

Bal Bharati PUBLIC SCHOOL

Solan

ANNUAL PEDAGOGY PLAN (2024-25)

Class: IX



https://bbpssolan.balbharati.org)

SUBJECT: ENGLISH (184)

***** BOOKS

Beehive - Course Book- NCERT book **Moments -** Supplementary Reader NCERT book

	NO. OF				
MONTH	WORKING	COURSE	LEARNING OUTCOMES	SKILL	TEACHING METHOD
	DAYS	CONTENT			
March	22	Beehive- The Fun	-To enable the students about Robots and	Evaluate,	• Guided
		They Had	Robotic Teachers.	analyze,	• Discussion
		The Road Not Taken		recall,	• Problem-solving
			- Identify and explain the significance of	 extrapolate, 	Based learning Peer
		Moments- The Lost	essential elements in poetry.	think	teaching
		Child		critically	• Self-assessment
			-Understanding and appreciation of the	curiosity	
		Writing- Story	works of Robert Frost		
		Writing			
			-To locate specific information while reading		
		Grammar- Verb	-Development of comprehension skills.		
		Forms			
			- To be able to use correct grammatical		
			structure in a sentence.		
April	22	Beehive- Wind,	- To develop an understanding of the main	 Evaluate, 	• Listening
			idea of the poem.	Recall,	comprehension
		The Sound of Music		Extrapolate	 Conversation
			-Understanding of literary devices	Observation	 Dialogue
		Moments- The	-To locate specific information while	Curiosity	Writing
		Adventures of Toto	reading.		
			To understand and encrething with the		
			- 10 understand and empathize with the		
			central character.		

		Writing- StoryWritingGrammar- Editing,Tenses	-Understanding and appreciation of the title - Inculcating sensitivity towards animals -Development of comprehension skills.		
Мау	18	 Beehive- The Little Girl, The Lake Isle 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 the main 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	18	Beehive - A Truly Beautiful Mind Rain on the RoofMoments- In the Kingdom of FoolsWriting- Descriptive Paragraph IntegratedGrammar - (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 	DictionaryInternet , Newspaper

July	18	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	24	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 writing skills 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 	 Conceptualizat ion Analytical thinking Simulate Collaborative effort and team spirit 	 Guided Discussion Problem-solving based learning Peer teaching Self- assessment
September	18	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	-The learners will be able to identify and		
		Leai	in poetry.		
		Writing - Descriptive			
		Paragraph	-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	20	Beehive - Kathmandu	-To facilitate the understanding of the text and enhance vocabulary.	 Evaluate, analyze, recall, extrapolate, 	 Listening Comprehension Conversation /
		Moments - A House is Not a Home The Beggar	-To enhance the ability to move beyond the text for extrapolation.	unitk critically	Dialogue,Symposium
		Writing - Descriptive Paragraph	-To develop the writing skills of the students. -Read texts actively recognize key passages raise questions.		
		Grammar – Gap filling, Editing.	- Acquisition of grammatical accuracy.		
November	22	REVISION			
December	24		ANNUAL EXAMINA	ATION	

SUBJECT: HINDI (085)

- ≻ पाठ्यपुस्तक
- 💠 स्पर्श भाग-1
- 💠 संचयन भाग-1
- 🛠 व्यावहारिक व्याकरण

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 नुनासिक 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	22	स्पर्श (1-भाग) अब कैसे छूटे राम नाम तुम कब जाओगे अतिथि	• मानवीय मूल्यों की ओर प्रेरित करना	 वाचन कौशल - पदों के मूल्य उद्देशयों से परिचित श्रवण कौशल- भाषा की 	 रदैस के पदों को गाकर सुनाना अपने घर आए अतिथियों का सत्कार का अनुभव

