Bal Bharati
PUBLIC SCHOOL
SOLAN

ANNUAL PEDAGOGY PLAN

2025-26

Class : IX

Subject: English (184)

Month	No. of Working Days	Course Content	Learning Outcomes	Skill	Teaching Method
March	**22**	**Beehive**-The Fun They Had The Road Not Taken **Moments**-The Lost Child **Writing**-Story Writing **Grammar**-Verb Forms	-To enable the students about Robots and Robotic Teachers. - Identify and explain the significance of essential elements in poetry. -Understanding and appreciation of the works of Robert Frost -To locate specific information while reading -Development of comprehension skills. - To be able to use correct grammatical structure in a sentence.	❖ Evaluate, analyze, recall, ❖ Extrapolate, think critically curiosity	• Guided • Discussion • Problem-solving Based learning Peer teaching • Self-assessment
April	**19**	**Beehive**- Wind ,The Sound of Music **Moments**- The Adventures of Toto	- To develop an understanding of the main idea of the poem. -Understanding of literary devices -To locate specific information while reading. - To understand and empathize with the central character.	❖ Evaluate, Recall, Extrapolate Observation Curiosity	• Listening comprehension • Conversation • Dialogue Writing

		Writing-Story Writing **Grammar**-Editing, Tenses	-Understanding and appreciation of the title - Inculcating sensitivity towards animals -Development of comprehension skills.		
May	**23**	**Beehive**- The Little Girl, The LakeIsle of Innisfree, **Moments**-Ishwaran the Storyteller **Writing**-Diary Entry **Grammar-**Modals and Determiners	-To enable the learners to think creatively. -Learning about characterization and self-analysis. -To develop the students' critical thinking ability. -To develop an understanding of them ain idea of the poem. -Development of the skill to sequence events. -Development of comprehension skills	❖ Expressing Analytical thinking Simulate ❖ The collaborative effort and team spirit	• Pair Work • Extempore • Written assignment
June	**15**	**Beehive**-A Truly Beautiful Mind Rain on the Roof **Moments**- In the Kingdom of Fools **Writing**-Descriptive Paragraph Integrated **Grammar** - (Reported Speech)	-To enable the learners to think imaginatively and write creatively. -Learning about characterization. - Use correct grammatical structures, organize and express ideas coherently -To develop an understanding of the poem's main idea through the poet's perspective of life. - To acquire grammatical accuracy -Development of creative writing skills and comprehension skills -To plan, organize, and present ideas in a coherent manner.	❖ Analyze Empathy Visualize Perceive Observation	• Dictionary • Internet, Newspaper

July	**14**	**Beehive**-A Legend of the Northland My Childhood **Moments** - The Happy Prince **Writing**-Descriptive Paragraph	-To enable the learners to think creatively. -Learning about characterization and self-analysis. -To develop the students' critical thinking ability. -To develop the writing skill and write paragraph on given situation/topic.	❖ Logical thinking Observational skills Recognize structure Evaluation	• Research Work • Gathering Information • Deductive Reasoning Group Work.
August	**22**	**Beehive**-No Men are Foreign Reach for the Top **Moments**-The Happy Prince **Writing**: Story composition **Grammar** – Integrated grammar	-To enhance the knowledge about poetic devices -To enhance the ability to move beyond the text for extrapolation. -To develop the writings kills of the students. -The learners will be able to identify and explain the significance of essential elements in poetry. -Read texts actively recognize key passages; raise questions; comprehend the literal and figurative uses of language. -Enhancement of the students' inferential skills	❖ Conceptualization Analytical thinking Simulate Collaborative effort and team spirit	• Guided Discussion • Problem-solving based learning • Peer teaching Self- assessment
September	**23**	**Beehive** - If I were you, A Slumber did my Spirit Seal	-To facilitate the understanding of the text and enhance vocabulary. -To enhance the ability to move beyond the text for extrapolation.	❖ Evaluate, analyze, recall, extrapolate, think critically	• Listening comprehension • Conversation • Dialogue Symposium

		Moments-The Last Leaf **Writing**-Descriptive Paragraph	-The learners will be able to identify and explain the significance of essential elements in poetry. -To develop the writing skills of the students. Read texts actively, recognize key passages; raise questions; comprehend the literal and figurative uses of language. -Enhancement of the students' inferential skills		
October	**16**	**Beehive** - Kathmandu **Moments**-A House is Not a Home The Beggar **Writing**-Descriptive Paragraph **Grammar**–Gap filling, Editing.	-To facilitate the understanding of the text and enhance vocabulary. -To enhance the ability to move beyond the text for extrapolation. -To develop the writing skills of the students. -Read texts actively recognize key passages raise questions. -Acquisition of grammatical accuracy.	❖ Evaluate, analyze, recall, extrapolate, think critically	• Listening • Comprehension • Conversation / Dialogue, Symposium
November	**23**	**REVISION**			
December	**14**	**ANNUAL EXAMINATION**			

Subject: Hindi (085)

