

Syllabus for Academic Session: 2022-23

Class: IX

Subject: English					
MONTH	BEEHIVE	MOMENTS SUPPLEMENTARY READER	GRAMMAR	WRITING SKILLS	ACTIVITY/ LEARNING OUTCOMES.
February	Topic/chapter: Breaking the ice □□ Introduction, testing previous knowledge, collecting holiday homework			Charts to decorate the new class	<ul style="list-style-type: none"> • Experiential learning takes place as the child shares his experience. Learns social skills. Develops communication skills
March	Ch -1 The Fun they Had Poem – The Road not Taken	The Lost child	Verb Form Verb Agreement	Descriptive Paragraph Informal letter writing.	<ul style="list-style-type: none"> • Paragraph writing based on E-learning and real schools. • Moments- MCQ question bank based on chapters. • Project on – The road not Taken.
April	Ch-2 The sound of Music Ch-3 The little Girl	Adventure of TOTO	Determiners Modals	Notice writing Diary entry	<ul style="list-style-type: none"> • Students will enhance their writing, listening Skills. • Speech on Bonding between animals and humans.
May	Ch-4 A Truly Beautiful Mind Poem –The Wind	In the Kingdoms of Fools The Happy Prince	Connectors Integrated grammar	Formal Letter writing Descriptive Paragraph	<ul style="list-style-type: none"> • Re-writing using different ending • General discussion about materialistic world and emotions. •

June	Ch-6 My Child hood Poem – Rain on the Roof	Weathering the storm in Ersama the last leaf.	Reported Speech	Story writing	<ul style="list-style-type: none"> • Group discussion about leadership • Talk about its experiences • Project on Abdul Kalam
July	Ch-7 Packing Poem- A Legend of North Land Poem –No Men are Foreigner	A House is not a home	Integrated Grammar	Report writing	<ul style="list-style-type: none"> • Writing skills- Report writing (enhancing writing skill)
August	Poem – On Killing a Tree		Integrated Grammar	Article Writing	<ul style="list-style-type: none"> • Students would be able to – • Comprehend • Correlate • Project work on the Topic given
September	Ch- 8 Reach for the Top Poem –The Snake Trying		Determiners Modals	Speech writing	<ul style="list-style-type: none"> • Awareness about strengthening the bond and relation under ‘ • Ek Bharat Shrestha Bharat’ collecting information on the Famous Places of Kerala
October	Ch-9 The Bond Of Love	The Beggar	Verb Form Verb Agreement		<ul style="list-style-type: none"> • Ek Bharat Shrestha Bharat’ collecting information on the Famous Places of Kerala
November	Poem – If I were You. Rest of Nov is for revision		Revision		<ul style="list-style-type: none"> • General discussion about Life
December	Pre-Boards Revision for rest of the month				<ul style="list-style-type: none"> • Sample paper Practice

विषय: हिंदी

मास	पाठ का नाम	व्याकरण	क्रियायात्मक कार्य	गतिविधियाँ
मार्च	पाठ : 1 धूळ पाठ २ : दुःख का अधिकार ,	शब्द और पद वर्ण विचार	अपठित गद्यांश अनुच्छेद लेखन पत्र लेखन	चर्चा- परिचर्चा दोहों का लेखन
अप्रैल	दोहे : रैदास के पद पाठ :1 गिल्लू			
मई	पाठ : समृति			
	पाठ : 2 एवरेस्ट मेरी शिखर यात्रा	उपसर्ग प्रत्यय अनुस्वार अनुनासिक	अपठित गद्यांश अनुच्छेद लेखन	बेचद्री पाल परचर्चा दोहों का गायन
जून	पाठ :3 तुम कब जाओगे अतिथि		नारा लेखन	
जुलाई	पाठ : 8 रहीम	संदेश लेखन		दोहों का गायन
अगस्त	पाठ : 5 धर्म की आड़	विलोम शब्द		धरम एकता का माध्यम है ।
सितम्बर	पाठ : 5 धर्म की आड़ पाठ : 9 आदमीनामा	नुक्ता पर्यायवाची शब्द	अपठित गद्यांश अनुच्छेद लेखन	काव्य का रसास्वादन जीवन संघर्षमय है इससे घबराना थमना नहीं
नवम्बर	पाठ : 6 शुक्रतारे के समान	विज्ञापन लेखन	अपठित गद्यांश	काव्य गायन
दिसम्बर	पाठ : 11 गीत अगीत	लघु कथा लेखन	अनुच्छेद लेखन	

