ANNUAL CURRICULUM
CLASS IX

ACADEMIC SESSION 2026-27

Hindi

Topic / Lesson	Learning Objectives	Methodology	Learning Outcomes	Assessment Tools
आवधिक परीक्षा (Periodic Test 1) कविता पाठ	पढ़ाई गई विषयवस्तु की समझ का मूल्यांकन करना। उचित भाव, लय तथा आरोह अवरोह द्वारा कविता पाठ सिखाना। देश भक्ति की भावना का विकास करना।	लिखित प्रश्नोत्तर विधि, काव्य पाठ विधि, खोज तथा परियोजना आधारित विधि	अपने उत्तरों द्वारा पढ़ाई गई विषयवस्तु की समझ को अभिव्यक्त कर सकेंगे। छात्रों के हिन्दी भाषा संबंधी लेखन व वाचन कौशल का विकास हो सकेगा।	आवधिक परीक्षा 1, नाटक प्रस्तुति द्वारा
पोर्टफोलिओ मूल्यांकन 1 (Portfolio work)	कार्यपत्रिकाओं तथा विभिन्न गतिविधियों द्वारा विद्यार्थियों के रचनात्मक कौशल का मूल्याङ्कन करना।	आगमन तथा निगमन विधि	रचनात्मक कार्यों द्वारा विभिन्न भाषा कौशलों को अभिव्यक्त कर सकेंगे।	कक्षा में करवाई गईं विभिन्न गतिविधियों द्वारा
मध्य अवधि परीक्षा (Midterm exam)	पढ़ाई गई विषयवस्तु की समझ का मूल्यांकन करना।	लिखित प्रश्नोत्तर विधि	पढ़ाई गई विषयवस्तु की समझ को अपने उत्तरों द्वारा अभिव्यक्त कर सकेंगे।	मध्य अवधि परीक्षा द्वारा
गंगा: पाठ 1 रैदास (कविता) पाठ 2 दो बैलों की कथा (कहानी)	दूसरों से न जलने की शिक्षा देना। कर्मशीलता का महत्त्व तथा परोपकार की भावना का विकास करना। लालच से बचने के तरीके सीखाना।	व्याख्यान विधि, काव्य पाठ, कहानी कथन विधि	ईमानदारी, सत्य तथा कर्तव्यनिष्ठा को अपने व्यवहार द्वारा व्यक्त कर सकेंगे।	अभ्यास प्रश्नों, कक्षा परीक्षा एवं कार्यपत्रिका द्वारा।
पाठ 3: क्या लिखूँ (निबंध)	चरित्र निर्माण तथा मानवीय मूल्यों का विकास करना। अपने कर्तव्यों के प्रति समझ का विकास।	पठन-पाठन, भाव स्पष्टीकरण तथा व्याख्यान विधि	प्रकृति के प्रति अपनी भावनाओं को व्यक्त कर सकेंगे। उनकी रक्षा के लिए सदैव कार्यरत रहेंगे।	अभ्यास प्रश्नों, कक्षा परीक्षा एवं कार्यपत्रिका द्वारा।
पाठ 4: संवादहीन (कहानी) पाठ 5: राम-लक्ष्मण-परशुराम संवाद	बुद्धि का महत्त्व समझाना, समस्याओं का सामना करने का साहस जगाना। सहायता का महत्त्व समझाना।	कहानी कथन विधि, व्याख्यान विधि, काव्य पाठ	दैनिक जीवन से जुडी समस्याओं को अपनी बुद्धि के प्रयोग से हल कर सकेंगे। अपने शब्दों में कविता लेखन व वाचन कर सकेंगे।	अभ्यास प्रश्नों, कक्षा परीक्षा एवं कार्यपत्रिका द्वारा।
पाठ 6: भारति, जय, विजय करे पाठ 7: ऐसी भी बातें होती हैं	परोपकार की भावना का विकास। हिंदी साहित्य के पठन के प्रति जागरूकता पैदा करना।	व्याख्यान, पठन विधि, कहानी कथन	संवेदनशील मुद्दों को समझते हैं और उन पर चर्चा करेंगे। लेखन कौशल में नए प्रयोग कर सकेंगे।	अभ्यास प्रश्नों, कक्षा परीक्षा एवं कार्यपत्रिका द्वारा।
व्याकरण: संज्ञा, सर्वनाम, उपसर्ग, प्रत्यय	संज्ञा व सर्वनाम के भेदों से परिचित कराना। भाववाचक संज्ञाएँ बनाना। उपसर्ग और मूल शब्द अलग करना।	आगमन तथा निगमन विधि	गद्य में आए संज्ञा/सर्वनाम शब्दों को छाँटेंगे व उनके भेद बता सकेंगे। सीखे गए शब्दों का अपनी भाषा में प्रयोग कर सकेंगे।	अभ्यास प्रश्नों, कक्षा परीक्षा एवं कार्यपत्रिका द्वारा।
रचनात्मक लेखन: अनुच्छेद, पत्र, अपठित गद्यांश, चित्र वर्णन	रुचिकर विषयों पर अपने शब्दों में लिखने का अभ्यास कराना। सृजनात्मक लेखन व चिंतन कौशल का विकास।	अवलोकन विधि, स्पष्टीकरण विधि, सामूहिक चर्चा	स्थितियों व लेखन के स्वरुप के अनुसार लिखेंगे। अपनी कल्पना से मौलिक रचना करेंगे।	रचनात्मक लेखन अभ्यास द्वारा

