Class IX
2026 – 27
Book List

English	**1. Kaveri : NCERT**
Hindi	**1. गंगा** **2. व्याकरण मनस्वी**
Mathematics	**Ganita Manjari (NCERT)**
Science	**Exploration : Textbook for Science for Grade IX**
Social science	**Gateway to Social Science (PART-I & II) by Goyal Brothers Prakashan**
Art Education	**-**
Health & Physical Education	**-**
Artificial Intelligence	**Artificial Intelligence (417) by Orange Publications**

ENGLISH

Months/ Periods	Literature	Grammar	Writing	Suggested Activities
April (26)	How I Taught My Grandmother to Read Bharat Our Land	Determiners Tenses	Notice Writing	Write a diary entry from the grandmother's perspective about learning to read
May (21)	The Pot Maker Gifts of Grace: Honouring Our Vocations	Noun Clause Relative Clause	Poster	Your school is organizing an "Artisan Fair" to promote and honour local craftsmen and their traditional skills. As a member of the Cultural Club design a poster to announce this event.
July (26)	Twin Melodies A Friend Found in Music	Modals SV Agreement	Letter to Editor	Prepare five emojis that represent non-lexical expressions (sounds or utterances that express feelings but are not actual words). Example: Expression: "Hmm…"(thinking) 🤔
August (26)	Vitamin-M I Cannot Remember My Mother	Reported Speech	Article writing	Make a timeline showing the grandfather's journey from the chapter Vitamin- M
September (10)	Revision	Conditional Clause (Type 1)	Narrative Essay	-

October (24)	The World of Limitless Possibilities Nine Gold Medals 3	Integrated Grammar Practice	-	Draft a Notice informing a special interactive session with a Paralympic winner. During this event, students will have a wonderful opportunity to ask questions and interact with the guest.
November (20)	Winds of Change Canvas of Soil	Integrated Grammar Practice	-	Imagine a traditional 'hand fan' can speak. Prepare 5–6 interview questions with answers you would ask the hand fan about its feelings, memories of the past, and thoughts about modern technology.
December (26)	Carrier of Words Words	Integrated Grammar Practice	Speech writing	Prepare two postcards and write a condolence message to your friend who has recently lost her grandfather. Also write a suitable reply on behalf of your friend thanking you for your support during this difficult time.
January (20)	Follow That Dream Believe in Yourself	Integrated Grammar Practice	E mail writing	
February (13)	Revision			

Periodic Test 1

Literature- How I Taught My Grandmother to Read
Bharat Our Land
Grammar- Determines
Tenses
Writing - Notice Writing

Periodic Test 2

Literature- The Pot Maker
Gifts of Grace: Honouring Our Vocations
Grammar- Clauses
SV agreement
Writing - Letter to Editor

Mid Term Examination

All topics covered from April to September

Periodic Test 3

Literature- The World of Limitless Possibilities
Nine Gold Medals 3
Grammar- Integrated Grammar
Writing- Narrative Essay

Annual Examination

All topics covered from April to January

Learning Objectives

Literature

- to comprehend the main points and central idea
- to understand the underlying meaning of the text
- to analyse the personality of a character
- to develop critical thinking and cultural awareness

Competencies:

Reading & Comprehension, critical & creative thinking and appreciate different forms of literature.

Grammar

- to demonstrate an understanding of grammatical structures
- to work on integrated grammar exercises
- to form sentences in indirect speech
- to develop linguistic competence and logical thinking

Competencies:

Linguistic Competence, Accuracy & Editing Skills, Logical Thinking.

Writing

- to organize and present ideas coherently using appropriate vocabulary
- to use an appropriate style and format
- to express ideas in grammatically correct English, using appropriate punctuation and cohesion devices
- to develop critical and analytical skills

Competencies:

Creative writing, Critical & Analytical Skills, Effective Communication

Listening

- to listen to a wide range of oral text and respond to them
- to listen critically for specific information.
- to follow instructions and directions

Competencies:

Active Listening Skills, Following instructions accurately, Vocabulary recognition.

Speaking

- to use language effectively
- to develop confidence in spoken English
- to use appropriate tone, posture, gesture, pause and to maintain eye contact while speaking

Competencies:

Oral Communication Skills, Interpersonal Skills, Confidence Building

Reading

- to read silently at varying speed and identify the main points
- to deduce the meaning of unfamiliar words in a given context
- to develop interpretative skills

Competencies:

Interpretative Skills, Critical Evaluation, Speed & Efficiency

Activities

- to integrate visual elements with text
- to develop experiential learning
- to demonstrate social awareness and responsibility

SDGs

3 -Good health and well-being, **4 -** Quality Education, **5-**Gender Equality, **8** - Decent work and economic growth, **10** -Reduced inequalities, **16 -** Peace, justice and strong institutions

हिंदी

हिंदी पाठ्यपुस्तक : 1- गंगा 2- व्याकरण मनस्वी					
माह / कालांश	इकाई	विषयवस्तु			कला समेकित गतिविधियाँ
		गद्य	पद्य	व्याकरण	
अप्रैल (24)		'दो बैलों की कथा' स.वि.ल. 10,15,16 असमानतओं में कमी, शांति-न्याय, थल पर जीवन।	-	पत्र, अपठित गद्यांश और उपसर्ग-प्रत्यय स.वि.ल. 4,17 गुणवत्तापूर्ण शिक्षा, लक्ष्यों के लिए भागीदारी।	यदि बैल वापस न लौटते तो कहानी काअंत कैसे होता? स.वि.ल. 4 गुणवत्तापूर्ण शिक्षा।
मई (17)		-	'पद' (रैदास) स.वि.ल. 10,12 असमानताओं में कमी, जिम्मेदारी पूर्ण उपभोग और उत्पादन।	अलंकार,संवाद लेखन, अनुच्छेद लेखन। स.वि.ल. 4,17 गुणवत्तापूर्ण शिक्षा, लक्ष्यों के लिए भागीदारी।	निर्गुणधारा के किसी एक कवि का सचित्र वर्णन कीजिए। स.वि.ल. 12 जिम्मेदारीपूर्ण उपभोग और उत्पादन।
जुलाई (20)		'क्या लिखूँ?' स.वि.ल. 5,16 लैंगिक समानता,	'राम-लक्ष्मण-परशुराम संवाद' स.वि.ल 4,16	सूचना लेखन, संज्ञा,सर्वनाम, अपठित काव्यांश। स.वि.ल.	आप अपना परिचय देते हुए कुछ वाक्य लिखिए जिससे

		शांति-न्याय और सशक्त संस्थाएँ।	गुणवत्तापूर्ण शिक्षा, शांति- न्याय और सशक्त संस्थाएँ।	4,17 गुणवत्तापूर्ण शिक्षा, लक्ष्यों के लिए भागीदारी।	आपके व्यक्तित्व की महत्त्वपूर्ण बातों का पता चलता हो। स.वि.ल. 4 गुणवत्तापूर्ण शिक्षा।
अगस्त(24)		'संवादहीन' स.वि.ल. 1,10 गरीबी, असमानताओं में कमी।	'झाँसी की रानी' स.वि.ल. 5,16 लैंगिक समानता, शांति-न्याय और सशक्त संस्थाएँ।	विशेषण, क्रिया, अर्थ के आधार पर वाक्य परिवर्तन। स.वि.ल. 4,17 गुणवत्तापूर्ण शिक्षा, लक्ष्यों के लिए भागीदारी।	आप अपने घर की महिलाओं की भोजन संबंधी रुचियों के विषय में जानिए और उनकी पसंद का भोजन माह में कब-कब बनता है, एक तालिका के माध्यम से समझाइए।
सितंबर (14)	अर्धवार्षिक परीक्षा (करवाए गए कार्य की पुनरावृत्ति)				
अक्टूबर (20)		'ऐसी भी बातें होती हैं' स.वि.ल. 4,8,10 गुणवत्तापूर्ण शिक्षा, सम्मानजनक कार्य और आर्थिक विकास, असमानताओं में कमी।	'भारती,जय, विजय करे' स.वि.ल. 2,6,17 शून्य भुखमरी, स्वच्छ जल और स्वच्छता, लक्ष्यों के लिए साझेदारी।	अपठित गद्यांश, पद्यांश और पत्र (अभ्यास कार्य)	लताजी के जीवन के प्रेरक वाक्यों और गीतों का चित्रमय कोलाज बनाइए। स.वि.ल. 4 गुणवत्तापूर्ण शिक्षा।
नवंबर (23)		'आखिरी चट्टान तक' स.वि.ल. 3,4,10 अच्छा स्वास्थ्य और कल्याण, गुणवत्तापूर्ण शिक्षा, असमानताओं में कमी।	'घर की याद' स.वि.ल. 6,13,15 स्वच्छ जल और स्वच्छता, जलवायु कार्यवाई, थल पर जीवन।	अर्थ के आधार पर वाक्य भेद, अलंकार,अनुच्छेद लेखन (अभ्यास कार्य)	''पधारों म्हारे देश' दिल्ली के महत्त्वपूर्ण पर्यटन स्थलों की एक सूची बनाते हुए उन स्थलों की विशेषताओं को ध्यान में रखकर एक

					विवरणिका तैयार कीजिए। स.वि.ल. 4 गुणवत्तापूर्ण शिक्षा।
दिसंबर (24)		'रीढ़ की हड्डी' स.वि.ल. 5,10 लैंगिक समानता, असमानता में कमी।	'घर की याद' स.वि.ल. 3,5 उत्तमस्वास्थ्य और खुशहाली, लैंगिक समानता।	संज्ञा, सर्वनाम, विशेषण और क्रिया (अभ्यास कार्य)	मान लीजिए कि आप एक पत्रकार है। उमा के घर की पूरे घटनाक्रम को जीवंत प्रसारण की तरह प्रस्तुत कीजिए। स.वि.ल. 4 गुणवत्तापूर्ण शिक्षा।
जनवरी (16)		'मैं और मेरा देश' स.वि.ल. 12,16 उपभोग और उत्पादन, शांति-न्याय और सशक्त संस्थाएँ।	-	उपसर्ग-प्रत्यय, संवाद लेखन, सूचना लेखन (अभ्यास कार्य)	-
फरवरी (12)	करवाए गए कार्य की पुनरावृत्ति करवाई जाएगी।				

हिंदी (परीक्षा विवरण तालिका)

(1) आवधिक परीक्षा -1 (20 अंक)

अपठित गद्यांश, उपसर्ग-प्रत्यय, अनौपचारिक पत्र, दो बैलों की कथा।

(2) आवधिक परीक्षा – 2 (20 अंक)