महीने	कार्य दिवसों की संख्या	विषयवस्तु	शिक्षण उद्देश्य	कौशल विधि	शिक्षण युक्तियाँ
मार्च	**22**	**स्पर्श (1-भाग)** दुःख का अधिकार एवरेस्ट मेरी शिखर यात्रा **व्याकरण:** अनुस्वार और अनुनासिक शब्द	• निर्धनों के प्रति सद्भावना का विकास तथा अंधविश्वास से अवगत करवाना • साहसिक कार्यो के प्रति प्रेरित	• श्रवण –कौशल – पाठ से कवि के विचारों की पहचान कर पाठ का औपचारिक सारांश बता सकेगें • वाचन कौशल – पाठ पढने की योग्यता का विकास	• प्रश्नोतरी • व्यक्ति की पहचान उसकी पोशाक से होती है विषय पर कक्षा में परिचर्चा • तेनजिंग शेरपा की पहली चढ़ाई के बारे में जानकारी एकत्रित करना
अप्रैल	**19**	**स्पर्श (1-भाग)** अब कैसे छूटे राम नाम तुम कब जाओगे अतिथि **व्याकरण** : उपसर्ग **लेखन भाग** : संवाद लेखन	• मानवीय मूल्यों की ओर प्रेरित करना • अतिथि सत्कार के परम्पराओं के बारे में ज्ञान प्राप्त करवाना	• वाचन कौशल – पदों के मूल्य उद्देशयों से परिचित • श्रवण कौशल- भाषा की विविध प्रकारों की पहचान कर पायेगे और पढ़ते समय मुहावरों के अर्थ को समझ कर वाक्य में प्रयोग करेगे	• रदैस के पदों को गाकर सुनाना • अपने घर आए अतिथियों का सत्कार का अनुभव कक्षा में सुनायेंगे
मई	**23**	रहीम के दोहे **संचयन (I– भाग)** गिल्लू **व्याकरण :**प्रत्यय **लेखन भाग** : अनौपचारिक पत्र	• दोहे के माध्यम से समाज की कुरीतियों से अवगत करवाना • पशु पक्षियों के प्रति प्रेम एवं उनके सरक्षण की	• पठन कौशल- क्रमानुसार पाठ का पठन करना • वाचन कौशल – अपना मनपसंद दोहा गायन के रूप में प्रस्तुत करना • श्रवण कौशल – दोहों को	• पीपीटी • सामूहिक चर्चा • कहानी लेखन

			भावना जागृत करना	ध्यान से सुनकर उनका अर्थ ग्रहण करना	
जून	**15**	गीत अगीत **संचयन (I– भाग)** समृति **व्याकरण :**स्वर संधि **लेखन भाग** : चित्र वर्णन	• प्राकृतिक सौंदर्य तथ जीव जन्तुयों के मानत्त्व, माविया राग और प्रेम भाव जागृत करना • कठिन परिस्थितियों का सामना करने की सीख	• श्रवण कौशल – छात्र अंश का वाचन करते हुए शब्दों के अर्थ सहित भावो पर चर्चा • पठन कौशल – समूह में बैठे छात्र उचित आरोह अवरोह तथा शुद्ध उच्चारण के साथ पाठ पठन करेगे	• प्रकृति से समबन्धित गीत कक्षा में सुनाना • अपने बुजुर्गो से उनकी बचपन की कहानियाँ सुनना तथ कक्षा में बताना
जुलाई	**14**	अग्निपथ वैज्ञानिक चेतना के वाहक चंद्रशेखर **व्याकरण :**विराम चिन्ह	• सफलता प्राप्त करने के लिए जीवन में संघर्षो का सामना , लगन व आत्मविश्वास से करना • वैज्ञानिक गतिविधियों तथा प्रयोग की और उन्मुख करना	• श्रवण कौशल – कविता को ध्यान से सुनकर उनका अर्थ ग्रहण करना • पठन कौशल – पाठ से वर्णित घटनाओं की सूची बनाना	• जीवन संघर्ष का ही नाम है इस विषय पर कक्षा में परिचर्चा • वैज्ञानिक खोजो, उपकरणों की सूची बनाइए, जिससे मानव जीवन बदल गया है
अगस्त	**22**	**संचयन (I– भाग)** कल्लू कुम्हार की ऊनाकोटी मेरा छोटा सा निजी पुस्तकालय **व्याकरण** आधार के अर्थ ,गद्यांश अपठित : करना भेद वाक्य पर **लेखन भाग**लेखन अनुच्छेद : संवाद लेखन	• त्रिपुरा राज्य के बारे में अवगत करवाना • साहसिक गतिविधियों तथा प्रयोग की ओर उन्मुख करवाना	• वाचन कौशल – त्रिपुरा राज्य की विकास सबधी जानकारी देना • लेखन कौशल- पाठ्य पुस्तक अभ्यास कार्य	• त्रिपुरा राज्य के भोगोलिक स्तिथि के बारे में बताना • सामूहिक कार्य • पुस्तकालय में नवीन पुस्तकों की सूची बनाना

सितम्बर	**23**	नए इलाके में खुशबु रचते हाथ..... **व्याकरण**समास ,गद्यांश अपठित : **लेखन भाग** : अनौपचारिक पत्र लेखन	• समाजिक असमानता को समझने व दूर कने में सक्षम होंगे	• श्रवण कौशल – बाल श्रमिक विषय पार एक अनुच्छेद लेखन सुनाया जाएगा • वाचन कौशल – स्त्री शिक्षा के महत्तव पर चर्चा	• बाल मजदूरी एक अभिशाप कक्षा में परिचर्चा करना
अक्टूबर	**17**	शुक्र तारे के समान **व्याकरण**चिन्ह विराम ,अनुच्छेद :	• हमेशा कार्यरत रहना ,सज्जनता तथा सहृदयता से सबका मन जीतने के बारे में प्रेरित करना	• श्रवण कौशल – लेखक के विचारों को पहचान कर पाठ का सारांश बता सकेगे • वाचन कौशल – स्वतंत्रता आन्दोलन में गांधी जी का योगदान विषय पार चर्चा करेगे	• जलियांवाला बाग़ में हुई घटना को कक्षा में परिचर्चा करना
नवम्बर	**23**	पुनरावृति			
दिसम्बर	**14**	वार्षिक परीक्षा			

Subject: Mathematics (041/241)

Units	Chapter Name	Marks
I	Number System	10
II	Algebra	20
III	Coordinate Geometry	04
IV	Geometry	27
V	Mensuration	13
VI	Statistics	06
	Total	**80**

Month	No. of Working Days	Content	Learning Outcome:	Skill	Teaching Methodology
Feb /March	**32**	**CHAPTER 1:** **(NUMBERS SYSTEM)** 1.1 Introduction 1.2 Irrational Numbers 1.3 Real Numbers and their Decimal Expansions 1.4 Operations on Real Numbers 1.5 Laws of Exponents for Real Numbers **CHAPTER 2:**	Students will be able to : Recall representation of natural numbers, integers, rational numbers on the number line. Write rational numbers as recurring/ terminating decimals. Use operations on real numbers.	Conceptualization, Critical Thinking, Problem solving	Collaborative Learning, Guided discussion, Inductive and deductive learning, Problem solving with examples.

