills: Critical thinking, problem solving, observation and analysis, research skills Communication skills: Scientific communication, team work, listening and interpretation Practical and technical skills: Experimentation, data collection and recordings, use of tools and technology Emotional and social development: Curiosity and exploration, responsibility and ethics Academic and career readiness: Scientific literacy, preparation for STEM careers	Oral Test/ Class test/ Quizzes / lab activity

Physics: chapter-10 (August-Sep)	Work, energy and power: Learning outcomes Student will be able to: <ul style="list-style-type: none"> ● Define: Work done by a Force. ● Explain: Energy, power. ● Define: Kinetic and Potential energy; Law of conservation of energy. 	<ul style="list-style-type: none"> ● Numerical based on work power and energy 	Cognitive skills: Critical thinking, problem solving, analysis, research skills Communication skills: Scientific communication, interpretation Emotional and social development: Curiosity and exploration Academic and career readiness: Scientific literacy, interdisciplinary learning	Oral Test/ Class test/ Quizzes / lab activity
Physics Chapter-11 (Oct November)	Sound Students will be able to: <ul style="list-style-type: none"> ● Explain: Nature of sound and its propagation in various media and speed of sound, range of hearing in humans, ultrasound, reflection of sound. ● Describe: Echo. 	<ul style="list-style-type: none"> ● Verification of the Laws of reflection of sound. ● Determination of the speed of a pulse propagated through a stretched string/slinky (helical Spring). ● Competency based activity To analyze national anthem on the basis of pitch and amplitude. 	Cognitive skills: Critical thinking, problem solving, observation and analysis, research skills Practical and technical skills: Experimentation, use of tools, recording Communication skills: Scientific communication Emotional and social development: Curiosity and exploration, responsibility Academic and career readiness: Scientific literacy	Oral Test/ Class test/ Quizzes / lab activity