अलंकार, क्या लिखूँ , रैदास के पद, संवाद लेखन

(3) अर्धवार्षिक परीक्षा - (80 अंक)

i- अपठित बोध – अपठित गद्यांश और अपठित पद्यांश।

ii- व्याकरण - उपसर्ग-प्रत्यय, अलंकार, अर्थ के आधार पर वाक्य परिवर्तन, संज्ञा, सर्वनाम, विशेषण और क्रिया।

iii- पठित गद्य – दो बैलों की कथा, क्या लिखूँ ?, संवादहीन।

iv- पठित काव्य – रैदास के पद, राम-लक्ष्मण-परशुराम-संवाद, झाँसी की रानी।

v- रचनात्मक लेखन-अनुच्छेद लेखन, अनौपचारिक पत्र, संवाद लेखन, सूचना लेखन।

(4) आवधिक परीक्षा - 3 (20 अंक)

अपठित काव्यांश, विशेषण और क्रिया, आखिरी चट्टान तक, भारति, जय विजय करे, सूचना लेखन।

(5) वार्षिक परीक्षा - (80 अंक)

i- अपठित बोध – अपठित गद्यांश और पद्यांश।

ii- व्याकरण – उपसर्ग-प्रत्यय, अलंकार, अर्थ के आधार पर वाक्य परिवर्तन, संज्ञा, सर्वनाम, विशेषण और क्रिया।

iii- पठित गद्य – 'दो बैलों की कथा' से लेकर 'मैं और मेरा देश'।

iv- पठित काव्य –'पद' से लेकर 'घर की याद तक'।

v- रचनात्मक लेखन- अनुच्छेद लेखन, अनौपचारिक पत्र, संवाद लेखन, सूचना लेखन।

(समयानुसार बदलाव भी किए जा सकते हैं।)

MATHEMATICS

Course structure

Units	Unit name	Marks
I	Number System	10
II	Algebra	20
III	Coordinate Geometry	4
IV	Geometry	27
V	Mensuration	13
VI	Statistics	6
	Total	80

Month & pd	Unit	Content	Learning objectives	Suggested activities
April (30)	**Coordinate Geometry**	**Chapter-1 :** **Orienting Yourself: The use of Coordinate Geometry** Introduction,2-D Cartesian Coordinate system, Distance between two points on 2-D plane and their midpoint.	**Students will be able to-** i)specify locations and the position of one-point relative to another point using coordinates. ii)represent a floor plan on a grid using coordinates. iii)compute the distance between two points. iv)determine whether three points are collinear. v)compute the position of the midpoint of a line segment.	**Activity-1 :** Coordinate treasure hunt **Competency:** i)The activity enhances basic mapping skills useful for planning and local modeling. ii) It helps students to develop problem solving skills and critical thinking ability. **Worksheet-1**

			***SDG 4** : Quality Education ***SDG 11**: Sustainable cities and communities	
	Algebra	**Chapter-2 : Introduction to Linear Polynomials** Definition of a polynomial in one variable, its coefficients with example, Terms of a polynomial, zeroes of a polynomial, Remainder and Factor Theorem.	**Students will be able to-** i) understand the meaning of an algebraic expression. ii) define a polynomial and its degree. iii) identify the degree, terms and coefficients of terms in a polynomial. iv) model linear growth and decay using linear polynomials. v) explain and identify patterns in linear relationships. vi) identify the slope and y-intercept of a linear equation in two variables. vii)graph a linear equation in 2 variables. * **SDG 4**: skill development through mathematical modeling. ***SDG 9**:innovation and technological problem-solving.	**Activity 2:** Framing linear relationship(growth/decay) **Competencies:** i)This activity helps to develop computational thinking to identify patterns, construct linear expressions. **Worksheet-2**

May (24)	**Number system**	**Chapter-3 : The World of Numbers** Introduction to Number System, Irrational no, Real numbers and their decimal expansions, Real numbers on the number line, Operations onReal no, Laws of exponents for real numbers.	**Students will be able to** **i)**understand the concept and properties of a rational number. ii) understand and explain the concept of density of rational numbers. iii) compute decimal representations of rational numbers. iv)understand the concept of irrational numbers. v)prove the irrationality. vi)construct square root spiral. **SDG 4**: Quality Education *__SDG 8__ : Economic growth	**Activity-3(Art integrated):** Making of colourful Irrational number spiral by line segments. **Competencies:** i) The activity develops the conceptual understanding of transforming abstract algebraic concepts into tangible, visual, and artistic geometric models, aiding in deeper conceptual retention. **Worksheet-3**
	Algebra	**Chapter 4:** **Exploring algebraic identities:** factorization, simplifying rational expressions	**Students will be able to** **i**)visualize algebraic identities using geometric models ii)factories algebraic expressions using identities. iii)find simplified version of rational expressions. iv)interpret factors of quadratic expressions through geometric models ***SDG 9: mathematical foundation** needed for innovation and technical care.	**Activity 4 -:** Geometrical verification of algebraic identity (Paper cutting and pasting). **Competency:** This activity builds logical thinking and analytical ability, which are essential for engineering, science and technology fields. **Worksheet-4**

July (28)	**Geometry**	**Chapter 5:** **I'm Up and Down, and Round and Round** Practical applications and uses of circles, definitions related to a circle--- Centre, diameter and radius, chords and angles subtended by chords, midpoints and perpendicular bisectors of chords, distance of chords from the centre, subtended angles by an arc and cyclic quadrilaterals	**Students will be able to:** i)state the definition of a circle. ii)explain the meanings of the terms like chord, diameter, radius, arc, segment and sector. iii)explain why a unique circle exists through three non-collinear points. iv)construct the circumcircle and circumcenter of a triangle and describe its location. v)explain the meaning of "angle subtended by an arc at the centre". vi)explain why equal chords subtend equal angles at the centre and vice-versa. vii)explain why a perpendicular from the centre to a chord, bisects the chord and vice-versa. viii)explain why equal chords are equidistant from the centre and vice-versa. ix)explain why among unequal chords, the longer chord is closer to the Centre and diameter is the longest chord. x)prove central angle doubling theorem. xi)explain why angles in the same segment of a circle are equal. xii)determine when four given points are concyclic. xiii)define cyclic quadrilaterals and explain its properties.	**Activity 5: -** Geometric proof of Central Angle Doubling Theorem. **Competency;** This activity helps to connect **circle geometry with logical reasoning.** **Worksheet 5**

	Mensuration	**Chapter 6: Measuring Space : Perimeter and Area** Perimeter of circle, introduction to pi and its irrationality, length of arc, length of an arc, area of rectangles, parallelogram and triangles, Heron's formula, squaring of rectangles, derivation of area of circle, sector of a circle, Brahmagupta's formula for area of a cyclic 4-gon.	xiv)explain how circular wheels have influenced transport, farming, building and technology. xv)identify cultural motifs involving circles, for example, the Dharma chakra, Asoka Chakra. Sudarshan Chakra. **SDG 4** – Quality Education **SDG 12** – Responsible Consumption and Production **Students will be able to** i)define perimeter as the length around the boundary of any shape. ii)explain that the circumference to diameter ratio is constant for all circles. iii)compute the circumference of a circle and length of an arc. iv)apply ideas of circle's perimeter and arc-length to real-world context. v)explain why a median divides a triangle into two equal areas. vi)apply heron's formula to compute area of a triangle. vii)explain the classical problem of squaring a given shape. viii)compute the area of a circle and its sector using formula.	**Activity 6 : S**quaring a rectangle from Baudhayana's sulbasutras. **Competency:** This activity enhances conceptual clarity in geometry and algebraic thinking. **Worksheet-6**

			ix) state Brahmagupta's formula for area of a cyclic quadrilateral. ***SDG 9:** Engineering foundation skills and Mathematical creativity.	
Aug (30)	**Probability**	**Chapter 7: The Mathematics of Maybe: Introduction to Probability** Concept of probability and randomness, probability scale, empirical probability (analyzing statistical data and performing experiments), theoretical probability (sample space and events), representing probability through tree diagrams and tables.	**Students will be able to:** i)understand the concept of randomness. ii)describe the likelihood of an event using the probability scale. iii)estimate the empirical probability of the occurrence of an event by analyzing statistical data. iv)define theoretical probability of an event. v)apply the definition of theoretical probability to compute the probability of an event. vi)compute the probability of an event with the help of tree diagrams and tables. **SDG 3 –** Good Health and Well-being **SDG 13** – Climate Action **SDG 8** – Decent Work and Economic Growth	**Activity 7:** Probability of an event with the help of a Tree diagram. **Competency:** This activity helps students to apply probability in daily life situations like: Weather forecasts, Games and decision-making. **Worksheet-7**

	Algebra	**Chapter 8: Predicting What Comes Next: Exploring Sequences and progressions:** Introduction to sequences , explicit or general rule of a sequence, recursive rule of a sequence , A.P	**Students will be able to-** i) understand the concept of sequence of numbers and the recursive and explicit rules for different sequences. ii)identify the pattern in a sequence and predict the next few terms iii)identify AP and determining nth term iv)visualize an AP graphically v)identify GP, finding it's nth term vi)visualize GP graphically and analyze attributes of fractals using GP. vii)solve the Tower of Hanoi puzzle. ***SDG9: foundation of coding, data sc. and technological thinking** *** SDG 8: future career readiness**	**Activity 8: Number sequences:** Find the missing number **Competency:** This activity helps to develop logical reasoning and ability of pattern-recognition. **Worksheet-8**
Sept (12)		**Revision** of all chapters **Mid-Term Examination**	**Students will be able to: -** i)clear doubts. i)Evaluate themselves through self-assessment and peer assessment.	Practice worksheet Viva-voce

Competencies developed:
The chapters aim to develop conceptual understanding, mathematical reasoning, procedural fluency, visualization skills and application of mathematical concepts.

Periodic Test-1- Ch-1 and, Ch-2 (Ganita Manjari-Part-1)
Periodic Test-2- Ch-3, Ch-4 and Ch-5 (Ganita Manjari-Part-1)
Mid Term Assessment- Syllabus covered from April to August.