		व्याकरण : उपसर्ग	 अतिथि सत्कार के 	विविध प्रकारों की पहचान	कक्षा में स्नायेंगे
		लेखन भाग : संवाद लेखन	परम्पराओं के बारे	कर पायेगे और पढ़ते	
			में ज्ञान प्राप्त	समय म्हावरों के अर्थ	
			करवाना	को समझ कर वाक्य में	
				प्रयोग करेगे	
मई	18	रहीम के दोहे	 दोहे के माध्यम से 	 पठन कौशल- क्रमानुसार 	• पीपीटी
		संचयन (I- भाग)	समाज की कुरीतियों	पाठ का पठन करना	 सामूहिक चर्चा
		गिल्लू	से अवगत करवाना	• वाचन कौशल - अपना	• कहानी लेखन
		व्याकरण :प्रत्यय		मनपसंद दोहा गायन के	
		लेखन भाग : अनौपचारिक पत्र	• पशु पक्षियों के प्रति	रूप में प्रस्तुत करना	
			प्रेम एवं उनके सरक्षण	 श्रवण कौशल - दोहों को 	
			की भावना जागृत	ध्यान से सुनकर उनका	
			करना	अर्थ ग्रहण करना	
जून	18	गीत अगीत	 प्राकृतिक सौंदर्य तथ 		 प्रकृति से समबन्धित
		संचयन (I- भाग)	जीव जन्तुयों के	• श्रवण कौशल - छात्र अंश	गीत कक्षा में सुनाना
		समृति	मानत्व, माविया राग	का वाचन करते हुए	 अपने बुजुर्गो से उनकी
			और प्रेम भाव जागृत	शब्दों के अर्थ सहित	बचपन की कहानियाँ
			करना	भावो पर चर्चा	सुनना तथ कक्षा में
		व्याकरण :स्वर संधि	 कठिन परिस्थितियों 	 पठन कौशल - समूह में 	बताना
		लेखन भाग : चित्र वर्णन	का सामना करने की	बैठे छात्र उचित आरोह	
			सीख	अवरोह तथा शुद्ध	
				उच्चारण के साथ पाठ	
				पठन करेगे	

जुलाई	18	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	24	संचयन (l- भाग) कल्लू कुम्हार की ऊनाकोटी मेरा छोटा सा निजी पुस्तकालय व्याकरणअर्थ के ,अपठित गद्यांश : आधार पर वाक्य भेद करना लेखन भागअनुच्छेद लेखन : 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	18	नए इलाके में खुशबु रचते हाथ व्याकरणसमास ,अपठित गद्यांश : 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 मजद्री एक अभिशाप कक्षा में परिचर्चा करना
अक्टूबर	20	शुक्र तारे के समान व्याकरण विराम चिन्ह ,अनुच्छेद :	 हमेशा कार्यरत रहना ,सज्जनता तथा सहृदयता से सबका मन जीतने के बारे में प्रेरित 	 श्रवण कौशल - लेखक के विचारों को पहचान कर पाठ का सारांश बता सकेगे वाचन कौशल - स्वतंत्रता 	 जलियांवाला बाग़ में हुई घटना को कक्षा में परिचर्चा करना

		करना	आन्दोलन में गांधी जी का			
			योगदान विषय पार चर्चा			
			करेगे			
नवम्बर	22	 पुनरावृति				
दिसम्बर	13	वार्षिक	⁵ परीक्षा			

SUBJECT: MATHEMATICS (041/241)

Month	No. of Workin g Days	Content	Learning Outcome: Students will be able to :	Skill	Teaching Methodology
February & 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:	Recall representation of natural numbers, integers, rational numbers on the number line. write rational numbers as recurring/ terminating decimals. Use operations on real numbers. Give examples of non- recurring/non-terminating decimals.	Conceptualization Critical thinking, Expressing in mathematical Language 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	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.	Observational skills Interpretation Extrapolation Analytical thinking Verification Synthesis Problem solving Aptitude	Collaborative learning Guided discussion Independent practice Problem solving with examples. Inductive and deductive Learning
		CHAPTER 3: (COORDINATE GEOMETRY) 3.1 Introduction 3.2 Cartesian System	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.	Conceptualize Accuracy Values like importance of Team work Environment sensitivity	Think, pair and share, mid point discussion, Problem solving with examples
April	22	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 equation in general form $ax +by +c = 0$ Frame linear equations for a given situation.	Extrapolation, Synthesis, Accuracy Interpretation Appreciate linearity in nature, self-discipline	Collaborative learning, Guided discussion, Think pair and share, Brain storming, graphic organizer Brainstorming

		CHAPTER 5 : (INTRODUCTION TO EUCLID'S GEOMETRY) 5.1 Introduction 5.2 Euclid's Definitions, Axioms and Postulates	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	36	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 included side of the other triangle (ASA Congruence).	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
		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	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, Brainstorming, Guided discussion, Collaborative learning, Problem solving with examples