Subject: Science

MONTH	UNITS/ LESSON	LEARNING OBJECTIVES OR SUBTOPICS	PRACTICAL/ACTIVITY	LEARNING OUTCOMES
Feb And March	Matter in our Surroundings	<p>To understand the physical nature of matter.</p> <ul style="list-style-type: none"> -To comprehend the characteristics features and nature of particle. To understand the state of matter. -To make the learner understand that matter can change its state. -To analyse the effect of change of temperature and pressure on states. -To understand the phenomenon of evaporation. -To make the learner understand about the factors effecting evaporation. 	<p>To determine the boiling point of water. To determine the melting point of ice</p> <p>To see the rate of evaporation in change of conditions</p>	<p>Students will be able to-</p> <ul style="list-style-type: none"> - Perceive the physical nature of matter. - Analyse the nature of particle. Ø To Interpret the existence of three sates of matter. -Derive an understanding that states are interchangeable. <p>Students will be able to-</p> <ul style="list-style-type: none"> - Analyse that state change takes place due to change of temperature and pressure - Know the concept of evaporation - Perceive the factors that effect on evaporation e.g Temp., Wind, Humidity and Surface area.
April	Motion	<p>Describing motion, motion along a straight line</p> <ul style="list-style-type: none"> -uniform and nonuniform motion, -rate of change of motion, velocity & acceleration - graphical representation of motion, equations of motion (graphical method) <p>Numerical based on equations of motion</p> <ul style="list-style-type: none"> - Uniform Circular motion. 	<p>To observe, analyse and plot the graph for different values of position, velocity and acceleration. Link for the simulation: https://ophysics.com/k4.html https://ophysics.com/k4b.html</p>	<p>Differentiate between scalar and vector quantities</p> <ul style="list-style-type: none"> - Explain the difference between distance and displacement, speed and velocity with examples - Derive the three equations of motion graphically. - analyses and interprets graphs and figures such as, distance-time and velocity-time graphs. explain uniform circular motion, and reason out that why it is known as an accelerated motion -critically analyse the different types of motion

May	Cell - the fundamental unit of life	To help them in developing idea about primitive cell and the cell evolved. Making diagrams of plant cell animal cell with visualization of organelles structure and their function.	To prepare stained temporary mount of human cheek cells to record the observations and draw their labelled diagram.	Interactive discussion on discovery of cell, osmosis, plasmolysis and comparison between prokaryotic and Eukaryotic cell.
June	Is matter Around us Pure	To know about elements, compounds and mixtures -To know the types of mixtures - To define solution and its types -To compare the properties of Solution - To be able to calculate the concentration of solution - Sublimation and its examples -Separation technique as sublimation To understand properties of colloidal solution, suspension and true solution -Physical and chemical changes	Prepare solutions like chalk solution, sugar/ salt solution and starch solution. Compare properties on basis of – Transparency, filterability, Tyndall effect and stability Experiment law of conservation of mass	To compare the features of different solutions like transparency, filterability, Tyndall effect To carry out the following reactions and classify them as physical chemical changes. (a) Iron with CuSO ₄ solution in water, Burning Of Mg in air, Zn with disulphuric acid, heating Of CuSO ₄ , Sodium sulphate and Barium chloride -Students will be able to Understand law of chemical combination and Daltons atomic theory Know atom, molecule, atomic mass and calculate molecular mass Ø Arrive at different chemical formulas Ø Solve mole concept problems
July	Force and Laws of Motion	Balanced and unbalanced forces - first law of motion - inertia and mass,	EXPERIMENT To study the third law of motion using two spring balances.	State Newton's First Law of Motion with the help of real-life examples State Newton's Laws of Motion with the help of real-life examples Formulate the laws mathematically and solve numerical based on them
	Tissues	Plant tissues, meristematic tissues, permanent tissues Simple parenchyma, collenchyma, Sclerenchyma complex tissues - xylem and phloem. Structure of Plants and animal tissue Animal tissues, epithelial tissues, connective tissue -blood, lymph, tendons ligaments, bone, cartilage muscular tissue, nervous tissue. -To make understanding about various	· Demonstration of tissue with the help of diagram drawn on board. · Display of types of tissue with the help of charts. -Use different vegetables casting to design Plant tissues and comment upon their structure and function Using visual aid through smart board. -Hands on activity to observe	To study permanent slides of plant/Animal tissues - parenchyma and Sclerenchyma. Chart making Poster making, Scrap Book -To help them in understanding complex structure of animal tissues with the help of live examples of their body actions.

		<p>categories of plant tissues and their location structure and function.</p> <p>- To develop skill of making drawing of various tissues and study their functions.</p> <p>-To help them in understanding complex structure of animal tissues with the help of live examples of their body actions.</p>	slide of various tissues under microscope	-To study permanent slides of Striped muscle fibres and nerve cells. Record their observations draw labelled diagrams
August	Structure of Atom	Ø Structure of an atom, Thomson model, Rutherford Model of an atom and its drawbacks, Bohr's Model of an atom		Students will be able to Ø Understand the different models proposed by chemists and their failures
	Atoms and molecules	Laws of chemical combination Ø Atom, Molecule, Compound Ø Atomic mass, Molecular Mass, Ions, Formula writing. Atomicity, Mole Concept	Experiment law of conservation of mass	Students will be able to Ø Understand law of chemical combination and Dalton's atomic theory Ø Know atom, molecule, atomic mass and calculate molecular mass Ø Arrive at different chemical formulas Ø Solve mole concept problems
September	Structure of Atom	Filling up of electrons in shells of atom Distribution of electrons in different orbits Valency, Atomic number, Mass number Isotopes and its applications		Students will be able to Ø Know the presence of electrons in each shell of K, L, M, N -Define valency, atomic number and mass number -Understand Isotopes and know about its application
October	Diversity in living organism	Classification bases, relation between classification and evolution, Five kingdom classification, Kingdom Monera, Protista, Fungi, Plantae And Kingdom Animalia. Binomial Nomenclature	To study the external features of root, stem, leaf & flower of Monocot and Dicot Plant. - To study the characters of Spirogyra/agarics, moss/fern, Pines and an angiosperm plant. - Draw and give two identifying features of the groups they belong to.	To develop skill to relate evolution and classification. -To give technique to learn classification in a simple way -To arrange all phylum and division of plant kingdom in a chart which help them in learning process faster
	Work & Energy	Work, Work done by a constant force, Energy, forms of energy, kinetic energy	EXPERIMENT Establishing the relation between the loss in weight of a solid when fully immersed in a) Tap water b) Strongly salty water with the weight of water	Work, Work done by a constant force, Energy, forms of energy, kinetic energy