MATHEMATICS AT ADVANCED LEVEL (OPTIONAL)

Course structure

S. No.	Chapters
1	Sets
2	Logarithms
3	Relations and Functions
4	Coordinate Geometry
5	Combinatorics
6	Exploring Some More Progressions

Month	Content	Learning objectives	Suggested activities
July	**Chapter 1: Sets** Introduction, Definition, Representation of a set, Set builder form, Finite and infinite sets, Empty or null sets, Equality of sets, Subset, Cardinality of a set, Power set, Universal set, Venn Diagram, Set operations, Intersection and Union of two sets , Disjoint sets, Difference of sets,	**Students will be able to** i)define a set and cite examples. ii)represent a set in roster form and set builder form. iii)understand finite and infinite sets iv)understand and identify null set v)explain equality of sets vi)define subset vii)explain cardinality of a set and power set, universal set. viii)represent sets by venn diagram. Ix) understand and apply different set operations like intersection or union on given sets. x)explain disjoint sets xi)calculate difference of sets xii)define and find complement of a set xiii)apply the theory of sets and the operations real life situations involving cardinal numbers**.**	Representing set-theoretic operations using Venn-diagram.

	Complement of a set, Application of sets.		
August	**Chapter 2 : Logarithms** Introduction, understanding logarithm as inverse of exponents, Logarithms properties, logarithm to base 10, Logarithms across subjects, solving logarithmic equations, Graph of logarithmic and exponential functions.	**Students will be able to** i)understand logarithm as the inverse of exponents ii)understand and apply different logarithmic properties for simplification. iii)explore logarithm as mathematical tool across different subjects. iv)apply logarithmic rules to solve real world problems related to celestial bodies. v)solve logarithmic equations by golden rule. vi)interpret the graphs of logarithmic and exponential functions**.**	Logarithm card matching
September	**Revision of previous chapters**	**Students will be able to** i)clear doubts. i)Evaluate themselves through self-assessment and peer assessment.	
October	**Chapter 3 : Relations and Functions** Introduction, Ordered pairs, Cartesian Product of Sets, Relations, Functions, Some functions and their graphs.	**Students will be able to** i)define a ordered pair ii)understand properties of Cartesian product and apply those properties to find the product of two sets. iii)define relations, it's domain, range, codomain. iv)write a relation in roaster form and find number of relations from a given set. v)apply the knowledge of relation to real life situations vi)define function and determine whether the given rules describe a function.	Verifying the relation between the degree measure and the radian measure of an angle.

		vii)draw graphs of identity function, constant function, quadratic function, cubic function, modulus function, reciprocal function, square root function and greatest integer function .	
November	**Chapter 4: Coordinate Geometry** Introduction, The Cartesian system, Quadrants, Moving points: magic of reflections, Coordinates as perpendicular distances, Concept of slope or gradient, Properties of slope, Intercept, Different forms of equation of a line.	**Students will be able to** i)conceptualize coordinate geometry as a language of graphs. ii)understand Cartesian plane, quadrants. iii)find the mirror image of a point taking x-axis or y-axis as a mirror. iv)relate the absolute values of abscissa and ordinate of a point with the perpendicular distance from y and x axis. v)understand the concept of slope, its classifications and calculate it. vi)understand x and y intercept and calculate their magnitude. vii)write linear equations in 2 variables in general form, slope – intercept form and intercept form.	Making of coordinate mirror**.**
December	**Chapter 5: Combinatorics** Introduction, The fundamental principle of counting, Factorials, Permutations, Combinations, Combinatorics in the modern world.	**Students will be able to** i)understand the historical evolution of combinatorics. ii)understand the Fundamental Principle of Counting and apply the rules in real life situations. iii) understand the concept of factorial iv)understand permutation and combination v) use permutation and combination formula to find total number of arrangements. v)relate combinatorics with cybersecurity, task scheduling in real world**.**	Finding the number of ways in which three cards can be selected from a given 5 set of cards.

January	**Chapter 6 : Exploring Some More Progressions** Introduction, Sum of first n terms of a geometric progression, Infinite geometric progression, Method of differences and combinatorics.	**Students will be able to** i)recollect the sequence of terms in geometric progression. ii)derive the formula to find sum of first n terms of a G.P. iii)calculate the sum of first n terms of a G.P. iv) calculate the sum of infinite terms of a G.P. v)calculate the differences of consecutive terms and hence the n th term of any sequence where the differences of successive terms are in A.P.	Visual understanding of Geometric progression by paper folding and graphing.

SCIENCE

BIOLOGY

Month	Unit	Content	Learning Objective	Suggested Activity/Art Integrated Activity/Experiment
Apr. (11)	Cell :The Building Block of life	• Different Types of cells • Cell structure • Cell wall • Nucleus-Structure and function. • Cell organelles and their functions • Plant cell and animal cell, Cell division and cancer.	Students will be able to: •Understand the discovery of cell. •Learn the structure and function of Nucleus and different features of cell. •Draw various parts of plant and animal cell. •Differentiate between diffusion and osmosis. •Learn the structure and function of different cell organelles •Explain the role of cell division. **(SDG 3: Good health and well-being (Understanding biological systems for health)** **SDG 12: Responsible Consumption and Production**	**Activity-** To demonstrate the process of osmosis with the help of raisins. **(Critical thinking, Knowledge)**

May (9) Jul. (12)	Tissues in Action Tissues in Action	• Tissue • Types of plant tissues- meristematic and simple permanent, their location, structure and functions • Types of complex plant tissues- their location, structure and functions. Animal tissues, types, location and their function	Students will be able to: • Locate and understand various plant tissues, their functions and learn to draw their diagrams. • Understand complex tissues, their function and types and learn to draw their diagrams. Students will learn to: Locate and understand various animal tissues with their functions and learn to draw their diagrams. **SDG 3: Good health and well-being (Understanding biological systems for health)** **SDG 15: Life on Land**	**Activity:** To study the types of plant tissue. (Picture based Activity) **(Critical thinking, Knowledge)**
Aug. (12)	Reproduction: How life continues	• Introduction to different forms of reproduction — sexual and asexual • Types of asexual reproduction with examples	Students will be able to: •Analyse the interactions between members of different groups of organisms, such as plants and pollinators • Compare asexual and sexual reproduction	**Activity:** NCERT

		• Sexual reproduction in flowering plants (flower and its parts, pollination, fertilization, seed dispersal)	• Describe male and female reproductive organs in plants and animals • Differentiate between ovule and seed; ovary and fruit • Explain pollination and fertilisation Identify and explain the role of biotic and abiotic agents in seed dispersal and pollination **SDG 3: Good health and well-being (Understanding biological systems for health)** **SDG 5: Gender Equality**	
Sep. (5)	Syllabus covered till September	REVISION FOR MID-TERM	Students will clear their doubts and revise the syllabus	MID TERM EXAMINATION
Oct. (11)	Reproduction: How life continues	• Sexual reproduction in humans: male and female reproductive systems (structure and function, formation of gametes, sperm and egg, fertilisation, pregnancy	• Explain how variations are introduced by sexual reproduction	**Activity:** To prepare a poster on Reproductive Health. **(Critical thinking, Knowledge, Digital and technological literacy)**

		and development of embryo, menstrual cycle) • Reproductive health and hygiene •Introduction to birth control methods and importance	• Illustrate the structure of male and female reproductive units or systems in plants and animals • Recognise the significance of contraceptive devices for population control and health **SDG 3: Good health and well-being (Understanding biological systems for health)** **SDG 5: Gender Equality**	
Nov. (9)	Patterns in life : Diversity & Classification	• Importance of classification • Five kingdoms and their key features with examples • Major division of animals and plants • Binomial nomenclature • Acellular entities: viruses	Students will learn to: •Distinguish organisms based on certain characteristics, such as number of cells present, cellular organization and mode of nutrition. • Classify various organisms in groups, such as five kingdoms, on the basis of their cellular organization. • Rules of binomial nomenclature. • Apply binomial nomenclature on some common organisms in their surroundings.	**Activity**: Concept map of classification system of living organisms. **(Critical thinking, Knowledge, Digital and technological literacy)**

			• Analyze the interactions between members of different groups of organisms, such as lichens • Recognize three domains of classification of organisms on molecular basis. **SDG 14: Life Below Water** **SDG 15: Life on Land**	
Dec. (12)	Earth as a system: energy, matter and life	• Earth as interconnected system • Nature of solar energy: solar radiation, electromagnetic spectrum, and speed of light • Solar energy interaction with the Earth's Surface and differential heating of the Earth (the role of the atmosphere and the Earth's surface)	Students will learn about: • The interconnectedness between different spheres of the Earth (biosphere, geosphere, hydrosphere, cryosphere and atmosphere) • The nature and interaction of solar radiation with earth's surface. • The latitude and tilt of the Earth. • Identify various components of the Earth that interact with solar energy • Explain the role of the atmosphere in influencing weather and climate on the Earth	**Activity**: Write a Slogan on "Save Earth/ Water" **(Critical thinking, Knowledge, Civic Literacy and Social Responsibility)**

			• How elements like carbon, nitrogen, oxygen and water are recycled between biotic and abiotic environments • The biogeochemical cycles, and the roles of biogeochemical cycles and its role in maintaining environmental balance **SDG 7: Affordable and Clean Energy** **SDG 12: Responsible Consumption and Production:**	
Jan. (14)	All chapters covered	Revision for Annual Exams	Students will be able to solve the questions related to syllabus	Annual Exams preparation

CHEMISTRY

Month	Unit	Content	Learning Objective	Suggested Activity/ Art Integrated Activity/Experiment
April (10)	Exploring Mixtures and Their Separation	• Homogeneous and heterogeneous mixtures, their components and properties • Solutions, suspensions, colloids and their properties	Students will be able to: • Differentiate between homogeneous and heterogeneous mixtures on the basis of their properties • Apply the knowledge of homogeneous and heterogeneous mixtures in daily life • Analyze graphs of solubility and explain how the solubility of substances changes with temperature	• **Activity** -The "Visible vs. Invisible" **(Comparative analysis, Critical thinking)**
May (8)	Exploring Mixtures and Their Separation (Cont..)	• Various ways to express concentration of solutions (mass by mass percentage, mass by volume percentage, volume by volume percentage)	•Calculate the concentration of solutions using mass by mass percentage, mass by volume percentage, volume by volume percentage	• Practice worksheet **(Knowledge, Critical thinking)** •Draw labelled diagrams or flow charts of separation techniques. **(Critical thinking, Creativity)**
July (9)		• Separation techniques based on the physical	• The scientific principles behind different separation techniques.	

		properties of components (crystallisation, distillation, paper chromatography, sublimation, centrifugation and coagulation)	**SDG 6: Clean Water and Sanitation**	
August (10)	Atomic foundation of matter	• Law of conservation of mass • Law of constant proportion • Dalton's Atomic theory • Molecules of elements, Molecules of covalent compounds and their properties.	Students will learn about the - • Two laws of chemical combination. • Ratio by mass of atoms for different compounds • Differentiate between chemical atoms and molecules, elements and compounds, ionic and covalent compounds, cations and anions, formula unit mass and molecular mass. • Calculation of charge on an ion, valency from the atomic number, the molecular and formula unit mass. **SDG 9: Industry, Innovation and Infrastructure (Fundamental knowledge for materials science and innovation)**	• **Activity-** To make Chemical formula for different compounds**. (Critical thinking, Conceptual understanding, Problem solving)**