		(POLYNOMIALS) 2.1 Introduction 2.2 Polynomials in One Variable 2.3 Zeroes of a Polynomial 2.4 Factorization of Polynomials 2.5 Algebraic Identities **CHAPTER 3:** **(COORDINATE GEOMETRY)** 3.1 Introduction 3.2 Cartesian System	Define polynomial in one variable with examples and counter examples. Identify polynomial with specified degree and classify them. Analyze that a quadratic polynomial can have at most 2 zeroes and a cubic polynomial can have at most zeroes. Find zeroes of a polynomial. Acquire knowledge and understanding the basic concepts and terms associated with the coordinate plane. Describe the position of a point with reference to x axis and y-axis. Write the abscissa and ordinate of a point.	Observational skills, Interpretation, Extrapolation Analytical thinking, Problem solving Aptitude Conceptualize, Accuracy, Values like importance of Team work, Environment sensitivity	Collaborative learning, Guided discussion, Independent practice, Problem solving with examples. Inductive and deductive Learning Think, pair and share, mid point discussion, Problem solving with examples
April	**19**	**CHAPTER 4:** **(LINEAR EQUATIONS IN TWO VARIABLES)** 4.1 Introduction 4.2 Linear Equations 4.3 Solution of a Linear Equation	Write linear equation in one variable and extend to that of linear equation in two variables. Write the	Extrapolation, Synthesis, Accuracy , Interpretation Appreciate linearity in nature, self-discipline	Collaborative learning, Guided discussion, Think pair and share.

		CHAPTER 5 : (**INTRODUCTION TO EUCLID'S GEOMETRY)** 5.1 Introduction 5.2 Euclid's Definitions, Axioms and Postulates	equation in general form ax +by +c = 0 Frame linear equations for a given situation. Observe and explain the history of geometry in India and Euclid's geometry. Define the terms like axioms, postulates and theorems. Distinguish between axiom, postulate and theorem	Conceptual understanding, Observational skills	Inductive Deductive Reasoning, Inquiry based learning, Think , pair and share, Independent practice
May/ June	**38**	**CHAPTER 7:** **(TRIANGLES)** 7.1 Introduction 7.2 Congruence of Triangles 7.3 Criteria for Congruence of Triangles 7.4 Some Properties of a Triangle 7.5 Some More Criteria for Congruence of Triangles	Understand that two triangles are congruent if any two sides and the included angle of one triangle is equal to any two sides and the included angle of the other triangle (SAS Congruence). Prove that two triangles are congruent if any two angles and the included side of one triangle is equal to any two angles and the	Conceptual understanding, Recognition of similar figures in nature, Observational skills Ability to visualize	Activity Method, Inductive Deductive Method, Guided discussion, Peer Teaching, Independent Problem solving with examples

			included side of the other triangle (ASA Congruence).		
		CHAPTER 6: (**LINES AND ANGLES)** 6.1 Introduction 6.2 Basic Terms and Definitions 6.3 Intersecting Lines and Non-intersecting Lines 6.4 Pairs of Angles 6.5 Lines Parallel to the Same Line	Acquire knowledge and understanding of basic concepts and geometric terms. Recognize types of pair of angles and classify them.	Conceptual understanding Observational skills Ability to visualize	Think, pair and share, Guided discussion, Collaborative learning, Problem solving with examples
July	**14**	**CHAPTER 8:** (**QUADRILATERALS)** 8.1 Properties of a Parallelogram 8.2 The Mid-point Theorem **CHAPTER 12:** **(STATISTICS)** 12.1 Graphical Representation of Data	Define the properties of different quadrilaterals. Verify angle sum property of a quadrilateral. Apply angle sum property of a quadrilateral in solving questions. Define raw data. Define the terms like statistics, Data	Conceptual understanding Recognition of similar figures in nature. Observational skills Conceptualize, Investigate Logical Thinking, Extracting	Inductive- Deductive reasoning, Problem Solving, Guided discussion, Independent practice Graphic organizer, Think pair and share, Inductive and deductive reasoning, Inquiry

			(Primary, Secondary). Construct a frequency distribution table to classify data.	Information, Problem solving Interpretation, Analytical skills Presentation	based learning, Guided discussion, Collaborative learning, Problem solving with examples.
Aug.	**22**	**CHAPTER 10:** **(AREAS) Heron's Formula** 10.1 Area of a Triangle – by Heron's Formula	Understand "Heron's formula" to find the area of a triangle. Derive the formula for calculating the area of an equilateral triangle, isosceles right-angled triangle using 'Heron's formula'.	Conceptualize, Investigate Logical Thinking	Think, Pair and Share, Inquiry based Learning, Inductive and deductive reasoning, Guided discussion, Collaborative learning
Sep/ Oct.	**39**	**CHAPTER 9:** **(CIRCLES)** 9.1 Angle Subtended by a Chord at a Point 9.2 Perpendicular from the Centre to a Chord 9.3 Equal Chords and their Distances from the Centre 9.4 Angle Subtended by an Arc of a Circle 9.5 Cyclic Quadrilaterals.	Identify circular objects present in the surrounding. Arrive at definition of circle and related concepts radius, circumference, chord, diameter, arc, secant, sector, segment, subtended angle through examples. Understand the properties of circle.	Recognize underlying structure Justification, Analytical thinking, Problem solving	Brain storming, Guided discussion, Collaborative learning, Problem solving

		CHAPTER 11: **(Surface area and Volume)** 11.1 Surface Area of a Right Circular Cone 11.2 Surface Area of a Sphere 11.3 Volume of a Right Circular Cone	Find surface area of right circular cone, sphere, hemisphere. Find volume of right circular cone, sphere, and hemisphere. Apply the concept of perimeter, area and volume in day-to-day life situations. Apply the formula of surface area and volume of 3 D shapes in solving questions.	Conceptualize Evaluate Problem solving, Calculate Formulate, Recognize Structure Critical Thinking	Inquiry Based Learning, Inductive and Deductive Reasoning, Guided learning, Problem solving
Nov.	**23**	**Revision**	Revision and testing skills		Revision and Class tests
Dec.	**14**	**Final Examination (Full Syllabus)**			