		6.5 Lines Parallel to the			
		Same Line			
July	18	CHAPTER 8: (QUADRILATERALS) 8.1 Properties of a Parallelogram 8.2 The Mid-point Theorem	Define the properties of different quadrilaterals. Verify angle sum property of a quadrilateral. Apply angle sum property of a quadrilateral in solving questions.	Conceptual understanding Recognition of similar figures in nature Observational skills Ability to visualize	Inductive- Deductive reasoning, Problem Solving, Guided discussion, Independent practice, Brain storming
		CHAPTER12: (STATISTICS) 12.1 Graphical Representation of Data	Define raw data. Define the terms like statistics, data (primary, secondary). Construct a frequency distribution table to classify data	Conceptualize Investigate Logical Thinking Extracting information Problem solving Interpretation Analytical skills Presentation	Graphic organizer, Think pair and share, Inductive and deductive reasoning, Brainstorming, inquiry based learning, Guided discussion, collaborative learning, Problem solving with examples
August	24	CHAPTER 10: (AREAS) Heron 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
September & October	38	CHAPTER 9: (CIRCLES) 9.1 Angle Subtended by a Chord at a Point 9.2 Perpendicular from the	Identify circular objects present in the surrounding. Arrive at definition of circle	Recognize underlying structure Justification	Brain storming , Guided discussion , Collaborative learning, Problem solving

		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.	and related concepts radius, circumference, chord, diameter, arc, secant, sector, segment, subtended angle through examples. Understand the properties of circle.	Analytical thinking 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 Identify, visualize	Brain storming, inquiry based learning, Inductive and deductive reasoning, guided learning, problem solving	
November	22		REVI	SION		
December	13	FINAL EXAMINATION				

SUBJECT: SCIENCE (086)

PHYSICS

Month	No. of Working Days	Content	Learning Outcome Students will be able to:	Skills	Teaching Methodology
March	22	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. 	 Analysis. Critical Thinking Curiosity. Confidence. Motivation. Creativity. Communication. Decision making. Problem Solving 	 Demonstration cum lecture method Guided Discussion Activity based teaching Problem solving based learning 5 E's Collaborative Learning
April	22	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. 	 Analysis. Critical Thinking Curiosity. Confidence. Motivation. Creativity. Communication. Problem solving Decision making 	 Demonstration cum lecture method Guided Discussion Activity based teaching Problem solving based learning 5 E's Collaborative

					Learning
May	18	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	 Understand force and its effects Understand Newton's laws and their applications in daily life Explain the terms like inertia, impulse and momentum. 	 Analysis. Critical Thinking Curiosity. Confidence. Motivation. Creativity. Communication. Decision making Problem Solving 	 Demonstration cum lecture method Guided Discussion Activity based teaching Problem solving based learning 5 E's Collaborative Learning
June	18	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. 	 Analysis. Critical Thinking Curiosity. Confidence. Motivation. Creativity. Communication. Decision making Problem Solving 	 Demonstration cum lecture method Guided Discussion Activity based teaching Problem solving based learning 5 E's Collaborative Learning
July	18	Ch. 9: Gravitation (cont.) 9.4 Weight 9.5 Thrust and Pressure 9.6 Archimedes' Principle	 Compare the weight of a body with different 'g'. Understand the importance of Newton's law of gravitation. 	 Analysis. Critical Thinking Curiosity. Confidence. 	 Demonstration cum lecture method Guided Discussion Activity based

		Practical: To establish 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 displaced by it by taking at least two different solids.		 Motivation. Creativity. Communication. Decision making Problem Solving 	teaching ↓ Problem solving based learning ↓ 5 E's ↓ Collaborative Learning
August	24	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. 	 Analysis. Critical Thinking Curiosity. Confidence. Motivation. Creativity. Communication. Decision making Problem Solving 	 Demonstration cum lecture method Guided Discussion Activity based teaching Problem solving based learning 5 E's Collaborative Learning
September	18	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. 	 Analysis. Critical Thinking Curiosity. Confidence. Motivation. Creativity. Communication. Decision making Problem solving 	 Demonstration cum lecture method Guided Discussion Activity based teaching Problem solving based learning 5 E's