		Potential energy, potential energy of an object at a height, law of conservation of energy. Rate of doing work, commercial unit of energy- kWh.	displaced by it by taking at least two different solids explain the concept of potential energy with the help of examples and derive its expression. - State the law of conservation of energy - Define power and give its SI unit. - Establish the relation between commercial unit of energy KWh and joules.	
November	Why do we fall ill	Signs and Symptoms, Organ and Tissue Specific Manifestation, Principles Of Treatment, Antibiotics and Vaccines, Immunization.	· To help them out in distinguishing between Sign and Symptom and acute and chronic diseases. · To make them to think and research about infectious and non-infectious diseases.	To make a case study of any one Communicable and Non communicable diseases. A group of four students will script a role play for an diseases and will act to show the symptoms and sign.
	Sound	Production of sound, propagation of sound, sound requires a medium to travel, sound waves as longitudinal waves, characteristics of a sound wave. reflection of sound; echo and SONAR. Structure of the Human Ear (Auditory aspect only)	EXPERIMENT Verification of the Laws of reflection of sound.	Visualize sound as waves and explain that sound cannot produce without a vibrating object. Explain the different characteristics of sound waves. draws labelled diagrams of human ear. explains processes and phenomena how bats use ultrasonic waves to catch prey
	Natural Resources	Air, role of atmosphere, air pollution, water - a wonder liquid, water pollution, minerals and soil, bio – geochemical cycle	To Study the characteristics of Earth worm, Cockroach, Bony fish and Bird. Draw diagram and record identifying features	To develop skill of observing and drawing Biogeochemical cycles
December	Revision			

Subject: Maths

MONTH	UNITS/ LESSON	LEARNING OBJECTIVES OR SUBTOPICS	PRACTICAL/ACTIVITY	LEARNING OUTCOMES
Feb & March	Number system	Irrational Number, Real Numbers and their decimal expansions.	Worksheets: • MCQ based. • Hots question based. • Based on simple concepts. Lab activity.	Students would be able to – • Represent natural numbers, integers, rational numbers on the number Line and terminating / non-terminating recurring decimals on the number Line through successive magnification.
	Polynomials	Polynomials in one variable, zeroes of polynomial, Algebraic identities.	Lab activity/ Art Integrated activity: • To construct square root spiral with coloured paper • Using coloured papers, To verify identity $(a+b+c)^2 = a^2 + b^2 + c^2 + 2ab + 2bc + 2ca$.	Student would be able to- • find Factors and multiples. Zeros of a polynomial. • State the Remainder Theorem with examples. Statement and proof of the Factor Theorem. • Recall of algebraic expressions and identities.
April	Lines and angles Basic terms and definitions	Basic terms, Pairs of Angles, Angle sum property of a Triangle	Lab activity/ Art Integrated activity: To verify Pythagoras theorem by paper cutting method	Students will be able to- • Recall if a ray stands on a Line, then the sum of the two adjacent angles so formed is 180° and the converse. • Recall if two Lines intersect, vertically opposite angles are equal
May	Linear equation in two variables	Linear equations, Solution of linear equations, graph	Worksheets: • MCQ based. • Hots question based. • Based on simple concepts.	Students will be able to - • Understand that a Linear equation in two variables has infinitely many solutions. • Draw graph of Linear equations in two variables.
	Coordinate geometry	Cartesian System, Plotting a Point.	Lab activity: Geo gebra as a tool can be used for Coordinate geometry.. Worksheets: • MCQ based. • Hots question based. • Based on simple concepts	Students will be able to: Students will be able to - • Define the Cartesian plane, coordinates of a point, names and terms associated with the coordinate plane, notations, plotting points in the plane.
June	Heron's formula	Heron Formula, Area of Triangle, Application	Worksheets: • MCQ based. • Hots question based. • Based on simple concepts.	Students will be able to - • Find area of a triangle using Heron's formula (without proof) and its application. Students will be able to: • Recall rules of congruency i.e. SSS, ASA, SAS and RHS.
	Triangles	Congruence of Triangles, Criteria for congruence etc.	Lab activity: To verify that sum of external angles of a regular polygon is 360°. • To verify	