Subject: Science (086)

Physics

Month	No. of Working Days	Content	Learning Outcome Students will be able to:	Skills	Teaching Methodology
Feb & March	**32**	**Ch. 7: Motion** 7.1 Describing Motion 7.2 Measuring the Rate of Motion 7.3 Rate of Change of Velocity	• To understand that rest and motion are relative. • Differentiate between distance and displacement • Calculate the average speed in a given situation. • To correlate various physical quantities like distance, displacement, average speed, acceleration and retardation with day to day observations.	➢ Decision making. ➢ Problem Solving ➢ Analysis. ➢ Critical Thinking ➢ Curiosity. ➢ Creativity.	➢ Demonstration cum lecture method ➢ Problem solving based learning ➢ Activity based teaching ➢ 5 E's ➢ Collaborative Learning
April	**19**	**Ch. 7: Motion (cont.)** 7.4 Graphical Representation of Motion 7.5 Equations of Motion 7.6 Uniform Circular Motion	• Understand the importance of graphs for representing different types of motion. • Identify the type of motion from d-t graph and v-t graph. • Understand and evaluate speed, acceleration and distance from various graphs.	➢ Decision making. ➢ Problem Solving ➢ Analysis. ➢ Critical Thinking ➢ Curiosity. ➢ Creativity.	➢ Demonstration cum lecture method ➢ Problem solving based learning ➢ Activity based teaching ➢ 5 E's ➢ Collaborative Learning

May	**23**	**Ch. 8: Force and Laws of Motion** 8.1 Balanced and Unbalanced Forces 8.2 First Law of Motion 8.3 Inertia and Mass 8.4 Second Law of Motion 8.5 Third Law of Motion	**Students will be able to:** • Understand force and its effects • Understand Newton's laws and their applications in daily life • Explain the terms like inertia, impulse and momentum.	➢ Decision making. ➢ Problem Solving ➢ Analysis. ➢ Critical Thinking ➢ Curiosity. ➢ Creativity.	➢ Demonstration cum lecture method ➢ Problem solving based learning ➢ Activity based teaching ➢ 5 E's ➢ Collaborative Learning
June	**15**	**Ch. 9: Gravitation** 9.1 Gravitation 9.2 Free Fall 9.3 Mass **Practical:** To determine the density of solid (denser than water) by using a spring balance and a measuring cylinder.	• Differentiate between g and G; mass and weight. • Calculate quantities using equations of motion during a free fall.	➢ Decision making. ➢ Problem Solving ➢ Analysis. ➢ Critical Thinking ➢ Curiosity. ➢ Creativity.	➢ Demonstration cum lecture method ➢ Problem solving based learning ➢ Activity based teaching ➢ 5 E's ➢ Collaborative Learning
July	**14**	**Ch. 9: Gravitation (cont.)** 9.4 Weight 9.5 Thrust and Pressure 9.6 Archimedes' Principle **Practical:** To establish the relation between the loss in weight of a solid when fully immersed in (a). Tap	• Compare the weight of a body with different 'g'. • Understand the importance of Newton's law of gravitation.	➢ Decision making. ➢ Problem Solving ➢ Analysis. ➢ Critical Thinking ➢ Curiosity. ➢ Creativity.	➢ Demonstration cum lecture method ➢ Problem solving based learning ➢ Activity based teaching ➢ 5 E's

		water (b) Strongly salty water, with the weight of water displaced by it by taking at least two different solids.			➢ Collaborative Learning
August	**22**	**Ch. 10: Work and Energy** 10.1Work 10.2 Energy 10.3 Rate of Doing Work	• List all situations when work is said to be not done • Identify and list different types of energy. • Understand the phenomenon of transformation of energy • Understand the relation between commercial and SI unit of energy.	➢ Decision making. ➢ Problem Solving ➢ Analysis. ➢ Critical Thinking ➢ Curiosity. ➢ Creativity.	➢ Demonstration cum lecture method ➢ Problem solving based learning ➢ Activity based teaching ➢ 5 E's ➢ Collaborative Learning
September	**23**	**Ch. 11: Sound** 11.1 Production of Sound 11.2 Propagation of Sound 11.3 Reflection of Sound **Practical (Physics)**: To verify the laws of reflection of sound	• Understand the phenomena of production as well as the propagation of sound. • Study the characteristics of a sound • Understand the phenomenon of reflection of sound.	➢ Decision making. ➢ Problem Solving ➢ Analysis. ➢ Critical Thinking ➢ Curiosity. ➢ Creativity.	➢ Demonstration cum lecture method ➢ Problem solving based learning ➢ Activity based teaching ➢ 5 E's ➢ Collaborative Learning

October	**17**	**Ch. 11: Sound (cont.)** 11.4 Range of Hearing 11.5 Applications of Ultrasound **Practical** **:** To determine velocity of a pulse propagated through a stretched string/slinky	• Comprehend the concept of ultrasound and its applications. • List the applications of ultrasound • Identify the range of hearing of humans	➢ Decision making. ➢ Problem Solving ➢ Analysis. ➢ Critical Thinking ➢ Curiosity. ➢ Creativity.	➢ Demonstration cum lecture method ➢ Problem solving based learning ➢ Activity based teaching ➢ 5 E's ➢ Collaborative Learning
November	**23**	**REVISION**			
December	**14**	**FINAL TERM**			