October	20	Ch. 11: Sound (cont.) 11.4 Range of Hearing 11.5 Applications of Ultrasound	 Comprehend the concept of ultrasound and its applications. List the applications of ultrasound 	 Analysis. Critical Thinking Curiosity. 	 Collaborative Learning Demonstration cum lecture method Guided Discussion
		Practical To determine velocity of a pulse propagated through a stretched string/slinky	 Identify the range of hearing of humans 	 Confidence. Motivation. Creativity. Communication. Decision making Problem Solving 	 Activity based teaching Problem solving based learning 5 E's Collaborative Learning
November	22		REVISION		
December	13		ANNUAL EXAMINA	ATION	

CHEMISTRY

Month	No. of Working Days	Content	Learning Outcome Students will be able to:	Skills	Teaching Methodology
March	22	 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 Practical: - Determination of melting point of ice and boiling point of water 	 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 	 Analysis. Critical Thinking Curiosity. Confidence. Motivation. Creativity. Communication. Decision making. Problem Solving 	 Demonstration cum lecture method Guided Discussion Activity based teaching Problem solving based learning 5 E's Collaborative Learning
April	22	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	 Define and identify pure substance Differentiate between mixtures on the basis of their properties Understand the physical and chemical changes associated 	 Analysis. Critical Thinking Curiosity. Confidence. Motivation. Creativity. Communication. Problem solving Decision making 	 Demonstration cum lecture method Guided Discussion Activity based teaching Problem solving based learning 5 E's Collaborative Learning

		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 criteria, stability			
May	18	 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) behavior toward carbon disulphide 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 	 Analysis. Critical Thinking Curiosity. Confidence. Motivation. Creativity. Communication. Decision making Problem Solving 	 Demonstration cum lecture method Guided Discussion Activity based teaching Problem solving based learning 5 E's Collaborative Learning
June	18	Ch. 3: Atoms and Molecules	Define the formation of molecules	> Analysis	
		3.2 What is an Atom?	Classification of	Critical Thinking	Demonstration cum

		3.3 What is a Molecule?3.4 Writing Chemical Formulae	 molecules Understand atomicities of similar and dissimilar elements Identify the atoms with positive and negative charges 	 Curiosity. Confidence. Motivation. Creativity. Communication. Decision making Problem Solving 	 lecture method Guided Discussion Activity based teaching Problem solving based learning 5 E's ↓ Collaborative Learning
July	18	Ch.3: Atoms and Molecules (Cont.) 3.5 Molecular Mass	 Utilize knowledge of ions to write chemical formulae Calculate unified mass of particles 	 Analysis. Critical Thinking Curiosity. Confidence. Motivation. Creativity. Communication. Decision making Problem Solving 	 Demonstration cum lecture method Guided Discussion Activity based teaching Problem solving based learning 5 E's Collaborative Learning
August	24	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 	 Analysis. Critical Thinking Curiosity. Confidence. Motivation. Creativity. Communication. Decision making Problem Solving 	 Demonstration cum lecture method Guided Discussion Activity based teaching Problem solving based learning 5 E's Collaborative Learning

SEPTEMBER	18	 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 	 Analysis. Critical Thinking Curiosity. Confidence. Motivation. Creativity. Communication. Decision making Problem solving 	 Demonstration cum lecture method Guided Discussion Activity based teaching Problem solving based learning 5 E's Collaborative Learning
October & November	42		REVISIO	DN	
December	13		ANNUAL EXAM	IINATION	

BIOLOGY

Month	No. of Working Days	Content	Learning Outcomes	Skills	Teaching Methodology
March & April	44	CH – 5 THE FUNDAMENTAL UNIT OF LIFE Cell as a basic unit of life; prokaryotic and eukaryotic cells, multicellular organisms; cell membrane and cell wall. cell organelles and cell inclusions; chloroplast, mitochondria, vacuoles.	 Students will be able to Define a cell as the fundamental unit of life. Differentiate between prokaryotic and eukaryotic cells in terms of structure and complexity. Identify and describe the major cell organelles (e.g., nucleus, endoplasmic reticulum, Golgi apparatus, ribosomes) and their functions. 	 Application Decision making Comprehension Analysis 	 Lecture cum Demonstration Guided Discussion AV-Aids Collaboration
May & June	36	CH – 5 THE FUNDAMENTAL UNIT OF LIFE (Contd) Cell organelles and cell inclusions; Endoplasmic reticulum, Golgi apparatus, Nucleus, Chromosomes - basic structure, number.	 Recognize how the cellular structure aligns with specific cellular functions. Draw animal cell and plant cell and label their organelles Appreciate the co-ordination and co-operation of different cell organelles for proper functioning of a cell 	 Critical thinking Evaluation Analysis Recognition 	 Demonstration Audio-Visual Aids Activity Based Brainstorming Collaborative