September (5)	Syllabus covered till September	REVISION FOR MID-TERM	Students will clear their doubts and revise the syllabus	MID TERM EXAMINATION
October (8)	Atomic foundation of matter	• Ions, Ionic compounds and their properties. • Writing chemical formulae. • Molecular mass • Formula unit mass	Students will be able to : • Calculate the charge on an ion, valency from the atomic number, the molecular and formula unit mass • Draw diagrams of electron dot structures of atoms and molecules **SDG 9: Industry, Innovation and Infrastructure (Fundamental knowledge for materials science and innovation)**	• **Activity** -NCERT
November (7)	Journey inside the Atom	• Atoms are the basic units of elements • Atoms consist of subatomic particles • Atomic Models (Thomson's Model, Rutherford's Model, and Bohr's Model)	Students will be able to : • Learn different models of atom. • Learn to distribute electrons in different shells.	• **Activity**- NCERT • **Activity** – A presentation based on 'Journey inside an atom'. **(Critical thinking, Conceptual understanding)**

December (10)	Journey inside the Atom	• Distributions of electrons in elements (up to 18 elements) • Valency atomic number • Atomic structures of different elements • Mass number, Isotopes and Isobars.	Students will be able to: • Find valency of different elements. • Determine the atomic mass and atomic numbers of different elements. • Differentiate between isotopes and isobars. **SDG 9: Industry, Innovation and Infrastructure (Fundamental knowledge for materials science and innovation)**	• **Activity**- Model of an atom representing electronic configuration in different shells (K, L, M shell etc.) **(Comparative analysis, Conceptual understanding, Problem solving)**
January (9)	All chapters covered	Revision for Annual Exams	Students will be able to solve the questions related to syllabus	Annual Exams

PHYSICS				
Month	**Unit**	**Content**	**Learning Objectives**	**Suggested Activity/Art Integrated Activities/ Experiments**
Apr. (10) May (8)		Motion—displacement, velocity, acceleration -Graphical representation of motion for an object moving in a straight line in one direction (with constant velocity, and constant acceleration) -Kinematic equations for motion in a straight line with constant acceleration (by graphical method) -Elementary idea of uniform circular motion.	Students will be able to: -Differentiate between distance travelled and displacement, and speed and velocity for objects moving in a straight line -Define displacement, velocity, acceleration, and uniform circular motion -Plot and interpret position-time graphs and velocity-time graphs to describe the motion of an object moving in a straight line in one direction. -Calculate average velocity from position-time graph, displacement and average acceleration from velocity-time graph -Derive kinematic equations for motion in a straight line with constant acceleration by graphical method	**Activity**- Crossword puzzle on motion. **(Conceptual understanding)** **Activity-** Worksheet on distance and displacement**. (Critical Thinking and Problem solving)**

			-Calculate values of unknown physical quantities from the given physical quantities, using kinematic equations -Derive the expression of speed for uniform circular motion **SDG 9 : Industry, Innovation and Infrastructure** **SDG 11 : Sustainable cities and communities** **SDG 7 : Affordable and clean energy**	
Jul. (9) Aug. (10)	Force and laws of motion Chapter Cont…	Force; balanced and unbalanced forces -Force of friction -Newton's first law of motion -Newton's second law of motion -Newton's third law of motion	-Define force and its types. -Explain the role of friction on the motion of objects -State and explain Newton's first law of motion -State and explain Newton's second law in terms of mass and acceleration -Calculate force using mathematical expression of Newton's second law of motion and define SI unit of force -State and explain Newton's third law of motion Apply Newton's laws of motion to explain everyday life events **SDG 9 : Industry, Innovation and**	**Activity -**Newton's three laws (To identify the law applicable to the given situation) **(Critical thinking and problem based learning)**

			Infrastructure **SDG 11 : Sustainable cities and communities** **SDG 7 : Affordable and clean energy** **SDG-12 :Responsible consumption and production**	
Sep. (5)	Syllabus covered till September	REVISION FOR MID- TERM	Students will clear their doubts and revise the syllabus	MID TERM EXAMINATION
Oct. (8) Nov. (4)	Work, Energy and Simple Machines	-Concept of work; work done by a constant force -Work-Energy theorem -Mechanical energy, kinetic and potential energy, and conversion between potential energy and kinetic energy -Conservation of energy -Power -Simple machines and their mechanical advantage (pulley, inclined plane, lever	-Define work done by a constant force and its SI unit -State work-energy theorem -Explain the concept of energy and state its SI unit -Name forms of energy and identify their interconversion in surroundings (elementary idea) -Define kinetic energy of a moving object and derive its mathematical expression -Define potential energy for an object raised to a height and derive its mathematical expression -Explain conversion between potential energy and kinetic energy (for the case of an object under free fall) -Define and calculate power and its unit	**Activity -**-To calculate potential and kinetic energies at different heights **(Conceptual understanding)** **Activity -** Practice worksheet (**Problem solving and Critical thinking)**

			SDG 9: Industry, Innovation, and Infrastructure **SDG 12: Responsible Consumption and Production** **SDG 7: Affordable and Clean Energy**	
Nov. (3) Dec. (10)	Sound	-Production of sound -Propagation of sound (as a longitudinal wave through a medium) -Graphical representation of sound wave -Characteristics of sound wave (wavelength, frequency, time period, amplitude, intensity, speed) -Human perception of sound (pitch, loudness) -Propagation of sound in different media (solid, liquid) -Reflection of sound (echo, reverberation), echolocation	-Demonstrate the production of sound in multiple ways (through vibration of strings, membranes, air columns) using materials in surroundings -Describe that sound needs a medium for propagation -sound travels as a longitudinal wave -Describe the characteristics of sound waves the (wavelength, frequency, time period, amplitude, intensity and speed) -write relationship between time period and frequency of sound wave -Explain human perception of sound in terms of audible range, loudness and pitch of sound -Describe reflection of sound and echolocation **SDG 9: Industry, Innovation, and Infrastructure** **SDG 12: Responsible Consumption and Production**	**Activity -**Practice worksheet (**Problem solving and Critical thinking)** **Activity -**To draw the sound waves of different (i) pitch (ii) loudness. **(Conceptual understanding)**

			SDG 11: Sustainable cities and communities **SDG 3: Good health and well being**	
Jan.	All chapters covered	Revision for Annual exams	Students will be able to solve the questions related to syllabus	Annual exams preparation
FEBRUARY – Annual Exams (2025-26)				

PT-1

Physics – Ch-4: Motion, Important terms, Graphical representation of motion

Chemistry – Ch-5: Types of mixtures, properties of true solution suspension and colloid, Tyndall effect, Concentration of solution

Biology – Ch-2: Cell including- cell shape, size, structure, types of solutions, Osmosis & diffusion, nucleus & types of organisms

PT-2

Physics – Ch-4, Describing Motion Around Us - Kinematics equations for Motion in Straight Line, Ch-6: How Forces affect Motion – The concept of force and types of forces

Chemistry- Ch-5: Exploring mixtures and their separations (Complete Chapter) from New Book- Explanation

Biology – Ch-2: Cell : The Building Block of Life (From New Book Exploration)

Mid Term

Physics – Ch-4: Describing Motion Around Us
Ch-6: How Forces Affect Motion

Chemistry - Ch-5: Exploring Mixtures and Their Separation

Biology – Ch-2: Cell – The Building Block of Life
Ch-3: Tissues in action

PT-3

Physics – Ch-7: Work, Energy and Simple Machine

Chemistry – Ch-9: Atomic Foundation of Matter

Biology – Ch-11: Reproduction : How Life Continues

Annual - All the Chapters Covered (Full Book)

List of experiments-

1. Verification of the Laws of reflection of sound.

2. Determination of the density of solid (denser than water) by using a spring balance and a measuring cylinder.

3. 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 displaced by it by taking at least two different solids.

4. Determination of the speed of a pulse propagated through a stretched string/slinky .

5. Preparation of: a) a true solution of common salt, sugar and alum

b) a suspension of soil, chalk powder and fine sand in water

c) a colloidal solution of starch in water and egg albumin/milk in water and distinguish between these on the basis of transparency filtration criterion stability

6. Preparation of : a) A mixture b) A compound using iron filings and sulphur powder and distinguishing between these on the basis of:

(i) appearance, i.e., homogeneity and heterogeneity (ii) behaviour towards a magnet

(iii) behaviour towards carbon disulphide as a solvent (iv) effect of heat

7. Perform the following reactions and classify them as physical or chemical changes:

a) Iron with copper sulphate solution in water b) Burning of magnesium ribbon in air

c) Zinc with dilute sulphuric acid d) Heating of copper sulphate crystals

e) Sodium sulphate with barium chloride in the form of their solutions in water

8.Determination of the melting point of ice and the boiling point of water.

9.Verification of the law of conservation of mass in a chemical reaction

10 . Preparation of stained temporary mounts of (a) onion peel, (b) human cheek cells & to record observations and draw their labelled diagrams.

11(A). Identification of Parenchyma, Collenchyma and Sclerenchyma tissues in plants, from prepared slides. Draw their labelled diagrams.

11(B). Identification of striped, smooth and cardiac muscle fibres and nerve cells in animals, from prepared slides. Draw their labelled diagrams.