			Pythagoras theorem by paper cutting method	• Prove of the angles opposite to equal sides of a triangle are equal and vice versa.
July	Quadrilateral	Angle sum property,Types of Quadrilateral,prpperties	Worksheets: • MCQ based. • Hots question based. • Based on simple concepts.	Students will be able to -• Prove that diagonal divides a parallelogram into two congruent triangles.
	Quadrilateral Const.	To verify mid-point theorem. • To verify that the quadrilateral obtained by joining the mid points of the sides of the quadrilateral is a parallelogram	Lab /Sports Integrated activity: • To measure the area of Basket ball court, Badminton court, Volume of cylindrical Pole .	Students will be able to: • Proof of Midpoint theorem i.e. in a triangle, the Line segment joining the mid points of any two sides is parallel to the third side and in half of it and its converse.
August	Art Integrated project work under Ek Bharat Shrestha Bharat Programme	Art Integrated Project • State paired with Kerela	Art Integrated Project.	Students will be able to Integrate Maths with different art forms. Understand the diverse culture of our country create awareness about the different art forms in other States.
September	Surface area and volume	Surface area of cuboid,cylinder,cone,sphere.	Lab activity: • To find the area of a right circular cylinder. • To transform a square into a triangle both having equal area	Students will be able to: • Find surface areas and volumes of cubes, cuboids, spheres (including hemispheres) and right circular cylinders/cones.
October	Statistics	Collection of Data , Presentation of Data,Central Tendency	Lab activity: • Introduce the process of constructing Mathematical Models • The process of Modeling, its Advantage and Limitations.	Students would be able to: • Understand the concept of collection of data, presentation of data — tabular form, ungrouped / grouped, bar graphs,
	Construction	Basic constructions	Worksheets: • MCQ based. • Hots question based. Based on simple	Students would be able to: • Construct bisectors of Line segments and angles of measure 60o, 90o, 45o etc., equilateral triangles.
November	Circles	Circles and its related terms,Circles through three points.	Worksheets: • MCQ based. • Hots question based. • Based on simple concepts.	Students would be able to: • Construct bisectors of Line segments and angles of measure 60o, 90o, 45o etc., equilateral triangles.

	Probability & Revision	Probability -an experimental approach.	Worksheets: • MCQ based. • Hots question based. • Based on simple concepts.	Students would be able to: • Proof of the angle subtended by an arc at the center is double the angle subtended by it at any point on the remaining part of the circle. • Angles in the same segment of a circle are equal.
December	REVISION AND PRE-BOARD			

Subject: History

MONTH	UNIT/ CHAPTER	SUB TOPICS	LEARNING OUTCOMES	INNOVATIVE PEDAGOGY/ART INTEGRATION/INTER DISCIPLINARY APPROACH	ACTIVITY/PRACTICAL/ PROJECT
March	The French Revolution	French Society during the Late Eighteenth Century <ul style="list-style-type: none"> • The struggle to survive • Growing middle class • The Outbreak of the Revolution • France becomes a Constitutional Monarchy. • France abolishes Monarchy and becomes a Republic • The Reign of Terror • A Directory rules France 	<ul style="list-style-type: none"> • Students would get familiarize with distinct ideologies, extracts of speeches, political declarations as well as the politics of caricatures, posters and engravings. • Students will learn to interpret these kinds of historical evidences. 	Map skills: on an outline map of France label locate or identify the following: <ul style="list-style-type: none"> • Bordeaux • Nantes • Paris • Marseilles 	Activity: Make a timeline of the important events of French Revolution
April	The French Revolution (Contd.)	Role of Women in Revolution The Abolition of Slavery The Revolution and everyday life	<ul style="list-style-type: none"> • Familiarize with the names of people involved the different types of ideas that inspired the revolution, the wider forces that shaped it. • Know the use of written, oral and visual material to recover the history of revolutions. 	Group discussion on the ideas and philosophies of Rousseau, Montesquieu.	

May	Russian Revolution	The age of Social change - Coming of socialism in Europe Russian Revolution - The course of event	<ul style="list-style-type: none"> Identify about the Social Changes that took place as a result of Industrialization. Describe the emergence of socialism in Europe 		Map skills: on an outline map of World label ,locate or identify the following: Major Countries of First World war.
June	Russian Revolution (Contd.)	Changes after October Revolution - The First War The Global influence of the Russian Revolution and the USSR	<ul style="list-style-type: none"> Explain the important factors leading to the Russian Revolution. List the impact of Russian Revolution 		Central Powers- Germany, Austria-Hungary, Turkey Allied Powers- France, England, Russia and U.S.A.
July	Nazism and the Rise of Hitler	Establishment of the Racial State and the Racial Utopia Birth of the Weimar Republic Effects of War, Political Radicalism and Economic Crisis Years of Depression	<ul style="list-style-type: none"> Analyze the personality of Adolf Hitler Describe the Birth of Weimar Republic List the factors responsible for economic crises in Germany in 1923. 	Map skills: on an outline map of World label, locate or identify the following; Major Countries of Second World war. Axis Powers- Germany, Italy and Japan. Allied Powers- UK, France, Former USSR, U.S.A.	Students to draw a comparison between the condition of women in Nazi Germany and women in France during French Revolution.
August	Nazi	Hitler's Rise to Power <ul style="list-style-type: none"> The destruction of Democracy and Reconstruction The Nazi World View 	<ul style="list-style-type: none"> Explain the causes for the rise of Hitler Criticize the condition of Germany during the Nazi rule. 		
	Nazi	<ul style="list-style-type: none"> Youth in Nazi Germany The Nazi Cult of Motherhood and the art of Propaganda Ordinary People and the crimes against Humanity Knowledge about the Holocaust Internal Assessment :Assignments and notebook	<ul style="list-style-type: none"> Discuss the critical significance of Nazism in shaping the politics of modern world. Familiar with the speeches and writings of Nazi leaders. 	Territories under German Expansion- (Nazi Power) - Austria, Poland, Czechoslovakia (Slovakia), Denmark, Lithuania, France and Belgium.	Make a presentation on holocaust survivors, their experience about Nazi Cult.
September	Forest society and colonialism	Why Deforestation? Land to be Improved, Sleepers on the tracks and Plantations The Rise of Commercial Forestry How were the lives of people affected, how did Forest Rules affect Cultivation, who could hunt New Trades, New Employments and New	<ul style="list-style-type: none"> List the causes for deforestation in India Recognize the rise of commercial forestry 		Students to gather information on other forest rebellion in colonial India and discuss the causes for the same.