Chemistry

Month	No. of Working Days	Content	Learning Outcome	Skills	Teaching Methodology
Feb & March	**32**	**Ch. 1: Matter in Our Surroundings** 1.1 Physical Nature of Matter 1.2 Characteristics of Particles of Matter 1.3 States of Matter 1.4 Can Matter Change its State? 1.5 Evaporation 1.6 **Practical: -** Determination of melting point of ice and boiling point of water	**Students will be able to:** • Particulate nature of matter • Identify states of matter – solId, liquid, gas and its properties • Predict the nature of attraction between particles in each state • Effect of temperature and pressure on such changes of state of matter • Definition of evaporation, sublimation, deposition	➢ Decision making. ➢ Problem Solving ➢ Analysis. ➢ Critical Thinking ➢ Curiosity. ➢ Creativity.	➢ Demonstration cum lecture method ➢ Problem solving based learning ➢ Activity based teaching ➢ 5 E's ➢ Collaborative Learning
April	**19**	**Ch. 2: Is Matter Around Us Pure** 2.1 What is a Mixture? 2.2 What is a Solution? 2.3 Physical and Chemical Changes **Practical–** Preparation of a) true solution of common salt, sugar and alum b) A suspension of soil chalk and fine sand in water c) colloid solution of starch in water and egg albumin/ milk in water and distinguish on the basis of transparency, filtration	• Define and identify pure substance • Differentiate between mixtures on the basis of their properties • Understand the physical and chemical changes associated	➢ Decision making. ➢ Problem Solving ➢ Analysis. ➢ Critical Thinking ➢ Curiosity. ➢ Creativity.	➢ Demonstration cum lecture method ➢ Problem solving based learning ➢ Activity based teaching ➢ 5 E's ➢ Collaborative Learning

		criteria, stability			
May	**23**	**Ch. 2: Is Matter Around Us Pure (cont.)** 2.4 What are the Types of Pure Substances? **Practical**: - Prepare a) a mixture b) a compound using iron filing and Sulphur powder and distinguish between two on basis of I)appearance ii)behavior toward magnet iii) behaviour toward carbon di sulphide iv) effect of heat **Ch. 3: Atoms and Molecules** 3.1 Laws of Chemical Combination	• Classify pure substances • Differentiate between elements and compounds • Define law of conservation of mass • Define law of constant proportion	➢ Decision making. ➢ Problem Solving ➢ Analysis. ➢ Critical Thinking ➢ Curiosity. ➢ Creativity.	➢ Demonstration cum lecture method ➢ Problem solving based learning ➢ Activity based teaching ➢ 5 E's ➢ Collaborative Learning
June	**15**	**Ch. 3: Atoms and Molecules (cont.)** 3.2 What is an Atom? 3.3 What is a Molecule? 3.4 Writing Chemical Formulae	• Define the formation of molecules • Classification of molecules • Understand atomicities of similar and dissimilar elements • Identify the atoms with positive and negative charges	➢ Decision making. ➢ Problem Solving ➢ Analysis. ➢ Critical Thinking ➢ Curiosity. ➢ Creativity.	➢ Demonstration cum lecture method ➢ Problem solving based learning ➢ Activity based teaching ➢ 5 E's ➢ Collaborative Learning
July	**14**	**Ch.3: Atoms and Molecules (Cont.)**	• Utilize knowledge of ions to write chemical formulae	➢ Decision making.	➢ Demonstration

		3.5 Molecular Mass	• Calculate unified mass of particles	➢ Problem Solving ➢ Analysis. ➢ Critical Thinking ➢ Curiosity. ➢ Creativity.	cum lecture method ➢ Problem solving based learning ➢ Activity based teaching ➢ 5 E's ➢ Collaborative Learning
August	**22**	**Ch. 4: Structure of the Atom** 4.1 Charged Particles in Matter 4.2 The Structure of an Atom 4.3 How are Electrons Distributed in Different Orbits (Shells)?	• Understand the discovery of electrons and their properties • Understand discovery of protons and their properties	➢ Decision making. ➢ Problem Solving ➢ Analysis. ➢ Critical Thinking ➢ Curiosity. ➢ Creativity.	➢ Demonstration cum lecture method ➢ Problem solving based learning ➢ Activity based teaching ➢ 5 E's ➢ Collaborative Learning
Sept	**23**	**Ch. 4: Structure of the Atom (cont.)** 4.4 Valency 4.5 Atomic Number and Mass Number 4.6 Isotopes	• Write electronic configurations for first 20 elements • Differentiate between isotopes and isobars • Identify change in chemical properties and uses of isotopes	➢ Decision making. ➢ Problem Solving ➢ Analysis. ➢ Critical Thinking ➢ Curiosity. ➢ Creativity.	➢ Demonstration cum lecture method ➢ Guided Discussion ➢ Activity based teaching ➢ Problem solving based learning ➢ 5 E's ➢ Collaborative Learning
October &November	**40**	**Revision**			
December	**14**	**Final Term**			

Biology

Month	No. of Working Days	Course Content	Learning Outcomes	Skills	Teaching Methodology
March	**22**	**Ch.5 Life processes:** **A. Nutrition:** • Living Being, Basic concept of nutrition, Human Digestive system. **Activity:** • **Starch Test in Food** – Using iodine solution, students test different food items for the presence of starch. • **Compost Making** – Create a compost bin with biodegradable waste to show how nutrients cycle in nature.	**Students will be able to:** • develop the concept of life processes • arrive at the meaning of autotrophic nutrition (photosynthesis) • compare and contrast the steps of opening and closing of stomata • identify the type of heterotrophic nutrition in living organisms on the basis of their features • evolve the meaning & function of enzyme • arrange/sequentially all the steps of digestion of food in human • draw labeled diagram of human digestive system **Students will be able to:** • Interpret the significance of various pathways of glucose catabolism. • Understand the concept of glucose catabolism • investigate about the gas	• Identification • Classification • Evaluation • Developing Hypothesis	• Demonstration cum lecture method • Guided Discussion • Activity based teaching • Problem solving based learning • Peer teaching • Project Method • Heuristic Method • Audio Visual Aids • 5 E's