12. To study Binary fission in Amoeba and Budding in hydra.

13. To Study plants and animals with the help of specimens/ models.

ADVANCE SCIENCE SYLLABUS

PHYSICS				
Month\ Period	**Unit**	**Content**	**Learning Objective**	**Suggested activities\ Art Integrated Activities**
July (4)	Measurement- The Foundation of Science	Introduction to measurement, system of units, Conversion of units between different systems.	• To make the learners understand the need for measurement and estimation. • To make them understand the different system of units and need for common system of unit. • To make them learn the conversion of units from one form to another. • **SDG 9: Industry, Innovation, and Infrastructure**	•Project-The Universal meter : Analysing the Global impact of a varied unit of length **(Critical Thinking and Problem solving**) •Estimation game: Decoding room dimensions **(Conceptual understanding and Analytical thinking)**
August (4)	Understanding Motion through Experience	Frame of Reference, Scalars and vector quantities, vector additions (graphical method), Equations of motion	•To make the learners understand the frames of reference and their importance in describing motion •To make them understand the scalers and vector quantities and graphical method to add vectors. •To make the learners understand the function of human eye along with type of defects •**SDG 4: Quality education** •**SDG 11: Sustainable cities and communities**	•Activity : The Lost Flight Mystery(To explain vector addition) **(Conceptual Understanding and Critical Thinking)** • Practice worksheets **(Critical Thinking and Problem Solving)**

September	**REVISION**			
October (4)	Newton's laws of motion	Concept of Pseudo Force, Gravitation, Variation of acceleration due to gravity with altitude and depth, Torque	• To make the learners understand the limitations of Newton's laws in accelerating frames, concept of centripetal and centrifugal force, effect of air resistance on falling objects, turning force (Torque) and its applications in daily life. **• SDG13-ClimateAction** **• SDG 7: Affordable and Clean Energy**	• Using a bob and stop watch calculate value of acceleration due to gravity(**g**) in your classroom and compare it with standard value of **g** . **(Critical Thinking and Problem solving)** • Practice worksheet **(Critical Thinking and Problem Based Learning)**
November (3)	The Geometry of power – Advanced Simple Machines	Mechanical advantage using Wheel and Axle, Pulley, Tension and Equilibrium of forces.	• To make the learners aware of Mechanical advantages using simple machines like pulleys, gears, axle. Tension and equilibrium of forces. **• SDG 9: Industry, Innovation, and Infrastructure** **• SDG 12: Responsible Consumption and Production**	• Presentation on Gear train used in mechanical watches. **(Diagrammatic Skills and, Conceptual understanding)** • Demonstration of Pseudo force **(Real World Applications and Critical Thinking)**

December (4)	Work and Energy	Conservative and Non-conservative forces, Potential energy of a spring.	• To make the learners understand conservative and non-conservative forces, potential energy of a spring and relation between load and extension of a spring. • **SDG 9: Industry, Innovation, and Infrastructure** • **SDG 12: Responsible Consumption and Production**	• Using a spring balance plot a graph between load and extension to understand the concept of Potential Energy of a spring. **(Critical Thinking and Problem Solving)**
January	**REVISION**			

CHEMISTRY				
Month	**Unit**	**Content**	**Learning Objective**	**Suggested activities\ art integrated activities**
July (4)	Unit-6, Structure of atom	• Subatomic discoveries- Electron, proton, neutron • Spectrum: Continuous and line spectra	Students will be able to: •Understand discharge ray tube experiments •Learn about the formation of continuous and line spectrum	• Model based on 'journey of atomic discoveries'. **(Creative Thinking)**
August (4)	Unit-6, Structure of atom	•Hydrogen line spectrum • Rutherford and Bohr models of atom: their achievements and limitations.	Students will be able to: • Learn about the formation of line spectrum and spectral lines of Hydrogen. • Understand major observations, conclusions, achievements and limitations of atomic models **SDG 4 – Quality Education** **SDG 7 – Affordable and Clean Energy**	• Poster on 'Science through colours'. • Practice Worksheet **(Critical Thinking and Problem Based Learning)**
September	**REVISION**			

Month	Unit	Content	Learning Objective	Suggested Activities\ Art Integrated Activities
October (4)	Unit 7, Chemical Bonding	• Octet rule and its limitations • Lewis structures	Students will learn to: •Identify compounds that obey the octet rule •Draw Lewis dot structures	• 3D model of some Lewis structures **(Conceptual understanding)**
November (1)	Unit 7, Chemical Bonding	• Metallic bonding: electron sea model and properties of metal.	•Relate metallic bonding to the properties of metals **SDG 9 – Industry, Innovation and Infrastructure** **SDG 12 – Responsible Consumption and Production**	• Group discussion • Practice Worksheet **(Analytical Thinking, Problem solving)**

November (2)	Unit-8, Mixtures and their separation	• Column chromatography: principle, procedure and application	Students will be able to: •Identify the stationary phase and mobile phase • Interpret the separation of components • Identify applications of column chromatography	• Chalk powder activity **(Conceptual understanding)**
December (4)	Unit-8, Mixtures and their separation	• Fractional distillation: Principle, procedure, application, comparison with simple distillation process.	•Explain the role of the fractionating column • Identify real-life applications of fractional distillation **SDG 14 – Life Below Water** **SDG 3 – Good Health and Well-Being**	• Debate on comparison between simple distillation and fractional distillation • Worksheet\Assignment **(Real World Applications Critical Thinking and Problem Solving**
January	**PRACTICE WORKSHEET REVISION**			

BIOLOGY				
Month	**Unit**	**Content**	**Learning Objective**	**Suggested Activities\ Art Integrated Activities**
July (4)	Microscope and Microscopy	• Journey of Microscopes • Types of microscopes, Parts of a Compound microscope • Microscopy Skills, Slide Preparation and Focusing • Compare Light microscope and Electron microscope (TEM and SEM) • Magnification vs. Resolution	Students will be able to understand: • The various types of microscopes and their structure. • Focusing the microscope.	**Activity:** To observe and compare leaf peels of monocot and dicot leaves. **(critical thinking and problem- solving)**

August (4)	Microscope and Microscopy	• Features of Electron Microscopes, Transmission Electron Microscope (TEM), Scanning Electron Microscope (SEM) • Compare Light microscope and Electron microscope (TEM and SEM) • Microscopes – Uses, limitations	Students will able to learn • The uses of various types of microscopes and compare them. • New Developments in microscopy. • **SDG-4 Quality Education** • **SDG-3 Good Health and Well-being**	Practice Worksheets **(problem-solving and critical thinking)**
September	**REVISION**			
October (4)	Engineering Life: Miracles in Biotechnology	• Introduction to Biotechnology • Common areas where Biotechnology has led to advancements • Traditional vs Modern Biotechnology • Microbes as Tools in Biotechnology	Students will be able to learn about – • Biotechnology and its advancements. • Tools and applications of microbiology in daily life.	• **Activity :** To prepare kanji, a traditional fermented\\\\\ drink using carrot and beetroot.**(Critical thinking & Problem- solving)**

		• Applications of Biotechnology in Daily Life • Medicine and Health Care • Food processing		
November (3)	Engineering Life: Miracles in Biotechnology	• Bio-Enzymes: Revolutionizing Household Cleaning • Environmental protection • Bioreactors: Powering Large-Scale Biotechnology Applications	Students will be able to learn about – • The uses of Bio-enzymes in various fields. • Applications of biotechnology	• Practice Worksheet-**(Critical thinking & problem- solving)**
December (4)	Engineering Life: Miracles in Biotechnology	• Parts of Fermenters • Growth of Microorganisms in a Fermenter • Ethical Issues in Biotechnology	• Use of a fermenter for fermentation process. • **SDG-6 and 13 Clean Water & Climate Action** • **SDG-2 Zero Hunger**.	• Revision worksheets
January	**PRACTICE WORKSHEET REVISION**			

SOCIAL SCIENCE

Month/Periods	Unit	Content	Learning Objectives	Suggested Activities and Learning Outcomes
APRIL (22)	Ch-1 Understanding Social Science (Part-1) SDG 11- Sustainable cities & communities Ch-2 Shaping of the Earth's Surface (Part-1) SDG 14- Life on Earth Ch-3 Beginning of Civilization (Part-1) SDG11-Sustainable cities and communities	**Understanding Social Science** • Meaning scope and relevance • Understanding social science from an Indian perspective **Shaping of the earth's Surface** • Theory of Plate Tectonics • Interior of the Earth • Role of weathering & erosion agents of Gradation river, waves and currents, wind glaciers and underground water **Beginning of Civilization** • Cultural development from 2 million year ago • Early human History • Periodisation: Archaeological ages • Who were human ancestors?	To explain the relevance of studying social science to understand society, environment, economy and governance in our lives. To be able to locates physiographical regions of India & the climatic zones of the world on a globe/map. To describe major landforms and explain the processes involved in their formation.	Mind Map Activity **Competency -Conceptual understanding and Analytical thinking** Students will be able to explain the meaning and scope of social science. Map Work Locate major tectonic plates on a world map. **Competency-Analytical Skills and Application Skills** Students will be able to locate major tectonic plates on a world map. Write down the similarities and differences between early and modern societies on A4 Sheet. **Competencies- Analytical and critical Thinking**

		• Paleolithic: • Hunter- gatherers & use of stone tool	To understand the beginning of the settled life with development of agriculture & domestication of plants & animals.	**Students will be** able to understand how cities grow and change.
MAY (16)	Ch-3 Beginning of Civilization SDG 11- Sustainable cities & communities Ch-2 Shaping of the Earth's Surface SDG No. 14 Life below water SDG NO. 15 Life on Land	**Beginning of Civilization (cont.)** • Mesolithic sites & tools • Neolithic & beginning of Farming • Neolithic Revolution • Domestication of Plants & Animals **Shaping of the Earth 's Surface** • Landforms, & disasters, Earthquake, Landslides, Avalanches, Glacial lake outburst flood & dust storms	To understand the social, political & religious structure of civilizations of Egypt and Mesopotamian To be able to explain the causes of natural disaster and propose strategies for their mitigation	**Map Activity** Locate the Neolithic and Mesolithic sites on an outline map of India **Competencies-Analytical and application skills** Project on Type of natural disaster and their mitigation strategies **Competency -Spatial & geographical skills** Students will be able to identify and explain different types of natural disasters.
JULY (21)	Ch-6 Democracy (Part-1) SDG 16- Peace, justice & strong institutions	**Democracy** • Meaning features and type of democracy • Roots of democracy in India • Challenge to democracy in India	To understand how the state govern society and maintains law and order To identify the functions of government in protecting rights,	Speaking Activity on - Democracy vs monarchy :Which is better? **Competencies-Critical thinking and Communication skills**

		• Democratic systems in the world **Building blocks in Economics** • Scarcity of resources • What to produce, how to produce and for whom to produce?	providing services and maintaining peace. To explain the meaning of scarcity, choice and opportunity cost in everyday day life, and economic decision making. Describe the 3 central problems of an economy what to produce, how to produce and for whom to produce.	Students will be able to differentiate between democracy and monarchy. Worksheets Environmental Sensitivity- Develop awareness regarding sustainable development **Competency- Conceptual understanding**
	Ch-8 Building blocks in Economics SDG 10- Reduced inequalities Ch-3 Atmosphere and Climate(Part-1) SDG No. 13 Climate Action	**Atmosphere and climate** • Structure and composition • Seasons of India • Monsoon in India	To explain the different atmospheric layers and represent them using sketches and diagrams. To observe and analyze local winds and their impact.	