		PRACTICAL: Preparation of stained temporary mounts of (a) onion peel, (b) human cheek cells & to record observations and draw their labeled diagrams.			
July	18	CH. 6 TISSUE Plant Tissues, Meristematic tissues, Simple Permanent Tissues Simple Parenchyma, Collenchyma, Sclerenchyma tissues	 Students will be able to Define plant tissues and their significance in the growth and development of plants. Classify plant tissues into meristematic and permanent tissues 	 Explanation Analyse Comprehension Understanding 	 Lecture cum Demonstration 5 E's Guided Discussion Project Method Collaboration
August	24	CH. 6 TISSUE (Contd) Complex Tissues - Xylem and Phloem Animal tissues, Epithelial Tissues, Connective Tissue, Nervous Tissue	 Discover the relationship between different types of permanent tissue on the basis of location, structure and function. Differentiate between meristematic tissue and permanent tissue 	 Decision making Analysis Critical thinking Evaluation 	 Lecture cum Demonstration Guided Discussion Collaboration 5 E's
September& October	28	CH.12 IMPROVEMENT IN THE FOOD RESOURCES	 Students will be able to Identify the nutrients required for growing plants. Evaluate the effects of nutrient 	 Understanding Analysis Critical thinking 	• Lecture cum Demonstration method

		Plant and animal breeding and selection for quality improvement and management; Use of fertilizers and manures; Protection from pests and diseases; Organic farming.	 deficiency. Adopt the different methods of preparing manure. Compare the qualities of manure and fertilizers in maintaining soil fertility Evaluate the importance of mixed farming. Analyze & appreciate the role of some ancient techniques in improving crop production Interpret the correct way of cattle farming, poultry, fish farming and apiculture 	 Evaluation Classification Creativity Explanation 	 Guided Discussion Project Method Collaboration 5 E's
November	22		REVISION		
December	13		ANNUAL EXAMINATION		

SUBJECT – SOCIAL SCIENCE (087)

Month	No. of Working Days	Content	Learning Outcome	Skills	Teaching Methodology
March	22	<u>Geography</u> India – Size and Location	Gain knowledge about India's geography and develop map-reading skills.	 Map interpretation Spatial understanding 	Map reading, group activities, discussions.
		Political Science What is Democracy? Why Democracy?	• Comprehend the concept of democracy, analyze its significance, and develop communication skills	Critical ThinkingPublic speaking.	Role play case studies, debates.
		Economics The story of Village Palampur. (PT 1 Only)	• Understand rural economic activities and apply economic concepts to real- world scenarios.	ObservationData analysis.	Case Study analysis, class discussions.
April	22	<u>Geography</u> Physical Features of India.	• Understand physical features of India, interpret maps, and create models to represent geographical features	Map interpretationModel creation.	 Map analysis Physical geography models Multimedia presentation.

		<u>Economics</u> 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
		<u>Political Science.</u> 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 The French Revolution.	• Understand the causes and consequences of the French Revolution, and develop critical thinking skills.	 Analytical thinking Historical reasoning. 	Lecture Group discussions.
May	18	Political Science Electoral Politics.	• Understand electoral processes, critically analyze political dynamics.	 Critical analysis of political processes Understanding election dynamics. 	 Mock elections Case studies.
		<u>Geography</u> Climate.	• Students will comprehend climate patterns, engage in scientific inquiry, and interpret climate data.	Scientific inquiryData interpretation.	 Climate experiments Multimedia presentations.

June	18	Economics Poverty as a challenge. <u>Geography</u> Natural Vegetation and wildlife	 Understand the challenge of poverty, critically evaluate poverty alleviation programs. Understand natural vegetation and wildlife, develop environmental awareness, and interpret 	 Critically evaluation Application of economic concepts. Environmental awareness Map interpretation. 	 Group discussions Case studies on poverty Alleviation program. Ecosystem mapping Multimedia presentations
		Political Science Working of Institutions	 Understand the functioning of democratic institutions, critically analyze their role. 	Critical analysisTeamwork	 Simulation activities Case studies Class debates.
July	18	<u>Geography</u> Drainage	• Understand the different rivers, the area they serve and their impact on the economy of that area.	Map skillCritical thinking	 Map Interpretation Lecture method
		<u>History</u> Socialism in Europe and the Russian Revolution.	• Analyze socialist movements and the Russian Revolution, interpret historical sources and develop argumentation skills	Interpretation of historical sourcesArgumentation	 Debate Multimedia resources.