		Services		
October	Forest society and colonialism (Contd.)	Rebellion in the Forest <ul style="list-style-type: none"> ● Bastar Rebellion Forest Transformations in Java ● Dutch Scientific Theory, Samin's Challenge ● War and Deforestation ● New Developments in Forestry 	<ul style="list-style-type: none"> ● Understand how the life of the people was affected due to commercial forestry. ● recall the rebellion of Bastar ● Analyze the forest transformation which took place in Java due to the influence of the Dutch 	
November	REVISION			

TEXT BOOK: India and contemporary world –I (Textbook in History for Class IX)

Subject: Demographic Political

MONTH	UNIT/ CHAPTER	SUB TOPICS	LEARNING OUTCOMES	INNOVATIVE PEDAGOGY/ART INTEGRATION/INTER DISCIPLINARY APPROACH	ACTIVITY/ PRACTICAL/ PROJECT
March	What is Democracy? Why Democracy?	Features of Democracy Arguments for and against Democracy Broader Meaning of Democracy	<ul style="list-style-type: none"> • Develop conceptual skills of defining democracy. • Understand how different historical processes and forces have promoted democracy. • Develop a sophisticated defence of Democracy against common prejudices. 	<ul style="list-style-type: none"> • Organizing a Debate on Positive and negative aspects of Democracy. • Art Integration: Showcasing the significance of Democracy through cartoon Illustrations. 	
April	Constitutional Design	Apartheid in South Africa Constitution of SouthAfrica Comparison between preamble of India, South Africa and America.		Project: Draw the comparison among the constitution of various democratic countries.	
May	Constitutional Design (Contd)	Making of the Indian Constitution Guiding Values of the Indian Constitution, Philosophy of Constitution, Institutional Design	<ul style="list-style-type: none"> • Understand the process of Constitution making. • Develop respect for the constitution and appreciation for Constitutional values. • Recognize Constitution as a dynamic and living document. 		Activity: Making of Preamble
June	Electoral Politics	Need for Election, Conditions for Democratic Elections, Political Competition, System of Elections in India, Electoral Constituencies, Reserved Constituencies, Voter's List, Nomination of Candidates	<ul style="list-style-type: none"> • Understand representative democracy via competitive party politics. • Familiarize with Indian electoral system. • Reason out for the adoption of present Indian Electoral system. 		Students to form a political party and prepare manifesto, from cabinet and present their plan and policies

July	Electoral Politics (Contd.)	Election Campaigns Polling and counting of Votes Independent Election Commission Challenges to free and fair Elections	<ul style="list-style-type: none"> • Develop an appreciation of citizen's increased participation in electoral politics. • Recognize the significance of the Election Commission. 		Activity: organizing Mock Elections in classroom taking following points into consideration: <ul style="list-style-type: none"> • Voter's List • Nomination of candidates • Election Campaigns Polling and counting of votes.
August	Working of Institutions	How is major policy decision taken? Decision Makers: Parliament, Prime Minister and President Independent Election Commission Challenges to free and fair Elections	<ul style="list-style-type: none"> • Get an overview of central governmental structures. • Identify the role of parliament and its procedures. • Distinguish between political and permanent executive authorities and functions. 		
September	Working of Institutions (Contd.)	Political Executives and Permanent Executives Powers of Prime Minister and President The Judiciary Internal Assessment: Assignment, notebook and enrichment activity.	<ul style="list-style-type: none"> • Understand the parliamentary system of executive's accountability to the legislature. • Understand the working of the Indian Judiciary. 		Debate on "Is Democratic Rights given to all in India."
October	Democratic Rights	Need for Rights Rights in Democracy Rights in the Indian Constitution (Six fundamental Rights) Expanding Scope of Rights	<ul style="list-style-type: none"> • Recognize the need for rights in one's life. • Identify and be able to comprehend the Fundamental Rights given by the Indian Constitution to its citizens. <p>Create awareness regarding the process of safeguarding rights.</p>		
November	Revision				