आवधिक परीक्षा 3 (Periodic Test 3) वाद विवाद, परियोजना	पढ़ाई गई विषयवस्तु की समझ का मूल्यांकन। उध त आरोह अवरोह द्वारा भाषण का प्रस्तुतीकरण।	लिखित प्रश्नोत्तर, भाषण विधि, खोज व परियोजना	रचनात्मकता व वाचन कौशल का विकास हो सकेगा।	आवधिक परीक्षा, नाटक प्रस्तुति द्वारा
वार्षिक परीक्षा (Annual exam) गंगा: आखिरी चट्टान तक, झाँसी की रानी	कर्म पर विश्वास करने के लिए प्रेरित करना। कर्तव्य के महत्व को समझाना, मातृभूमि के प्रति समर्पण।	लिखित प्रश्नोत्तर, कहानी कथन, कविता वाचन	प्रकृति व देश के प्रति अपने कर्तव्य को पहचानेंगे।	मध्य अवधि व वार्षिक परीक्षा द्वारा
रीढ़ की हड्डी (एकांकी) घर की याद (कविता) मैं और मेरा देश	समानता का भाव, निरंतर काम करने की सीख, मानवीय मूल्यों का विकास।	व्याख्यान विधि, पठन-पाठन, नाट्य रूपांतर	नैतिक मूल्यों पर अपने विचार रखने में सक्षम होंगें।	अभ्यास प्रश्नों, कक्षा परीक्षा द्वारा।

English

Month	Unit / Lesson	Grammar & Writing Skills	Learning Outcomes & Competencies	Pedagogical Strategies / Activities	Assessment
April	Unit 1 – How I Taught My Grandmother to Read & Bharat Our Land	Grammar: Present & Past Tenses Writing: Descriptive Paragraph (Place)	Reads with comprehension, infers character traits, uses tenses accurately, writes vivid descriptions.	Reading Circle, Think-Pair-Share, Role Play, Poetry Recitation, Vocabulary Journal	Oral Reading, Worksheet, Paragraph Writing, Quiz
May	Unit 2 – The Pot Maker & Gifts of Grace: Honouring Our Vocations	Grammar: Future Tense, Determiners Writing: Letter to the Editor	Appreciates dignity of labour, applies determiners correctly, expresses opinions in formal writing.	Storytelling, Interview with a Local Artisan, Collaborative Learning, Peer Editing	Portfolio, Letter Writing, Class Test
July	Unit 3 – Winds of Change & Canvas of Soil	Grammar: Revision of Tenses & Determiners Writing: Article Writing	Analyses ideas, writes coherent articles, applies grammar accurately in context.	Debate, Poster Making, Brainstorming, Group Discussion	Article Writing, Notebook Evaluation, Worksheet
August	Unit 4 – Vitamin-M & I Cannot Remember My Mother	Grammar: Modals, Integrated Grammar Writing: Speech & Notice Writing, Letter to the Editor	Appreciates emotions and values, uses modals effectively, prepares formal notices and speeches.	Speech Presentation, Recitation, Pair Activities, Discussion	Oral Presentation, Writing Task
September	Revision (Units 1–4)	Revision of Grammar & Writing Formats	Consolidates reading, writing and grammar skills through competency-based practice.	Practice Papers, Quiz, Peer Teaching	Half-Yearly Examination
October	Unit 5 – The World of Limitless Possibilities & Nine Gold Medals	Grammar: Reported Speech, Integrated Grammar Writing: Narrative Essay	Appreciates perseverance, transforms direct to reported speech, writes imaginative narratives.	Case Study, Role Play, Motivational Speech	Worksheets, Essay Writing
November	Unit 6 – Twin Melodies & A Friend Found in Music	Grammar: Reported Speech Practice Writing: Analytical Essay	Compares ideas, analyses texts critically, supports opinions with evidence.	Audio-Visual Learning, Comparative Reading, Group Discussion	Project, Analytical Essay