AUGUST (22)		**Atmosphere and climate (cont.)** • Climate change • Floods • Carbon footprint	To explain the cause and effects of climate change. To analyze how climate change influences the frequency and intensity of natural disasters.	Poster on carbon footprint / Green house effect and global warming. **Competency -Spatial & geographical skills** Students will be able to recognize human activities that increase carbon emissions
	Ch-8 Building Blocks in Economics SDG 10- Reduced inequalities	**Building Blocks in Economics (cont.)** • Difference b/w market, centrally planned, and mixed economic systems • Welfare economy	To identify and differentiate the characteristics of planned, free market, and mixed economic systems. To explain the concept of a welfare economy	Debate on whether government should control all resources. **Competencies**- **Analytical skills & critical thinking**. Students will be able to explain the concept of resources
	Ch-5 State and Society (up to 1000CE) (Part-) SDG 11-Sustainable cities and communities	**State and Society (up to 1000 CE)** • Vedic Age – geography, texts rituals, political institutions and social order • Administrative structure of early empires • Quest for knowledge	To explain various facets of Vedic society and polity To appreciate the achievement of Indian empires and cultural legacy	Create a timeline showing important developments up to 1000CE. **Competencies - Chronological understanding, analytical skills** Students will be able to sequence historical events

	Ch-7 Elections (Part-1) SDG 16- Peace, Justice & strong institutions	• Traders and trades routes, guilds and merchants, crafts and industries **Elections** • Factors of importance of elections • Electoral systems • Delimitation commission • Election Commission of India and its role • Constituency, electoral roll, enumerators • Party of India	To understand the knowledge traditions and practices of India. To identify factors highlighting importance of election in a democracy To categories 3 types of electoral systems. To define concept of delimitation and its purpose in Indian electoral process.	and understanding continuity and change. Activity : Create /design an election manifesto for a political party **Competencies-Critical and analytical thinking** Students will be able to understand the concept of elections and the role of political parties .
SEPTEMBER (10)	**Revision**	**MID TERM EXAMINATION**		
OCTOBER (21)	Ch-9 The Price Puzzle: What Drives the Market (Part-1) SDG 12- Responsible, Consumption & production	**The Price Puzzle: What Drives the Market** • Laws of demand and supply • Real world deviations from textbook theory • Some related concepts- price ceilings and market failures	To explain the law of demand and law of supply with real life examples. To Analyze how changes in market conditions lead to surplus or shortage or black markets.	Supply demand chart- draw a table of price vs quantity demanded and supplied. **Competencies**- **Analytical & critical thinking** Students will be able to explain the concepts of demand and supply

	Ch-1 Oceans and Life (Part-2) SDG-14- Life below water Ch-3 Building a Resilient India(Part-2) SDG- 16 Peace, Justice & strong institutions	**Oceans and life** • Introduction to ocean relief • Marine resources and their significance **Building a Resilient India** • Safeguarding **Sov**ereignty, resistance alliances and confederacies • The bhakti tradition	To explain the movement of ocean waters, including waves. Tides and currents. To understand the importance of marine resources. To explain the cultural, political and military contributions of regional kingdoms in the medieval India. To appreciate how diverse communities and regions shaped India's history	Map activity -Major oceans, seas and ocean currents on a world map. **Competencies-Spatial understanding and Geographical awareness** Students will be able to identify and label major oceans and seas Story telling activity :Narrates stories or miracles associated with Bhakti saints. **Competencies-Communication and listening Skills** Students will be able to narrate stories in a structured and engaging manner.
NOVEMBER (19)	Ch-3 (PART-2) Conti. SDG- 16 Peace, Justice & strong institutions Ch-1 (Part-2)Cont. SDG- 14 Life below water	**Building a resilient India (cont.)** • Forts and fortification • Expansion of Indian economy and state **Oceans and life** • Cyclones and tsunamis-early warning systems	To analyze the continuity of the civilization history of India as a nation up to 18^{th} century CE. To examine the relationship between	

	Ch-5 Authority(Part-2) SDG- 16 Peace, Justice & strong institutions	• International maritime rules and regulations **Authority** • The roots of authority • Constitutional status of justice and security • Links the role of citizens with the election and democratic institutions • Types of authority	oceans, climate, livelihoods and natural disasters. To highlight key rules, conventions, and international agreements governing ocean navigation. Interpret the relationship between Danda and Nyaya as the twin foundations of authority. To trace the evolution of authority structures in India Illustrate types of authority	Prepare poster on - Responsible Use of Authority **Competencies-Creativity, Value based learning** Students will be able to understand ethical use of authority.
DECEMBER (23)	CH -4 India and the World 1(Part-2) SDG- 17 partnerships for the goals	**India and the World 1(1900-1200CE)** • Trade and commerce • Cultural connections • Indian knowledge systems	Explore India's relations with early civilization of the world. Identify the major articles of trades and the major trading ports.	Create a timeline activity on key events between 1900 BCE and 1200 BCE **Competencies-Chronological understanding, analytical skills and research skills**

	Ch-6 From Ideas to Startups (Part-2) SDG- 12 Responsible, consumption & production Ch-2 Life on Earth(Part-2) SDG No. 15 Life on Earth	**From Ideas to Startups** • What is entrepreneurship? • Case studies of successful entrepreneurs • Creative destruction with examples • Start up ecosystem in India • Make in India initiative • Stages of starting and executing a business idea through a business plan • Some basic accounting concepts **Life on Earth** • Biomes: distribution and characteristics • Forest and eco tourism, forest dwellers	Appreciate the significant contributions of India in diverse sphere in an integrated manner. Define entrepreneurship & explain its importance in innovation, job creation Analyze real world examples of successful entrepreneurs. Recognize the role of Micro, small and medium enterprises. To identify the major biomes of the world.	Students will be able to sequence events in correct chronological order. Activity-Create an info graphic on how a startup is built (steps from idea to enterprise) **Competencies-Creativity & critical thinking** Students will be able to explain the stages of building a startup and identify key factors for success in entrepreneurship Discussion on -Government efforts to support forest dwellers and their livelihoods and challenges.

			To appreciate local tradition practices related to bio diversity	
JANUARY (20)	Ch-2 Life on Earth (cont) SDG . 15 Life on Earth Ch-7 Smart Ways to Manage your Finances SDG- 8 Decent, Work and economic Growth	**Life on earth (cont.)** • Forest and wildlife conservation • Government efforts to support forest dwellers **Smart Ways to Manage your Finances** • Relevance of personal financial management in daily life • Inflation and its impact on purchasing power • Simple vs compound interest rate • Various savings and investment options like fixed deposit, stocks, bonds, mutual funds • Risk and insurance • Personal income tax	Analyze the concept of eco-tourism and discuss its role in promoting sustainable forest eco system Investigate the causes of forest fires in the local area, and prepare a plan for mitigation and prevention To explain what personal financial management means and why it is essential in everyday life. To recognize how managing income, spending, saving and investment.	**Competencies-** **Spatial & geographical skills** Students will be able to describe the role of government in supporting forest dwellers Role play- Banker and customer Banker explaining saving accounts fixed deposits and investment Customer asking questions and planning finances. **Competencies-** **Critical thinking & Analytical skills** Students will be able to understand basic banking services (Deposit, withdrawal, loans ,accounts)

			To explain the difference between simple interest and compound interest. Identify various savings and investment instruments. To understand the concept of income tax and why citizens are required to pay it	
FEBRUARY(10)	**REVISION ANNUAL EXAMINATION**			

PT-1

Ch-1 : Understanding Social Science

Ch-2 Shaping of the earth's surface (Part-I)

PT-2

Ch-4 : Beginning of civilization

Ch-2 : Shaping of the earth Surface (Part-II)

Ch-6 : Democracy

Mid-Term Examination

CH-1: Understanding Social Science

Ch-2: Shaping of the earth surface

Ch-3: Atmosphere and climate

Ch-4: Beginning of Civilisation

Ch-5: Society

Ch-6 : Democracy

Ch-7: Elections

Ch-8: Building Blocks in Economics

PT-III

Ch-9: The Price Puzzle – What drives the market

Ch-1: Oceans and life (Part-II)

Annual Examination: PART-I

Ch-2: Shaping of the earth surface

Ch-3: Atmosphere and climate

Ch-4: Beginnings of civilization

Ch-5: Society

Ch-6: Democracy

Ch-7: Elections

Ch-8: Building Blocks in economics

Ch-9: The Price Puzzle : What drives the market

PART-II

Ch-1: Oceans and Life

Ch-2: Life on earth

Ch-3: Building a Re-silent India

Ch-4: India and the world -I

Ch-5 : Authority

Ch-6: From Ideas to startup

Ch-7 : Smart ways to manage your finances.

GENERAL COMPETENCIES-

- **Conceptual Understanding : Understanding key concepts and themes of History ,Geography ,and Political Science and relating them to real -life situations.**
- **Critical Thinking and Analysis : Interpreting historical events, social issues, maps, and data to draw meaningful conclusions.**
- **Problem Solving and Application : Applying knowledge of Social Science concepts to understand contemporary social and environmental issues.**
- **Communication Skills : Expressing ideas effectively through discussions ,presentations ,debates ,and written work.**
- **Collaborative and Experiential Learning: Participating in projects, group discussions, role plays, and activities to enhance understanding and teamwork.**
- **Research and Interpretation Skills: Collecting information from various sources, analyzing evidence, and understanding multiple perspectives on socio-political issues.**

ART EDUCATION

Month	Period	Topic/Content	Practical	Learning Objectives
July	4	**Visual Art**		
		1. History of Visual Art covering pre-historic period to the late 11th century. 2. Tangable and Non- Tangable cultural heritage.	Painting based on pre historic period i.e Madhubani, Dancing Shiva, Miniature drawing….etc	Students will learn about the history of Art - Pre historic period painting.
		Music		
		Sitar & Vocal • Sangeet, Swar, Saptak, Laya, Tala, Raga, Aroh, Avroh, Pakad • Description of Raga Bhupali and teen tala • Swarmalika (for Vocal Students) • Lakshangeet (for Vocal Students) **<u>Tabla</u>** • Tala, Lay, Sam, Tali, Khali structure of Tabla & its Varnas	Raga Bhupali in Drut Teen taal/Chhota khayal	History of Vishnu Narayan Bhatkhande and his contribution to Hindustani music.