		B. Respiration: • Respiration,Breathing,Breathing mechanism, • Branchial , Pulmonary, Cutaneous Respiration **Activity:** • Students blow air through a straw into lime water to observe how carbon dioxide turns it milky, demonstrating respiration's role in gas exchange.	released during exhalation • draw and identify the parts of respiratory system • distinguish between pulmonary and branchial respiration.		
April	**20**	**Ch.5 Life processes Contd.....** **C. Transportation** Transportation in animals and plants. **D. Excretion** Excretion, Human Excretory System , Dialysis **Practical** • Preparing a temporary mount of a leaf peel to	**Students will be able to:** • identify the components of transport system in humans • mark the direction of blood flow in human heart • conceptualize the path of circulation through flow chart • compare and contrast structure and function of vein and artery • draw and identify the parts of human heart • emphasize on the importance of lymphatic	• Comprehension • Application • Problem solving • Application Analysis Comprehension Analysis	• Demonstration cum lecture method • Guided Discussion • Activity based teaching • Problem solving based learning • Peer teaching • Hands on Experiment • Inquiry based method • Project Method • Heuristic Method • Audio Visual Aids • 5 E's • Brainstorming

		show stomata. • Experimentally show that carbon dioxide is given out during respiration. • Studying (a) binary fission in Amoeba, and (b) budding in yeast and Hydra with the help of prepared slides.	system • discover the mechanism of transport of water in plants **Students will be able to:** • identify various waste products • understand the importance of filtration and removal of liquid waste (urine) through kidney • draw the detailed structure of nephron • find out the waste products of plants & mechanism of their removal • discover the impact of less intake of water on excretory system		• Collaborative
May	**23**	**Ch.6 Control & Co-ordination** • Nervous System • Co-ordination in plants • Hormones in animals Lab Activity : • To demonstrate how adrenaline affects pulse rate by having students measure their heart rate before and after a short physical activity.	**Students will be able to:** • identify the components of the nervous system, including the central nervous system (CNS) and peripheral nervous system (PNS). • explain the structure and function of neurons, nerve impulses, and synapses • identify plant hormones and their roles in growth, development, and response to environmental stimuli. • apply the understanding of	• Creative thinking • Comprehension • Application • Understanding • Application	• Problem solving based learning • Peer teaching • Hands on Experiment • Inquiry based method • Project Method • cum lecture method • Guided Discussion

		Observing Tropisms in Nature *(Coordination in Plants)* • By taking students outside/school garden to identify phototropism (plants growing towards sunlight), geotropism (roots growing downward), and thigmotropism (tendrils coiling around objects).	control and coordination mechanisms to explain physiological responses to various stimuli in organisms • evaluate the impact of disruptions in control and coordination on health and well-being. • develop hypotheses and experiments to investigate the impact of external factors on control and coordination in both plants and animals.		
June	**15**	**Ch.6 Control & Co-ordination** **Contd.....**	**Students will be able to**: • collaborate with peers to discuss and debate the implications of current research findings in the field of control and coordination • compare the spinal nerve and cranial nerve on the basis of origin and function • interpret the need of chemical coordination • locate the position of endocrine glands in human body • correlate the functions of different hormones as means of information	• Creative thinking • Comprehension • Application • Understanding Application	

			transmission in human body • interpret the significance of feedback mechanism • • discover the effect of stimuli on plant growth and movement • differentiate between Nastic movement and tropic movement • develop the concept of phytohormones.		
July	**13**	**CH - 13 Our Environment** Ecosystem, Food Chain, Food Web, Ozone. **Activity:** • Understanding Ecosystem (Group Discussion & Chart Making) • Energy Transfer in a Food Chain (Experiment & Calculation)	**Students will be able to**: • develop the definition of ecosystem & study the components • classify ecosystem in to various types on the basis of their nature and size • correlate the importance of biotic and abiotic components in all ecosystem • develop the definition of food chain and trophic level • construct the food chain with different trophic levels • establish nutritional relationships among organisms • determine features of food chain	• Understanding • Synthesis Analysis • Comprehension • Problem solving • Application	• Demonstration cum lecture method • Guided Discussion • Activity based teaching • Problem solving based learning • Peer teaching

			• calculate the amount of energy transferred among various trophic levels in a food chain • construct food web formed by interlinking of food chain		
August	**24**	**Ch. – 7 How Do Organisms Reproduce?** Importance of variation Modes of reproduction(Asexual & Vegetative) Sexual Reproduction	**Students will be able to**: • demonstrate an understanding of how variation contributes to the adaptability and evolution of species • describe various methods of asexual reproduction, such as binary fission, budding, and regeneration • analyze the advantages and disadvantages of sexual reproduction compared to asexual reproduction	• Creative thinking • Comprehension • Application • Understanding • Application	• Brainstorming • Collaborative • Inquiry-based learning • Demonstration cum lecture method • Guided Discussion
September	**24**	**Ch. – 7 How Do Organisms Reproduce?** **Contd.....** Reproductive health. **Practical:** Studying (a) Binary fission in Amoeba, (b) Budding in yeast and Hydra with the help of prepared slides.	**Students will be able to**: • discuss the importance of family planning, contraception, and sexually transmitted infection (STI) prevention • analyze factors affecting fertility and infertility, as well as available reproductive technologies • analyze factors affecting fertility and infertility, as	• Analytical thinking • Comprehension • Application • Understanding • Application	

			well as available reproductive technologies • justify the need of reproduction for the perpetuation & continuity of life • justify that sex ratio needs to be maintained to balance the reproductive process and to spread awareness against female foeticide for a healthy society.		
October	**17**	**Ch.8 Heredity** Heredity; Mendel's contribution- Laws for inheritance of traits: Sex determination. **Debate/Discussion on Sex Determination** • Discuss **gender ratio in India**, myths around sex determination, and the importance of **gender equality and legal aspects.** **Activity:** • Provide **different parent genotypes** and ask students to construct **Punnett squares** to predict offspring ratios for monohybrid and	**The learner will be able to**: • Understand the concept of heredity • identify common traits in humans & classify them in different categories • appreciate the efforts of Mendel for studying contrasting traits located on different chromosomes in pea plant • construct a monohybrid & dihybrid cross and calculate the ratio of	• Understanding • Analysis • Application • Problem Solving • Critical thinking • Evaluation • Synthesis, Analysis • Application • Gender sensitization	• Problem solving based learning • Peer teaching • Hands on Experiment • Inquiry based method • Project Method • cum lecture method • Guided Discussion

		dihybrid crosses. **Family Trait Survey** • Ask students to survey their family members for common traits like **eye color, dimples, rolling tongue ability, or attached earlobes**. • They will record the occurrence of these traits in a table and discuss dominant and recessive traits.	offspring's (Punnet square) • co-relate the link between genes present and the traits expressed • analyze the importance of knowledge of gender/sex determination in present situation in India • construct a cross to show possibility of male or female child being born in human.		
November	**22**	Revision			
December	**13**	Final Term			