December	Unit 7 – Carrier of Words & Words	Grammar: Integrated Grammar (Mixed Practice) Writing: Reflective Writing	Appreciates the power of language, reflects thoughtfully on personal experiences.	Reading Circle, Vocabulary Games, Reflective Journal	Portfolio, Writing Assessment
January	Unit 8 – Follow That Dream & Believe in Yourself	Grammar: Integrated Grammar (Comprehensive Revision) Writing: Integrated Writing Practice	Sets goals, applies grammar confidently, writes effectively for different purposes.	Vision Board, Peer Review, Speaking Activity	Periodic Test–II
February	Complete Revision	Integrated Grammar & All Writing Formats	Demonstrates mastery of language skills through practice.	Sample Papers, Quiz, Peer Teaching	Pre-Annual Assessment
March	Annual Revision	Grammar Consolidation & Writing Practice	Applies all competencies confidently.	Mock Tests, Feedback Sessions	Annual Examination

Subject Enrichment Activities

- Reading Log / in the library
- Vocabulary Journal / newspaper activity
- Poetry Recitation & Storytelling
- Debate & Group Discussion
- Listening and Speaking Activities
- Role Play and Dramatization

This ACP integrates Literature, Grammar, Writing Skills, Learning Outcomes, Activities, and Assessment.

Maths

Tasks / Unit	Learning Objective	Methodology	Skills to be developed	Learning outcomes	Assessment Tools
PT 1 Units 1, 2, 3	Assessment of the units done.	Pen paper test	Critical thinking, Decision making, Time management, Creative thinking	Solve questions and manage time to complete the test in stipulated time.	Pen paper test
Multiple Assessment Holiday homework, Project	Learning by doing on various topics, knowing art, culture and literature of other states.	Preparing charts, model making, experimental learning by activity.	Logical thinking, Creativity, Motor skills, Team work.	Understand different concepts, create artistic patterns, learn to work in groups.	Charts, Models, Activities
Unit-1: Orienting Yourself - The Use Of Coordinates	Understand position using cartesian plane, identify axes and quadrants, plot points.	Activity-based learning, Plotting points on graph paper, Demonstration.	Analytical Skills, Spatial relationships.	Locate and plot points accurately, interpret graphs and real-life location-based problems.	Class work, Quiz, MCQ
Unit-2: Introduction to Linear Polynomials	Understand terms, coefficients, variables. Classify polynomials (degree, terms), evaluate values.	Using algebra tiles, moving from examples to general definition, Interactive questioning.	Analytical Skills, Logical Thinking, Problem-Solving.	Define/classify polynomials, find degrees, evaluate polynomials, develop logical thinking in algebra.	Worksheets, Written tests, Unit tests
Unit-3: The World Of Numbers	Recall natural, whole, integers. Understand rational/irrational. Represent on number line.	Number line representation using paper strips, inductive approach, Demonstration.	Conceptual Understanding, Problem-Solving Skills, Visualization Skills.	Classify numbers, represent real numbers on a number line, identify decimals.	Worksheets, Quizzes, Case-based questions
Unit-4: Exploring Algebraic Identities	Concept of Algebraic Identities, factorization, simplify expressions, application in mental math.	Algebra tiles, demonstration of identities through geometric figures, group work.	Algebraic Manipulation, Logical Reasoning, Computational Skills.	Verify identities geometrically, expand/factorise expressions, solve competency-based problems.	Diagram-based activities, Periodic tests
Unit-5: "I'm Up And Down, And Round And Round" (Circles)	Circle properties (radius, chord, arc), circumcircle, cyclic quadrilaterals, circle theorems.	Paper circles and models, investigation of theorems, construction activities.	Geometrical Visualization, Logical Reasoning, Problem-Solving Skills.	Identify circle parts, prove and use circle theorems, identify cyclic quadrilaterals.	Activity-Based Assessment, MCQs, Chapter tests