Subject: Geography

MONTH	UNIT/ CHAPTER	SUB TOPICS	LEARNING OUTCOMES	INNOVATIVE PEDAGOGY/ART INTEGRATION/INTER DISCIPLINARY APPROACH	ACTIVITY/PRACTICAL/ PROJECT
March	Ch-1. India—Size and Location	<ul style="list-style-type: none"> • Location and size • India and world • India's Neighbors 	Students will be able to Identify the location of India and the Indian subcontinent		Map work as per NCERT list
April	Ch-2. Physical features of India	The Evolution of Himalayas; <ul style="list-style-type: none"> • Major Physiographic division • The Himalayan Mountains 	Students will be able to Understand the major landform, features and the underlying geological structure; their association with various rocks and minerals as well as nature of soil types.		Map work as per NCERT list
May	Ch-2. Physical features of India (Contd.)	<ul style="list-style-type: none"> • The Northern Plains, • The Peninsular Plateau, • The Indian Desert, • The Coastal Plains, • The Island Groups 			DISASTER MANAGEMENT PROJECT
June	Ch-3. Drainage	<ul style="list-style-type: none"> • The Drainage system in India • Difference between Himalayas and peninsular rivers. 	Students will be able to Identify the river systems of India and explain the role of rivers in the human society	Maps can be shown to the students.	Map work as per NCERT list

		<ul style="list-style-type: none"> • The Himalayan River system • The Peninsular River system • Role of Rivers and Lakes in the Economy. • River Pollution and causes and measures • National River Conservation Plan 			
July	Ch-4. Climate	<ul style="list-style-type: none"> • Weather and climate. • Climatic controls. • Factors affecting India's Climate • The Indian Monsoon 	<p>Students should be able to Identify various factors influencing the climate and explain the climatic variation of our country and its impact on the life of the people. Explain the importance and unifying role of monsoons.</p>	<p>Maps can be shown to the students.</p> <p>Making of Rain Gauge.</p>	Map work as per NCERT list
August	Ch-4. Climate(Contd.)	<ul style="list-style-type: none"> • Seasons: Hot weather season, Cold weather season, Advancing Monsoon and Retreating monsoons. • Distribution of Rainfall • Monsoon as a Unifying Bond 			

September	Ch-5. Natural Vegetation and Wildlife	<ul style="list-style-type: none"> • Factors affecting distribution of Natural Vegetation. • Ecosystem and Biomes. • Types of Natural vegetation • Wildlife • Conservation measures. 	<p>Students should be able to Understand the nature of diverse flora and fauna as well as their distribution.</p> <p>Develop concern about the need to protect the biodiversity of our country.</p>		Map work as per NCERT list
October	Ch-6. Population	<ul style="list-style-type: none"> • Population size and distribution by numbers and density • Population growth and Processes of Population change • Age composition, Sex ratio Literacy Rate. • Occupational structure, Health and Adolescent • Population. • National population policy 2000 	<p>Students will be able to analyze the uneven nature of population distribution and show concern about the large size of our population. Identify the different occupations of people and explain various factors of population change.</p> <p>Explain various dimensions of National Population Policy and understand the needs of adolescents</p>	Graphical data presentation of density of population, sex ratio, literacy rate.	Map work as per NCERT list
November	Revision				

Subject: Economics

MONTH	CHAPTER	SUB-TOPIC	INNOVATIVE PEDAGOGY	LEARNING OUTCOMES	ACTIVITY/ PRACTICAL/ PROJECT
March	The Story of Village Palampur	<ul style="list-style-type: none"> • Organization of production • Farming in Palampur • Land is Fixed • Is there a way one can grow more from the same land? • Will the land sustain? • How is land distributed between the farmers of Palampur? • Who will provide the labour? • The capital needed in farming 	<ul style="list-style-type: none"> • Interactive discussion on Non- Farm activities in Uttar Pradesh (Case studies on Gur – making, shops, bullock cart for transport, etc.) 	Students will be able to <ul style="list-style-type: none"> • Be aware of non-farm activities in rural sector. • Know about the benefits of non-farm activities for rural economy. • Have critical thinking to understand the relationship between non-farm activities and holistic development in a village. 	_____
April	The Story of Village Palampur (Continuation)	<ul style="list-style-type: none"> • Non-Farming activities • Dairy, small-scale manufacturing in Palampur, shopkeepers and transport 	_____	_____	_____
May	People as Resource	<ul style="list-style-type: none"> • Story of Sakal and Vilas • Economic activities by Men and Women • Quality of population • Education and Health • Unemployment • Story of a Village 	_____	Students will be able to <ul style="list-style-type: none"> • Have awareness about the different types of urban unemployment. • Improve their communication skill and confidence. 	Students to find out the different types of unemployment found in solan . Presentation of any two types of unemployment found here in the form of a talk show.