Subject: Social Science (087)

Month	No. of Working Days	Content	Learning Outcome	Skills	Teaching Methodology
Feb & March	**32**	**<u>Geography</u>** Ch -1 India–Size and Location **<u>Political Science</u>** Ch-1What is Democracy? Why Democracy? **<u>Economics</u>** Ch-1The story of Village Palampur. (PT 1 Only)	• Gain knowledge about India's geography and develop map-reading skills. • Comprehend the concept of democracy analyze its significance and develop communication skills • Understand rural economic activities and apply economic concepts to real- world scenarios.	• Map interpretation • Spatial understandi ng • Critical Thinking • Public speaking. • Observation • Data analysis**.**	➢ Map reading, group activities discussions. ➢ Role play case studies, debates. ➢ Case Study analysis, class discussions.

April	**19**	**Geography** Ch-2 Physical Features of India.	• Understand physical features of India, interpret maps and create models to represent geographical features	• Map interpretation • Model creation.	➢ Map analysis ➢ Physical geography models ➢ Multimedia presentation.
		Economics Ch-2 People as Resource.	• Understand the concept of human capital analyze its role in economic development, and apply economic concepts to real life scenarios.	• Critical analysis • Application of economic concepts	➢ Role playing ➢ Case studies on human capital
		Political Science. Ch-2 Constitutional Design	• Understand constitutional principal, engage in collaborative decision making and comprehend legal framework.	• Collaborative decision-making • Understanding legal frameworks.	➢ Group projects ➢ Mock constitutional drafting ➢ Class discussions
		History Ch-1 The French Revolution.	• Understand the causes and consequences of the French Revolution, and develop critical thinking Skills.	• Analytical thinking Historical reasoning.	➢ Lecture method. ➢ Group discussi ons.

May	**23**	**Political Science** Ch-3 Electoral Politics**.** **Geography** Ch-4 Climate. **Economics** Ch-3 Poverty as a challenge**.**	• Understand electoral processes, critically analyze political dynamics. • Students will comprehend climate patterns engage in scientific inquiry, and interpret climate data. • Understand the challenge of poverty, critically evaluate poverty alleviation • programs	• Critical analysis of political processes • Understanding election dynamics. • Scientific inquiry • Data interpretation. • Critically evaluation Application of economic concepts.	➢ Mock elections ➢ Case studies. ➢ Climate experiments ➢ Multimedia presentations. ➢ Group discussions Case studies on poverty Alleviation program.
June	**15**	**Geography** Ch-5 Natural Vegetation and wildlife (Map only) **Political Science** Ch-4 Working of Institutions	• Understand natural vegetation and wildlife develop environmental awareness and interpret ecosystem maps. • Understand the functioning of democratic institutions.	• Environmental awareness • Map interpretation. • Critical analysis • Teamwork	➢ Eco system mapping ➢ Multimedia presentations ➢ Simulation activities ➢ Case studies ➢ Class debates.

July	**14**	**Geography** Ch-3 Drainage **History** Ch-2 Socialism in Europe and the Russian Revolution. **Geography** Ch-6 Population	• Understand the different rivers the area they serve and their impact on the economy of that area. • Analyze socialist movements and the Russian Revolution, interpret historical sources and develop argumentation skills • Analyze and infer the reasons behind the uneven distribution of population in India.	• Map skill • Critical thinking • Interpretation of historical sources • Argumentation • Analytical Skill	➢ Map Interpretation ➢ Lecture method ➢ Debate ➢ Multimedia resources. ➢ Lecture and discussion method.
August	**22**	**Economics** Ch-4 Food Security in India	• Explore issues related to food security propose solution, and enhance problem-solving and teamwork skill	• Problem-solving • Teamwork skills.	➢ Group Project ➢ Guest lectures from experts.
October	**17**	**History** Ch-5 Pastoralists in modern world (P.T. only)	• Gain a deep understanding of the challenges faced by pastoralists in the modern world. • Foster problem-solving skills by brainstorming potential solutions to mitigate challenges faced by pastoralists.	• Critical Thinking. • Research skills.	➢ Case studies ➢ Interactive discussions ➢ Guest speaker.
November	**23**	Revision			
December	**14**	Final Term			

Subject: Sanskrit(122)

संस्कृतपाठ्यपुस्तक - शैमुषी भाग 1

मासः	कार्यदिवसाः	साहित्य - भागः	व्याकरणम्	शिक्ष्ण उद्देश्यानि	शिक्षण - विधयः
मार्च	**22**	भारतीवसन्तगीतिः	संधिः धातुरूपाणि पत्रम् (औपचारिकम् अनौपचारिकञ्च)	संस्कृत- भाषायां रुचि जागरणम् । व्याकरणविषयेषु दक्षता।	अनुवाचनम् आगमन - निगमनविधी हिन्दी भाषया सह एकीकरणम्
अप्रैल	**20**	स्वर्णकाकः	चित्रवर्णनम् सङ्ख्या शब्दरूपाणि (अकारान्त पु. न., आकारान्त स्त्री.)	छात्रेषु सत्यतायाः विकासः। लोलुप्ततायाः निराकरणम्। व्याकरणविषयेषु नैपुण्यम्।	व्याख्यान - विधिः आगमन - निगमनविधी
मई	**23**	गोदोहनम्	कारक - उपपद विभक्तिः (प्रथमा - चतुर्थी)	भाषा कौशलानां विकासः। जीवने परिश्रमस्य उपयोगितायाः ज्ञानं स्वीकरणम् च॥	अर्थग्रहण विधिः व्याकरणिक विश्लेषणम् संवाद पद्धतिः अभिनय विधिः आगमन - निगमनविधी
जून	**15**	सूक्तिमौक्तिकम्	अपठितगद्यांशः	पद्यैः व्यावहारिकज्ञानम् ।	अर्थग्रहण विधिः