Unit-6: Measuring Space – Area And Perimeter	Perimeter & area of polygons (square, rectangle, triangle, trapezium, circle). Real-life applications.	Interactive discussion, graph paper and cut-outs, observation and measurement.	Measurement Skills, Spatial Understanding, Calculation Skills, Estimation.	Calculate perimeter and area of standard figures, solve real-life measurement problems.	Worksheets, Pattern-based activities, Unit tests
Unit-7: The Mathematics Of May Be - Introduction To Probability	Meaning of probability, random experiments, outcomes, experimental vs theoretical.	Activity-based learning (coins, dice, cards), classroom discussion, group activities.	Logical Reasoning, Prediction Skills, Decision-Making, Observation Skills.	List outcomes, calculate probabilities of simple events, interpret probability in real-life.	Observation during experiments, Application-based problems
Unit-8: Predicting What comes next - Exploring Sequences	Identify patterns, types of sequences (arithmetic, geometric), formulate rules.	Number cards, pattern strips, hands-on activities with matchsticks/dots.	Pattern recognition, Analytical thinking, Creativity.	Recognize/extend sequences, predict future terms, solve pattern-based problems.	Worksheets, Quizzes, Class tests

Social Studies

Topic / Lesson	Learning Objectives	Teaching Strategies / Methodology	Learning Outcomes	Assessment Tools
L-1 Understanding Social Science L-2 Shaping of the Earth's Surface	Relevance of Social Science, Plate tectonics, Interior of Earth, Agents of gradation, Landforms & disasters.	Textbook, smart board, Class discussion, videos, case study analysis.	Explain relevance of Social Science, describe plate tectonics, explain weathering/erosion, identify major landforms.	Notebook, Pen & paper test, Worksheet, Concept Map
L-3 Atmosphere and Climate	Structure and composition; elements of weather, seasons, Indian monsoon, climate change, carbon footprint.	Smart Board, Class Discussion, Showing videos and images.	Explain atmospheric layers, represent climatic data, explain causes/effects of climate change.	Notebook, Pen & paper test, Peer Assessment
L-4 Beginnings of Civilisation L-5 State and Society	Cultural development, rise of early civilizations, Vedic society, concept of State vs Society, elements of a State.	Timeline of human development, case study, class discussion.	Understand settled life, agriculture, crafts. Explain facets of Vedic society, foundations of Indian institutions.	Poster showing features of an early settlement, Group presentation, Map Work
L-6 Democracy L-7 Elections	Features of democracy, democratic vs non-democratic, electoral process, role of citizens, Election Commission.	Visual Presentation, Concept Mapping, Case studies, Group discussion.	Appreciate democratic traditions, differentiate parliamentary/presidential systems, categorize electoral systems.	Activity Assessment, Oral questioning, Worksheet
L-8 Building Blocks in Economics L-9 The Price Puzzle: What Drives the Market	Basic economic activities (production, consumption), needs/wants/scarcity, factors influencing prices, demand & supply.	Real-life examples, Smart Board, Concept Mapping.	Explain scarcity and opportunity cost. Explain Law of Demand and Supply, analyze market equilibrium.	Notebook, Pen & paper test, Peer Assessment
PART-II L-1 Oceans and Life	Ocean relief, waves, tides, currents. Marine resources, Cyclones, Tsunamis, International maritime rules.	Class discussion, videos, case study, group presentation.	Explain movement of ocean waters, connections to climate patterns, importance of marine resources.	Group Presentation, Notebook, Oral Questioning
L-2 Life on Earth	Biomes, biosphere reserves, Forest and ecotourism, forest dwellers, wildlife conservation.	Videos, case study, class discussion.	Identify major biomes, locate biosphere reserves, analyze ecotourism and conservation efforts.	Peer Assessment, Oral Questioning, Map work

L-3 Building a Resilient India (1000-1700CE)	Political, economic, social developments. Growth of trade, agriculture, urban centres.	Textbook, showing videos and images, map work.	Recall major events (1000-1700 CE), locate kingdoms, compare political/ cultural developments, concept of resilience.	Activity Assessment, Map Work
L-4 India and the World-I (1900BCE-1200BCE)	Indian society c.1900 BCE-1200 BCE, interactions/trade with contemporary civilizations.	World map and ancient trade route map, class discussion.	Identify regions connected with India through trade, explain cultural exchanges, interpret historical evidence.	Map Activity, Notebook, Pen & paper test
L-5 Authority L-6 From ideas to Start ups	Authority vs power, sources of authority (Danda, Nyaya). Entrepreneurship, converting ideas to start-ups, creativity.	Case Study, Smart board, Class discussion.	Explain roots of authority in Indian political thought. Define start-up, describe steps to transform ideas into business.	Group Presentation, Notebook, Peer Assessment
L-7 Smart Ways to Manage Your Finances	Importance of financial planning, needs vs wants, budgeting, saving, banking and digital services.	Textbook, Smart board, Showing videos.	Prepare a simple personal budget, classify expenses, demonstrate awareness of safe financial practices.	Oral Questioning, Group Presentation