July		**Dance**		
		• Introduction to specific dance and basic of the same dance with different postures. • Understanding of tala, matra & laya	Demonstration of fundamental steps and bhumi pranam	Exploring the historical origins of choosen dance.
		Theatre		
		Introduction to Theatre, Elements of Drama (Actor, Audience, Space, Story, Character)	Ice-breaking theatre games, body and voice exercises	Understand the basics of theatre and develop confidence in self-expression.
August		**Topic/Content**	**Practical**	**Learning Objectives**
	5	**Visual Art**		
		Story telling tradition from across India chronology of important milestones across all art forms. Elements of Art.	Draw one painting that shows story telling tradition i.e. Patachitra (odisha), Patua (West Bengal). Three dimensional art work using its technique . e.g : Bamboo craft, fabric toy, jute craft, paper mache.	Students will able to know about story telling tradition across India.
	5	**Music**		
		• Dhwani, Nada, Shruti, Matra, Sam, Vadi and Samvadi • Sthai and Antra of Raga Bhupali and Thah of Teentala	• Continuation of Raga Bhupali with few taans • Patriotic song (1)	History of Vishnu Narayan Bhatkhande and his contribution to Hindustani music.

		Tabla • Theka, Kayada, and thah of Teen tala	• Teen tala	
August		**Dance**		
		Foot works and differentiate foot works between classical dance and folk dance.	Learn different types of footsteps with different beats.	Right down the biography of a chosen dancer.
		Theatre		
		Storytelling Traditions of India, Folk Theatre Forms (Nautanki, Jatra, Yakshagana, Bhavai, etc.)	Individual and group storytelling activities	Appreciate India's rich theatrical heritage and develop narration skills.
September	**Topic/Content**		**Practical**	**Learning Objectives**
	4	**Visual Art**		
		Ancient text and literacy sources that have guided India's art tradition. Geographical, sociocultural and political influences on art practices (vedas-Samvveda-arthved, yajurved etc.) Upnishads	Colour wheel	Students will get the knowledge of literacy sources that have guided Indian art tradition. Also they will get the knowledge of colors.
September	**Music**			

		Sitar & Vocal • Alankar, Tali, Khali, Gat structure and parts of sitar & tanpura with its label **Tabla** • Different kinds of tihais & description of jhaptala	• Continuation of Raga Bhupali and more taans • Folk song (1) • Tukudas in teentala learn to play jhaptala on table and learn hand beat also	Notation system of V.N. Bhatkhande.
	Dance			
		Write down about different hand gestures .	Learn different hand gestures, hearing to sync bodily movements with music.	Students need to clarify what they learnt from foot steps and hand gestures.
	Theatre			
		Voice and Speech Training, Facial Expressions and Body Language	Voice modulation exercises, mime activities	Develop communication skills and expressive abilities through voice and movement.
October	**Topic/Content**		**Practical**	**Learning Objectives**
	Visual Art			
	5		Create an art work using linear and aeria perspective. Monochrome painting on A3 sheet.	Students will get the knowledge of linear and aeria perspective. Also know about monochrome painting.

October	**Music**			
	5	**Sitar & Vocal** • Thatt, Vibhag, Anuvadiswar,Dugun of teentala & thab of Aditala, Aroh, Avroh and Pakad with description of Raaga altheya- Bilawal **Tabla** • Rela & tukra & thah of Aditala • Basic Knowledge of Gharana	Aroh, Avroh and Pakad learn and practice. Hand Beat of teentala 2 Kayas, 2 bols and 2 relas in teentala Hand beat of teentala of thah & Dugun	Learn and practice the notation system of Pt. V. N. Bhatkhande
	Dance			
	5	About Navras and write down about all.	Learn and perform about navras and traditional Indian dance and bodily movements.	Exploring nine fundamentals emotions and how to express them through facial expressions.
	Theatre			
		Characterisation and Role Play	Enact simple characters from daily life, history, or literature	Understand character development and improve observation skills.

	Topic/Content		Practical	Learning Objectives
		Visual Art		
	5	Art form around the world that shows parallel development and cross-cultural influences.	Create a 2D composition. Create a four-part comic strip.	Students will know about art around the world, also get to know 2D composition comic strip.
	Music			
November	5	**Sitar & Vocal** • Jati, Artaran, Vivadi swar description of jhaptala with thah • Write down the Sthai and Antra of Raaga Alheya- Bilawal **Tabla** • Paran, EKtala to write description including Rela & tukra	• Learn to play/sing Raga Alheya Bilawal • Hand beat of jhaptala(thah) learn how to tune sitar/ tanpura • Learn to play Ek tala & hand beat of the same learn how to accompany with vocal & instruments	History of Hindustani Music in Modern Period. Life history of Pt. Vishnu Digambar Paluskar And also sketch of tabla with label.
	Dance			
November	5	Elementary introduction of classical dance and folk-dance forms.	Differentiate between classical dance and folk dance	Exploring the historical origin of dance and their geographical context and original customs.

	Theatre			
		Improvisation and Creative Dramatics	Short improvisational scenes based on given situations	Enhance creativity, teamwork, and problem-solving abilities.
December		**Topic/Content**	**Practical**	**Learning Objectives**
	Visual Art			
	5	Continuity of historical art traditions and connections with present time.	Create an imaginary composition that is still life, landscape etc. Human sketches.	Learn about still life, landscape and human sketch etc.
	Music			
	5	**Sitar & Vocal** • Sthai, Antra, Few taans of Raga Altheya- Bilawal • Description of Chartala with Thah & Dugun	• Raga Alheya- Bilawal in drut teentala/chota khayal with few taans. • Devotional song-1 • Learn & play on tabla with hand beat of chartala	Inter relationship of music – Physics (sound) Maths (different types of laya) History- Brief knowledge of musical history Interview of any two artists (for tabla)

December	**Dance**			
	5	Write down about beats, speed variations and rhythms patterns of tala	Identifying beats, speed, variations and rhythmic patterns through clapping and recitation tala	An elementary introduction to the classical and folk dance forms of India
	Theatre			
		Script Reading and Scene Development	Reading and performing short scenes from children's plays	Learn script interpretation, dialogue delivery, and stage discipline.
January	**Topic/Content**		**Practical**	**Learning Objectives**
	Visual Art			
	5	Brief introduction of topic: - Painting, sculpture, print making, applied art and design.	Logo design. Gond/Madhubani painting on A3 sheet.	Learn about logo design.
	Music			
	5	**Sitar & Vocal** • Complete Raga Alheya-Bilawal	Continuation of Raga Alheya- Bilawal	• History of Sitar • Pattern of Instrumental of study • Biography of any two artists in brief

January	**Dance**			
	5	Understanding – Sound, Rhythm structure music of dance and importance of active listening.	Stage and costume – exploring how props, costume, lighting and sound work together to create a cohesive performance.	Creative projects- Documenting regional dance practice or interview, local artists. Holistic evaluation-Participation in school events or group choreography**.**
	Theatre			
		Stagecraft (Costumes, Props, Lighting, Makeup) and Final Performance	Preparation and presentation of a short theatrical production	Understand the technical aspects of theatre and demonstrate performance skills confidently.

Assessment Activities

- Participation in theatre games and activities
- Voice and expression exercises
- Role-play and improvisation
- Group performance/project work
- Reflection journal or theatre appreciation report
- Final stage presentation

ARTIFICIAL INTELLIGENCE

AI SYLLABUS CLASS IX (2026-27)				
MONTH (NO. OF PERIODS)	**UNIT/CHAPTER**	**CONTENT**	**LEARNING OBJECTIVES**	**ACTIVITY**
APRIL (15)	**SUBJECT SPECIFIC SKILLS** **UNIT-1 AI Reflection, Project Cycle & Ethics**			
	Introduction to AI	• What is Intelligence? • Why AI? • History of AI • Applications of AI in daily life • AI domains, relationship between different domains	• To understand what is artificial intelligence & appreciate AI • To learn & be able to describe the applications of AI in daily life • To learn different AI domains and how they are interrelated	• **Play block** – NLP based game in which the machine identifies the word based on a sentence.
	Employability skills **Unit -1**			
	CH-01 COMMUNICATION SKILLS – I	• Methods of communication • Meaning of communication • Importance of communication	• To learn about different methods & types of communication & it's importance.	• WRITING pros & cons of written, verbal and non-verbal communication • Listing Do's & don'ts for avoiding common

		• Elements of communication		body language mistakes
MAY (9)	**<u>Subject specific skills</u> <u>Unit-1 introduction to AI</u>**			
	<u>AI Project Cycle</u>	• Introduction to AI Project Cycle • Need Of AI Project Cycle • Different Steps of AI Project Cycle • Project Cycle Mapping	• To learn about the AI Project Cycle • To understand the different steps involved • To learn about Problem Statement Template, 4 W's Canvas • To learn different data Acquisition & data Exploration Techniques.	• **Kibo's activity 7:** Fill in the details of any 3 types of data visualisation techniques that you have learnt from datavizcatalogue.com
	<u>Employability skills Unit -1</u>			
	<u>CH-01</u> COMMUNICATION SKILLS – I	• Perspective in communication • Factors affecting perspective • Visual, language & past experiences • Writing skills – phrases, kinds of sentences, parts of sentences, parts of speech • Use of articles, construction of paragraphs	• To learn about perspective & factors affecting perspective • To learn about the writing skills	• Group discussion on factors affecting perspective • Demonstration & practice of writing sentences & paragraphs on topics related to the subject

JULY (15)	**SUBJECT SPECIFIC SKILLS UNIT-1 INTRODUCTION TO AI**			
	AI Project Cycle	• AI Modelling • Evaluation Techniques • Deployment	• To learn about different modelling approaches • To learn about evaluation & deployment of an AI Model and different methods	• Pg 85 Part B, AI Imagine Applying Mental Models • Pg Part B,AI investigate Explore More Act.1
	AI Ethics	• Morals & Ethics • Morals vs Ethics	• To develop a basic understanding of morals and ethics, • also to understand the difference between morals and ethics	• Kibo's activity 10 : Balloon Debate: Is AI a boon or a bane?
	EMPLOYABILITY SKILLS UNIT -2			
	CH-02 SELF MANAGEMENT SKILLS – I	• Meaning of self-management • Self-management skills • Factors building self-confidence • Factors that help in honing self-management skills	• To learn what is self management & about self management skills • To learn about the factors that help building confidence in an individual	• Give yourself positives strokes by saying 5 good things to yourself on waking up. Write in 50 words how you felt for the entire week • Observe your local leaders and analyse how they try to help the society or serve the community at a large