<p>June</p>	<p>Poverty as A Challenge</p>	<ul style="list-style-type: none"> • Two Typical Cases of Poverty • Poverty as Seen by Social Scientists • Social Exclusion and Vulnerability • Poverty Line • Poverty Estimates <p>Inter-State Disparities</p>	<p>Preparation of Graphs on Vulnerable groups of India and Inter- State Disparity</p>	<p>Students will be able to</p> <ul style="list-style-type: none"> • Estimate and perceive the rate of poverty amongst various communities of India like the Scheduled castes, scheduled Tribes, etc. • Find out reasons of poverty in states like Orissa, Bihar, Uttar Pradesh, etc. • Analyze reduction in poverty in states like Goa, Delhi, West Bengal, Punjab, etc. • Know steps taken by the government to minimize poverty in various states. 	<hr/>
<p>July</p>	<p>Poverty As A Challenge (Continuation)</p>	<ul style="list-style-type: none"> • Global Poverty Scenario • Causes of Poverty • Anti – Poverty Measures • The Challenges Ahead 	<hr/>	<hr/>	<hr/>
<p>August/ September</p>	<p>Food Security In India</p>	<ul style="list-style-type: none"> • What Is Food Security? • Who Is Food-Insecure? • Food Security in India • What is Buffer Stock? • What Is the Public Distribution System? • Current Status of Public Distribution System • Role of Co-operatives in Food Security 	<ul style="list-style-type: none"> • Collecting information on ‘subsidies’ provided by the government to the farmers. • (How are these subsidies helping to ensure food security in India?) (In the notebooks make a write-up in 200-250 words supported with relevant data which may be collected from a suitable source. Mention the source.) 	<p>Students will be able to</p> <ul style="list-style-type: none"> • Understand the need of subsidies given to farmers. • Develop critical thinking on how with the help of subsidies, farmers can improve their income and lifestyle <p>Realize the source of subsidies, the revenue of the government.</p>	<hr/>
<p>October – December</p>	<p>Revision</p>				

विषय - संस्कृत

मासः	शीर्षकम् ;साहित्यद्व	व्याकरणम् रचनात्मक कार्यम्	शिक्षण अधिगमस्य प्रतिफलम्	क्रियाकलापः
मार्च	स्वर्णकाकः भारतीयसन्तगीति	संस्कृतानुवाद स्वर सन्धि, शब्द रूपाणि, वर्तमानकालः, कारक उपपद विभक्ति- प्रयोगाः	कथायाः माध्यमेन लोभस्य दुष्परिणामानाम् ज्ञानम्, विलोम पर्याय शब्दैः शब्द भंडारे लकार- पुरुष - वचन उपपदविभक्ति- विशेषण विशेष्यानाम् उचित प्रयोगेन संस्कृतवादनम् कुर्तुम्	स्फोरकपत्रो धतुभिः सह तुमुन, कत्वा, ल्यप् शतृ प्रत्ययान् संयोज्य तालिका निर्माणम्।
अप्रैल	गोदोहनम्	भूतकालः भविष्यकालः रूपाणि अजन्त, सर्वनाम- शब्दाः कारक उपपद विभक्ति स्पष्टीकरण उचित प्रयोगाः च।	कार्यम् यथासमयम् करणेम् सम्बद्ध दृष्टान्तानाम् उल्लेखः भूतकालः भविष्यकाल उचित प्रयोगस्य नियमाः स्पष्टीकरणम् उचित प्रयोगः च।	स्फोरकपत्रो धतुभिः सह तुमुन, कत्वा, ल्यप् प्रत्ययान् संयोज्य तालिका निर्माणम्।
मई	कल्पतरुः		श्लोकानाम् अन्वयज्ञानम् भावग्रहणम् कथाया माध्यमेन प्राणि नाम् दुखहरणाम् नैतिक मूल्यानाम् पल्लवनम्	आरोह अवरोह पूर्वकम् श्लोकानाम् सस्वर वाचन गायनम् च। लोक कल्याण विषयकानाम् कथानाम् संग्रहणम्
जून	सुक्तिमौक्तिकम्		छंदानाम् भावग्रहणम् सदाचार सत्संगति प्रिय वाणि मित्राता परोपकारायः नैतिक मूल्यानाम् पल्लव नम् उद्भावनम् च।	आरोह अवरोह पूर्वकम् श्लोकानाम् सस्वर वाचनम् गायनम् च।
जुलाई	भ्रान्तो बालाः	त्वत् प्रत्यय प्रयोगाः सक्षमाः संख्यावाचक शब्द रूपाणां नियमानाम् स्पष्टीकरणम् उचित प्रयोग च।		स्फोरकपत्रो धतुभिः सह प्रत्ययम् संयोज्य तालिका निर्माणम्।
अगस्त	लौहतुला	कारक प्रयोगाः उपपदविभक्ति प्रयोगाः विसर्ग सन्धि,	कथाया माध्यमेन लोभस्य दुष्टपरिणामानाम् ज्ञाननम् शब्द भंडारे अभिवृद्धि शतृ तालिका स्पष्टीकरण उचित प्रयोगाः च।	संचिकायाम् शतृ तसिल प्रत्ययानाम् संयोगस्य प्रकृति प्रत्ययस्य च प्रस्तुतीकरणम् वाक्यानाम् प्रस्तुतीकरणम्