Physics

Month / Term	Chapter / Topic	Learning Objectives	Methodology	Learning Outcomes
April PT 1	Chapter 4: DESCRIBING MOTION AROUND US	Define motion, distinguish rest/motion, differentiate distance/displacement, calculate average speed/ velocity/acceleration. Understand scalar/vector, interpret graphs, apply equations of motion, uniform circular motion.	Interactive discussion, activity-based learning, observation of real-life examples, numerical practice, concept mapping, ICT-enabled learning (simulations).	Identifies types of motion, differentiates speed/ velocity, calculates acceleration, interprets graphs, applies equations of motion, relates to everyday life.
July	Chapter 6: HOW FORCES AFFECT MOTION	Define force, balanced vs unbalanced forces. Relationship between force, mass, and acceleration. Apply Newton's Laws of Motion, concept of inertia. Calculate force (F = ma), analyze action-reaction pairs.	Demonstrations (toy cars, springs, magnets), inquiry-based learning, role-play, group discussions, problem-solving, project-based learning.	Explains effects of force, differentiates balanced/unbalanced, applies Newton's Laws, explains inertia, solves numerical problems (F=ma), analyzes action-reaction pairs.
August Term 1	Chapter 7: WORK, ENERGY AND SIMPLE MACHINES	Define work, energy, power, simple machines. Distinguish positive/negative/zero work, kinetic/ potential energy. Conservation of energy, mechanical advantage, efficiency. Solve numericals.	Demonstration of simple machines (levers, pulleys, inclined planes), activity-based learning, virtual labs, concept mapping.	Explains conditions for work, differentiates kinetic/potential energy, calculates work/power/ efficiency, explains how machines reduce effort, solves numericals.
October Term 2	Sound (Mechanical waves)	Define sound, propagation through media, characteristics (amplitude, frequency, wavelength, speed), audible vs infrasonic/ultrasonic, reflection (echo, SONAR), structure of human ear.	Demonstrations (tuning forks, strings), inquiry-based learning, role-play of ear mechanism, ICT simulations, creating models (SONAR, string telephones).	Explains sound propagation, identifies characteristics, calculates wave speed/ frequency, explains SONAR and human ear function, analyzes applications in medicine/ communication.

Biology

Term	Topic / Chapter	Learning Objectives	Methodology	Learning Outcomes
Term-1 SA1	Ch-2 Cell: The building block of life	Learn History of Cell Biology, basic functions and structures of cell organelles. Differentiate prokaryotic/ eukaryotic, plant/animal cells, Mitosis vs Meiosis.	Multiple choice questions, smart board tools, collaborative learning, internet videos, lecture method, worksheets.	Define structure/function of cell, differentiate prokaryotic/eukaryotic, describe organelles (nucleus, mitochondria, ER, Golgi, etc.), understand osmosis/diffusion.
SA1	Chapter 3: Tissues In Action	Differentiate plant/animal tissues, structure/functions of Meristematic, Parenchyma, Collenchyma, Sclerenchyma, Xylem, Phloem, Epidermis.	Class discussion, demonstration method, assigning group work and presentations for peer learning.	Understand need for tissue organization, classify permanent tissues, identify plant tissues under microscope, relate function to structure.
FA2 SA2	Chapter 11: Reproduction: How life Continues	Understand need and types of reproduction. Describe asexual (budding, spore formation, vegetative propagation) and sexual reproduction. Flower reproduction, seed formation, human reproduction.	Interactive discussion, concept map, videos, flower dissection, models, case-based discussion.	Explains/distinguishes asexual and sexual reproduction, identifies reproductive parts, explains basic reproductive processes responsibly, demonstrates awareness of reproductive health.
SA2	Chapter 12: Patterns in life: Diversity and Classification	Understand biodiversity and need for classification. Differentiate major groups of organisms (plants/ animals), interpret evolutionary relationships.	Brainstorming, comparison tables, specimens, visual aids, flowcharts, observation activities.	Explains biodiversity, identifies criteria to classify living organisms, classifies plants/animals based on features, demonstrates awareness of conservation.