AUGUST (12)	**SUBJECT SPECIFIC SKILLS** **UNIT-1 INTRODUCTION TO AI**			
	AI Ethics	• Need of AI Ethics • Ethical issues with AI • AI Bias • AI Access • Advantages & disadvantages of AI	• To understand the need of AI Ethics and Ethical issues associated with AI. • To learn about different biases in AI. • To learn the advantages and disadvantages of AI.	• 2 AI case studies associated with ethical concerns related to AI
	EMPLOYABILITY SKILLS **UNIT -3**			
	CH-03 BASIC ICT SKILLS	• Role of ICT in daily lives • Intro to ICT, importance of ICT in personal life and at workplace • Identify the various components of the computer system	• To learn about the role & importance of ICT in our daily lives • To learn and to make them able to identify various computer components	• Identify various peripherals and components on your computer system in the lab and write their uses

SEPTEMBER (6)	**SUBJECT SPECIFIC SKILLS** **UNIT-2 DATA LITERACY**			
	Basics of Data Literacy	• Introduction to Data Literacy • How to become Data literate? • Data Privacy & Data Security • Cyber Security	• To Understand what is data literacy & it's need • To learn about Data Privacy & Data security and their relation with AI • To learn the best practices for cyber security	• Kibo's Activity 9: Usability of data pg 111
	EMPLOYABILITY SKILLS **UNIT -3**			
	CH-03 BASIC ICT SKILLS	• Identify various peripheral devices • Performing basic computer operations, types of OS • Connect with the world using internet and it's applications	• To learn about the role & importance of ict in our daily lives • To learn and to make them able to identify various computer components	• Identify various services / features offered by Gmail and briefly write about them all

OCTOBER (12)	**SUBJECT SPECIFIC SKILLS** **UNIT-2 Data Literacy**			
	Acquiring, Processing, and Interpreting Data	• Types of Data • Data Acquisition & various sources • Data Preprocessing • Data Interpretation- Meaning, need and types • Data Visualisation using TABLEAU	• To learn about the different types of data • To learn about various Data Acquisition techniques • To understand the meaning, need and types of Data interpretation techniques • To learn data visualisation on TABLEAU	• Pg 126 to Pg 131 demonstration of Data Visualisation using TABLEAU
	EMPLOYABILITY SKILLS **UNIT -4**			
	CH-04 ENTREPRENEURIAL SKILLS-I	• Identify various types of business activities • Types of business enterprises • Entrepreneurship development • Characteristics & roles of an entrepreneur	• To learn about different types of business activities • To learn about the idea of entrepreneurship in it's true sense	• Discuss the various types of activities , generally adopted by small businesses in local community

NOVEMBER (12)	**SUBJECT SPECIFIC SKILLS** **UNIT-3 Math for AI**			
	Importance of Math for AI **Statistics** **Probability**	• Relation of Math ad AI • Essential Mathematics for AI • Application of Statistics • Uses of Statistics in real life • Introduction to Probability • Applications of Probability in real life	• To understand the need to learn Math for AI • To learn the application of Statistics and Probability in AI	• Pg 174 and Pg 175 AI Imagine: Activity 1 & 4
	EMPLOYABILITY SKILLS **UNIT -5**			
	CH-05 GREEN SKILLS – I	• Intro to environment • Relationship between society, environment, ecosystem, & factors causing imbalance • Natural resource conservation	• Understanding environment and the idea of green skills • To learn the relationship between society, environment, ecosystem & factors causing imbalance • To understand natural resource conservation	• Prepare a poster detailing the relationship between man and environment in various periods

DECEMBER (12)	**SUBJECT SPECIFIC SKILLS** **UNIT-4 Generative AI**			
	Generative AI	• Concepts behind Generative AI • Generative vs Conventional AI • Types and Examples of Generative AI • Benefits and limitations of using Generative AI	• To understand the basic concept behind Generative AI and LLMs • To be able to compare Generative AI with conventional AI • To learn about different examples of Generative AI • To learn about benefits and limitations of Generative AI	• AI Experiment 3: Runway ML – Hands on Activity
	EMPLOYABILITY SKILLS **UNIT -3**			
	CH-05 GREEN SKILLS – I	• Environment protection & conservation • Definition of green economy • Importance of green economy	• To learn about environment protection & conservation • To understand the definition & importance of green economy	• Prepare a project on various aspects of green economy

	SUBJECT SPECIFIC SKILLS UNIT-5 INTRODUCTION TO PYTHON			
JANUARY (12)	**INTRODUCTION TO PYTHON** -PYTHON BASICS	• Introduction to python • Python IDE – different modes • Python character set • Data types, Boolean arithmetic • Operators: arithmetic, logical, relational • Input function in python • Programming in python – sequential statements, selective & iterative statements • Loops in python – while , nested while, for , nested for • Range() function • Jump statements	• To understand what is python, why is it used or why is python preferred for ai over other oops languages. • To learn about different modes of python, character set, data types, Boolean datatype, Boolean arithmetic, operators in python • To learn about sequential statements like if , if-elif, if-elif-else and nested if • To learn about iterative statements or loops like while or for, jump statements like break or continue and their use in programs	• Practical Work

	SUBJECT SPECIFIC SKILLS **UNIT-5 INTRODUCTION TO PYTHON**			
		• Creating strings, traversing a string using for	• To learn how to create a string in different ways	• Practical Work
FEBRUARY (12)	**INTRODUCTION TO PYTHON** -STRINGS & LISTS IN PYTHON	• String operations - concatenating strings, replicating strings, membership operators • Comparison operators, string slicing, string built in functions • Creating lists, traversing a list using for	• To learn about different string operations like concatenation, replicating strings, membership operators, comparison operators • String indexing & slicing • To learn how to create a list in different ways & how to traverse a list, indexing	
		• List operations- slicing lists, replicating lists, reversing a list • Lists are mutable	• To learn the similarities between lists & strings • To learn about different list operations like replicating strings, reversing a list, slicing	
		• Functions like append(), extend(), count(), deleting	• To learn how lists & strings are different based on mutability	

HEALTH & PHYSICAL EDUCATION

Unit	Learning Objectives	Learning Outcomes	SDG Goals
Unit 1: Development of Physical Culture in India	• Understand meaning and importance of Physical Education. • Develop awareness about history and culture of Indian sports. • Identify career opportunities in sports and PE.	• Explain evolution of Physical Education. • Appreciate traditional Indian games. • Identify careers in sports and fitness sector.	SDG 3: Good Health & Well-being SDG 4: Quality Education SDG 8: Decent Work & Economic Growth
Unit 2: Health, Fitness and Wellness	• Understand concepts of health, fitness and wellness. • Learn components of physical fitness. • Develop first-aid and CPR awareness.	• Differentiate health, fitness and wellness. • Demonstrate healthy lifestyle habits. • Perform basic first-aid and CPR skills.	SDG 3: Good Health & Well-being SDG 4: Quality Education
Unit 3: Sciences and Sports	• Understand body systems related to exercise. • Learn skeletal and muscular functions. • Relate exercise with growth and development.	• Describe body systems involved in movement. • Explain effects of exercise on the body. • Understand stages of growth and development.	SDG 3: Good Health & Well-being SDG 4: Quality Education
Unit 4: Technology Integration	• Develop digital literacy in sports. • Understand use of technology and wearables. • Learn interpretation of sports performance data. • Apply digital tools in sports training.	• Use technology for fitness assessment. • Interpret sports data effectively.	SDG 4: Quality Education SDG 9: Industry, Innovation & Infrastructure

Unit 5: Sports for All	• Promote inclusiveness and equality in sports. • Understand disability etiquette and participation. • Encourage women participation in sports.	Explain concept of inclusive sports. • Show respect towards differently-abled persons. • Participate in community sports activities.	SDG 5: Gender Equality SDG 10: Reduced Inequalities
Unit 6: Olympic Movement	• Understand Olympic values and history. • Learn symbols, motto and ethics of Olympics. • Promote sportsmanship and fair play.	Explain evolution of Olympic Movement. • Apply Olympic values in daily life. • Demonstrate spirit of fair play and respect.	SDG 3: Good Health & Well-being SDG 16: Peace, Justice & Strong Institutions
Unit 7: Yoga	• Practice yoga asanas and pranayama. • Improve focus and self-confidence. • Understand importance of yoga for holistic health.	Demonstrate yoga practices correctly. • Explain role of yoga in well-being.	SDG 3: Good Health & Well-being
Unit 8: Sports Practicals	• Develop concentration, confidence and emotional balance. • Develop fundamental sports skills. • Enhance teamwork, discipline and leadership. • Improve physical fitness through games and sports.	• Demonstrate basic skills of selected sports. • Participate actively in games and competitions. • Show sportsmanship and cooperation.	SDG 4: Quality Education SDG 3: Good Health & Well-being SDG 5: Gender Equality SDG 16: Peace & Team Spirit

GUITAR

Month	Period	Content
April and may	**7**	**Introduction to guitar** **Anatomy of Guitar** **Beginner scale** **Beginner strumming** **Prayer song- Count your blessings** **Pg. no. 46**
July and Aug	**8**	**Fundamental Guitar skill** **Prayer song – Power of love Pg. No. 44**
Sept-Oct-Nov	**12**	**The twelve half steps and basic notation**
Dec – jan- feb	**11**	**Scales: Constructions and fingerings** **Chords: Building easy triads and power chords.** **Christmas songs -0 Hallelujah and prayer song – We should not be moved –pg no 234**

Learning Objectives :

1. To learn how to hold a guitar and learn open strings.
2. To Understand hand positions.
3. To learn how to strum up and down.

SITAR

MONTH	PERIOD	CONTENT
April & May	**7**	Introduction Scale: Sargam and meend learning Sargam practice dogun & chargun ,1 Devotional Song, rag bhupali
July & Aug	**8**	Different Strings Exercise Devotional song &1 Patriotic song
Sep & Oct	**8**	Different Strings Exercise & 2 devotional Songs
Nov, Dec & Jan	**11**	Different Strings Exercise, 1 Prayer Song & 1 Patriotic Song Hum honge kamyab and Shri Krishna song
Feb	**2**	Revision Work

Learning Objectives:

- To understand hand positions
- To learn to play sargam and its stroke
- To learn to play patriotic song & devotional song

TABLA

Month	Period	Content
April and May	7	Teen tal 16 matra vilambit Madhya leh Beginner bbol of table dha dhin dhin dha Beginer technique of teen tal
July and Aug	8	Kayda no 1
Sept-Oct-Nov	12	Kayda number 2 vilambit leh
Dec – Jan- Feb	10	Teen talk daadra kegerwa tihai tukdaa

Learning objectives :

1. **To understand hand position**
2. **To learn how to play hastasadhan**
3. **To learn to play different taals.**