		<u>Geography</u> Population	• Analyze and infer the reasons behind the uneven distribution of population in India.	Analytical Skill	 Lecture and discussion method.
August	24	Economics Food Security	• 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.
September	18	Political Science Democratic rights.	 Understand democratic rights. Analyze the importance of democratic rights. 	Critical Thinking.Argumentation.	 Role play. Case Studies. Debates
October	20	<u>Historv</u> 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	22	REVISION			
December	13	ANNUAL EXAMINATION			

SUBJECT – INFORMATION TECHNOLOGY (402)

Month	No. of Working Days	Content	Learning Outcome	Skill	Teaching Methodology
March	22	Communication Skills-I Self-Management Skills-I ICT Skills-I	 Learners will be able to: Elaborate the communication skills. Tell the use of ICT skills. Tell the different processes introduced in self -management. 	Understanding, recall, recognition.	Lecture cum Demonstration: Begin the chapter with a live demonstration introducing communication skills and ICT skills. Visual Aids: Use visuals, such as pictures or props, to enhance understanding and knowledge
April	22	Data Entry & Keyboarding Skills	 Learners will able to: Use keyboard and mouse for data entry Use typing software Identify the keys and its use on the keyboard Identify the user interface of typing tutor 	Attention to detail, recall, creativity, critical thinking.	Lecture cum demonstration: Conduct an interactive discussion introducing the Data entry. Present a live demonstration using keyboard and typing tutor. Group Discussion: Facilitate group discussions to share their findings and experiences.
May	18	Introduction to IT- ITeS industry	 Learners will be able to: Appreciate the applications of IT Identify and list the various IT enabled services Observe the application of IT in 	Understanding, Critical thinking, problem solving, analyzing.	Interactive Recap: Conduct an interactive session recapping the features of IT - ITeS, emphasizing key concepts of layers and filters.

			various areas		Peer Teaching: Encourage students to share their knowledge, promoting
June	18	Entrepreneurial Skills-I Green Skills-I Introduction	 Learners will be able to: Define the different skills Introduce entrepreneurial skills. Elaborate the concept of green skills. 	Recall, reorganization, Critical thinking, analyzing	Demonstration:Conduct an interactivediscussion introducing greenskills, benefits and securityconcerns.Peer Teaching:Encourage students to sharetheir knowledge, promotingcollaborative learning,
July	18	Data Entry & Keyboarding Skills	 Learners will be able to: Typing text and interpret results Use Pointing device – Mouse, Mouse operations. Practice to improve typing using typing tutor software. 	Recall Problem solving, Critical thinking, analyzing	 Lecture cum Demonstration: Begin the chapter with a live demonstration using typing tutor. Peer Teaching: Encourage students to share their knowledge, promoting collaborative learning,
August	24	Digital Documentation	 Learners will be able to: Create a document using a word processor Apply Editing features Apply formatting features Create and work with tables Use Print Options Understand and apply mail merge. 	Creativity, Problem solving, Critical thinking	Lecture cum Demonstration: Provide a live demonstration creating a document and applying its features. Visual Aids: Use visuals, such as pictures or props, to enhance understanding and creativity.
September	18	Electronic Spreadsheet	Learners will be able to:Create a SpreadsheetApply formula and functions in	Creativity, problem solving, analytical skill	Lecture cum Demonstration: Conduct an interactive session demonstrating Spreadsheet to

			 spreadsheet Format data in the spreadsheet Understand and apply Referencing Create and insert different types of charts in a spreadsheet 		have the desired output, emphasizing key concepts of formulas and functions.
October	20	Digital Presentation	 Learners will be able to: Understand features of an effective presentation Create a presentation Work with slides Format text and apply animations Create and use tables Insert and format image in presentation 	Creativity, problem solving, Recall. Critical thinking	Lecture cum Demonstration: Conduct an interactive session demonstrating Digital presentation to have the desired output and design Peer Teaching: Encourage students to share their knowledge, promoting collaborative learning,
November	22	REVISION			
December	13	ANNUAL EXAMINATION			