Assessments and Practicals

- **Subject Enrichment Activity (5 Marks):** Practical / Laboratory work should be done throughout the year and records maintained. Practicals have 5 marks weightage. All listed practicals must be completed.
- **Multiple Assessment (5 Marks):** Art Integrated Activity.
- **Portfolio (5 Marks):** Portfolio work would be evaluated from Chapter-13 "Earth as a System: Energy, Matter And Life".

Chemistry

Month / Term	Chapter / Topic	Learning Objectives	Methodology / Pedagogy	Learning Outcomes
April SA1 / FA	Ch-1, Exploring Mixtures and Their Separation	Differentiate Homogeneous/heterogeneous mixtures; Solutions, suspensions, colloids. Understand concentration. Identify/apply separation techniques (crystallisation, distillation, chromatography, centrifugation).	Fun Activities: "The Kitchen Chemist Challenge". Experimental demonstration of separation techniques, group activity, paper chromatography, model making.	Differentiate mixtures, demonstrate separation techniques, calculate concentration (mass/ mass, volume/volume), apply knowledge in daily life, draw labelled diagrams.
July SA1	Structure of Atom	Atoms as basic units, subatomic particles. Atomic models (Thomson, Rutherford, Bohr). Electron distribution, valency, atomic/mass number, isotopes, isobars.	"The Mystery Box Experiment", role play for nucleus/electrons, clay model building, storytelling on discoveries.	Differentiate subatomic particles, illustrate electron distribution, calculate electrons/ protons/neutrons, accurately apply chemical symbols, draw atomic models.
August SA1	Revision of term 1 Syllabus	Reinforce understanding of key concepts. Apply theoretical knowledge to real-life. Solve varied questions. Practice numericals.	Past-paper relay, Kahoot quizzes, gallery walk, 10-minute rapid recall, peer teaching.	Recall concepts accurately, improve exam techniques/time management, demonstrate increased confidence.
September SA & FA	Ch-3 Atoms And Molecules	Laws of chemical combination (Conservation of Mass, Constant Proportions). Dalton's Theory. Molecules, ions, ionic/covalent compounds. Write chemical formulae. Calculate molecular mass.	Activity: "Molecular Speed-Dating". Demonstration of conservation of mass, valency cards game.	Differentiate atoms/molecules/ions, demonstrate law of conservation of mass, calculate valency/mass, write correct chemical formulae.
November SA	Earth as a System: Energy, Matter and Life	Earth as interconnected system (atmosphere, hydrosphere, lithosphere, biosphere). Solar energy, winds. Biogeochemical cycles (water, carbon, nitrogen, oxygen). Human impacts.	Activity: "The Great Carbon Journey". Demonstration of land/sea breeze, group project on carbon cycle, poster making.	Explain interconnectedness of spheres, explain solar radiation and differential heating, explain biogeochemical cycles, identify human impacts on Earth systems.
December SA2	Revision	Consolidate learning, strengthen analytical & application skills, prepare for SA-2.	Mock tests, peer assessment, concept map races, flashcard challenges.	Analyze information, identify relationships, improve exam techniques.

Practicals, Projects, and Portfolios

- **Project Work:** Integrated projects linking topics to real-life situations and economic development. Develops research, critical thinking, and teamwork.
- **Portfolio:** A compilation of academic work (assignments, journal entries, lab reports, artwork) reflecting learning progress.

List of Experiments - Term 1

- Preparation of true solutions (salt/sugar), suspensions (soil/chalk), and colloidal solutions (starch/milk) and distinguish transparency, filtration, stability.
- Preparation of mixtures and compounds using iron filings and sulphur powder.
- Perform and classify physical/chemical changes (e.g., Iron with $CuSO_4$, burning Mg ribbon, Zinc with dil. H_2SO_4, heating $CuSO_4$).
- Preparation of stained temporary mounts (onion peel, human cheek cells) and draw labelled diagrams.
- Identification of Parenchyma, Collenchyma, Sclerenchyma tissues in plants, and muscle/nerve cells in animals from slides.
- Determination of the melting point of ice and the boiling point of water.

List of Experiments - Term 2

- Verification of the Laws of reflection of sound.
- 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 fully immersed in water/salty water and the weight of water displaced.
- Determination of the speed of a pulse propagated through a stretched string/slinky.
- Verification of the law of conservation of mass in a chemical reaction.