सितम्बर	सिकतासेतुः जटायोः शौर्यम्	लोट लकार उपसर्गाः तपोबलेन विद्या— प्राप्तयै प्रयत्नशील बालकस्य हृदय परिवर्तन जटायोः वीरतायाः ज्ञानम् श्लोकानाम् शु(च)च्चारणम् आरोह अवरोह पूर्वकम् गायनम् ।	चर्चा परिचर्चा, समस्त पद— निर्माणस्य विग्रहस्य च ज्ञानम् । रामायणे सीता हरणस्य प्रसंगे रावणेन सह यु(स्तस्य जटायोः वीरतयाः वर्णनम्	तलिकायाम् उपसर्गः नवीन शब्द निर्माणम् स्वरसंघेः अन्तगतम् संधिविच्छेद सधेः च तालिकायाम् प्रस्तुतीकरणम् ।
अक्तूबर	पर्यावरणम्	विधि लिङ् लकार शतृ शानच्, प्रत्यय प्रयोगाः उपसर्गाः	पर्यावरणस्य शु(ताया अवबोधनम्, वायु जल प्रदूषणम् संरक्षणम् विविधेपयनाम् चितनम्	गृहेषु पादपारोपणम् तलिकायाम् उपसर्गः नवीन शब्द निर्माणम्
नवम्बर	वाङ्मनः प्राणस्वरूपम्	विलोमपदं, क्रिया पदेषु 'तुमन'प्रत्यय,पर्यायवाची सन्धि विच्छेनम्		पाठस्य सारांशं प×चवाक्यैः लिखत ।

COMPUTER APPLICATIONS

CLASS IX (Code 165)(2022-23)

Learning Outcomes

1. Ability to familiarise with basics of computers.
2. Ability to navigate the file system.
3. Ability to create and edit documents, spread sheets, and presentations.
4. Ability to perform basic data manipulation using spread sheets and use Indian languages in documents.
5. Ability to send and receive emails, follow email etiquette, and communicate over the internet.
6. Ability to create and upload videos.
7. Ability to use websites, social networks, chat sites, and email safely and correctly.

Distribution of Marks and Periods

Unit No.	Unit Name	Marks	Periods	
1.	Basics of Information Technology	20	20	05
2.	Cyber safety	15	10	05
3.	Office Tools	15	20	55
4.	Lab Exercises	50	-	-
	Total	100	50	70

Unit 1: Basics of Information Technology

- Computer Systems: characteristics of a computer, components of a computer system – CPU, memory, storage devices and I/O devices
- Memory: primary (RAM and ROM) and secondary memory
- Storage devices: hard disk, CD ROM, DVD, pen/flash drive, memory stick
- I/O devices: keyboard, mouse, monitor, printer, scanner, web camera
- Types of software: system software (operating system, device drivers), application software including mobile applications

- Computer networking: Type of networks: PAN, LAN, MAN, WAN, wired/wireless communication, Wi-Fi, Bluetooth, cloud computers
(Private/public)
- Multimedia: images, audio, video, animation

Unit 2: Cyber-safety

- Safely browsing the web and using social networks: identity protection, proper usage of passwords, privacy, confidentiality of information, cyber stalking, reporting cybercrimes
- Safely accessing websites: viruses and malware, adware

Unit 3: Office tools

- Introduction to a word processor: create and save a document.
- Edit and format text: text style (B, I, U), font type, font size, text colour, alignment of text. Format paragraphs with line and/or paragraph spacing. Add headers and footers, numbering pages, grammar and spell check utilities, subscript and superscript, insert symbols, use print preview, and print a document.
- Insert pictures, change the page setting, add bullets and numbering, borders and shading, and insert tables – insert/delete rows and columns, merge and split cells.
- Use auto-format, track changes, review comments, use of drawing tools, shapes and mathematical symbols.
- Presentation tool: understand the concept of slide shows, basic elements of a slide, different types of slide layouts, create and save a presentation, and learn about the different views of a slide set – normal view, slide sorter view and hand-outs.
- Edit and format a slide: add titles, subtitles, text, background, and watermark, headers and footers, and slide numbers.
- Insert pictures from files, create animations, add sound effects, and rehearse timings.
- Spreadsheets: concept of a worksheet and a workbook, create and save a worksheet.
- Working with a spreadsheet: enter numbers, text, date/time, series using auto fill; edit and format a worksheet including changing the colour, size, font, alignment of text; insert and delete cells, rows and columns. Enter a formula using the operators (+, -, *, /), refer to cells, and print a worksheet.
- Use simple statistical functions: SUM (), AVERAGE (), MAX (), MIN (), IF () (without compound statements); embed charts of various types: line, pie, scatter, bar and area in a worksheet.

4. Lab Exercises

- Browser settings for a secure connection
- Working with the operating system: Navigation of the file system using a mouse and keyboard.
- Word processing: create a text document; create a letter, report, and greeting card.
- Create a text document with figures in it. It should describe a concept taught in another course.
- Discuss the following in a text document about the basic organisation of a computer: CPU, memory, input/output devices, hard disk.
- Create a text document in an Indian language other than English.
- Create a presentation.
- Create a presentation with animation.
- Include existing images/ pictures in a presentation.
- Animate pictures and text with sound effects in a presentation
- Create a simple spreadsheet and perform the following operations: min, max, sum, and average.
- Create different types of charts using a spreadsheet: line, bar, area and pie.

Breakup of marks for the Practicals:

S.No.	Unit Name	Marks
1.	Lab Test (30 marks)	
	Word processing	10
	Handling spreadsheets	10
	Creating presentations	10
2.	Report File + viva (10 marks)	
	Report file: <ul style="list-style-type: none">• 4 documents each with a word processor, spreadsheet, and presentation tool	8
	Viva voce (based on the report file)	2
3.	Project (that uses most of the concepts that have been learnt) (10 marks)	
	Total Marks	50