			शब्दरूपाणि (इकारान्त पु., स्त्री.)	छात्रेषु नैतिक - मूल्यानां विकासः| लय, गत्यादिनां ज्ञानम्|	अनुवाचनम्
जुलाई	**14**	भ्रान्तो बालः	उपसर्ग शब्दरूपाणि (उकारान्त पु., स्त्री.)	छात्रेषु धैर्यस्य विकासः| आत्म- संयमस्य भावनायाः विकासः| व्याकरणविषयेषु दक्षता|	व्याख्यान - विधिः व्याकरणिक विश्लेषणम् आगमन - निगमनविधी
अगस्त	**22**	सिकतासेतुः	कारक - उपपद विभक्तिः (पञ्चमी - सप्तमी)	जीवने परिश्रमस्य उपयोगितायाः ज्ञानं स्वीकरणम् च|| कारक विषये दक्षता|	हिन्दी भाषया सह एकीकरणम् संवाद पद्धतिः व्याख्यान - विधिः अभिनय विधिः
सितम्बर	**24**	जटायोः शौर्यम्	अव्यय शब्दरूपाणि (ऋकारान्त पु., स्त्री.)	जीवने उत्साहस्य विकासः| सत्यव्यवहारस्य ग्रहणम्| उचितानुचितस्य ज्ञानम् उचितस्य रक्षणं च|	अनुवाचनम् आगमन - निगमनविधी अर्थग्रहण विधिः
अक्टबर	**17**	पर्यावरणम्	शब्दरूपाणि (हलन्त)	जीवने पर्यावरणस्य महत्वं ज्ञातव्यं संरक्षणं च| वृक्षाणां महत्वम्|	विज्ञान विषयेण सह एकीकरणम् व्याख्यान - विधिः व्याकरणिक विश्लेषणम्
नवम्बर	**23**	पुनराभ्यासः			
दिसम्बर	**14**	वार्षिक परीक्षा			

Subject: Artificial Intelligence (417)

Month	No. of Working Days	Content	Learning Outcome	Skill	Teaching Methodology
March	22	AI Reflection, Project Cycle, and Ethics	Learners will be able to: • Understand the AI project cycle. • Reflect on ethical considerations in AI. • Analyze real-life applications of AI ethics.	Critical Thinking, Ethical Reasoning, Problem-Solving	**Lecture cum Demonstration:** Introduce AI ethics with real-world examples. **Case Studies:** Discuss ethical dilemmas in AI through group activities.
April	19	Data Literacy	Learners will be able to: • Understand the importance of data. • Differentiate types of data (structured, unstructured, semi-structured). • Explore data collection methods.	Analytical Thinking, Data Interpretation	**Lecture cum Demonstration:** Explain data collection, organization, and visualization. **Hands-on Activity:** Students practice working with datasets.
May	23	Math for AI (Statistics & Probability)	Learners will be able to: • Understand key statistical concepts. • Apply probability in AI decision-making. • Use mean, median, and mode in AI applications.	Problem-Solving, Logical Thinking, Analytical Skills	**Lecture cum Demonstration:** Explain statistical concepts with AI examples. **Practical Exercises:** Solve AI-related probability problems.
June	15	Introduction to Generative AI	Learners will be able to: • Explain generative AI and its applications. • Identify AI-generated content (images, text, and music). • Explore ethical concerns in generative AI.	Creativity, Critical Thinking, Problem-Solving	**Lecture cum Demonstration:** Introduce AI-generated media with real-life examples. **Discussion:** Analyze benefits and ethical concerns of generative AI.
July	14	Introduction to Python	Learners will be able to: • Understand Python programming basics. • Write simple Python scripts	Coding Skills, Logical Thinking, Problem-Solving	**Lecture cum Demonstration:** Explain Python syntax and basics. **Hands-on Coding:** Students practice writing Python programs.

			• Use loops, conditions, and functions in Python.		
August	22	Communication Skills-I, Self-Management Skills-I	Learners will be able to: • Develop verbal and non-verbal communication skills. • Understand self-management techniques. • Improve time management and goal setting.	Understanding, Self-Awareness, Organizational Skills	**Lecture cum Demonstration:** Discuss communication and self-management techniques. **Role-Playing Activities:** Improve interpersonal skills.
September	23	ICT Skills-I	Learners will be able to: • Elaborate on communication skills. • Explain the use of ICT skills. • Identify different processes in self-management.	Understanding, Recall, Recognition	**Lecture cum Demonstration:** Introduce communication and ICT skills with real-world examples. **Visual Aids:** Use images, props, or presentations to enhance understanding.
October	17	Entrepreneurial Skills-I, Green Skills-I	Students will be able to: • Define entrepreneurial and green skills. • Recognize the importance of sustainable business practices. • Explore various green initiatives.	Recall, Reorganization, Critical Thinking, Analyzing	**Demonstration:** Conduct an interactive discussion introducing green skills, benefits, and security concerns. **Case Studies:** Discuss real-world examples of entrepreneurs and eco-friendly businesses.
November	23	Revision	Students will revise all the topics covered in the syllabus to ensure proper understanding and preparation for exams.	Problem-Solving, Analytical Skills	**Practice Sessions:** Conduct revision tests and quizzes. **Doubt-Solving Sessions:** Address individual doubts and difficulties.
December	14	Final Term Exam	Students will appear for final exams to assess their learning and understanding.	Exam Preparation, Time Management	**Mock Tests:** Conduct final exams. **Performance Analysis:** Provide feedback and improvement strategies.