Term-I

History-

Ch-1: The French Revolution
- French Society during the late eighteenth century
- The Outbreak of the Revolution
- France abolishes Monarchy and Becomes a Republic
- Did Women have a Revolution?
- The Abolition of Slavery
- The Revolution and Everyday Life

Geography-

Ch-1: India
- Size and location
- India and the world
- India's Neighbours

Ch-2: Physical Features of India
- Major Physiographic Divisions

Civics-

Ch-1: What is democracy? Why democracy?
- What is democracy?
- Features of Democracy
- Why democracy?
- Broader Meaning of Democracy

Ch-2: Constitutional Design
- Why do we need a Constitution?
- Making of the Indian Constitution
- Guiding Values of the Indian Constitution

Economics-

Ch-1: The Story of Village Palampur
- Overview
- Organization of production
- Farming in Palampur
- Non-farm activities of Palampur

Ch-2: People as Resource
- Overview
- Economic activities by men and women
- Quality of Population
- Unemployment

SUBJECT - HISTORY
Chapter-1: The French Revolution

Outline Political Map of France

- Bordeaux
- Nantes
- Paris
- Marseilles

SUBJECT – GEOGRAPHY

Chapter -1: India-Size and Location
- India-States with Capitals, Tropic of Cancer, Standard Meridian

Chapter -2: Physical Features of India

- **Mountain Ranges:** The Karakoram, The Zasker, The Shivalik, The Aravali, The Vindhya, The Satpura, Western & Eastern Ghats

- **Mountain Peaks** – K2, Kanchanjunga, Anai Mudi

- **Plateau -** Deccan Plateau, Chotta Nagpur Plateau, Malwa Plateau

- **Coastal Plains -** Konkan, Malabar, Coromandel & Northern Circar

Term-II
History-   **Ch-2: Socialism in Europe and the Russian Revolution**   • The Age of Social Change   • The Russian Revolution   • The February Revolution in Petrograd   • What Changed after October?   • The Global Influence of the Russian Revolution and the USSR   **Ch-3: Nazism and the Rise of Hitler**   • Birth of the Weimar Republic   • Hitler's Rise to Power   • The Nazi Worldview   • Youth in Nazi Germany   • Ordinary People and the Crimes Against Humanity
Geography-   **Ch-4: Climate**   • Concept   • Climatic Controls   • Factors influencing India's climate   • The Indian Monsoon   • Distribution of Rainfall   • Monsoon as a unifying bond   **Ch-5: Natural Vegetation and Wild Life**   • Factors affecting Vegetation   • Vegetation types   • Wild Life Conservation
Civics-   **Ch-3: Electoral Politics**   • Why Elections?   • What is our System of Elections?   • What makes elections in India democratic?   **Ch-4: Working of Institutions**   • How is the major policy decision taken?   • Parliament   • Political Executive   • Judiciary
Economics-   **Ch-3: Poverty as a Challenge**   • Two typical cases of poverty   • Poverty as seen by Social Scientists   • Poverty Estimates

- Vulnerable Groups
- Interstate disparities
- Global Poverty Scenario
- Causes of Poverty
- Anti-poverty measures
- The Challenges Ahead

LIST OF MAP ITEMS
CLASS IX (2021-22)
TERM- II

SUBJECT - HISTORY

Chapter-2: Socialism in Europe and the Russian Revolution

Outline Political Map of World (For locating and labeling / Identification)
Major countries of First World War- (Central Powers and Allied Powers)
Central Powers - Germany, Austria-Hungary, Turkey (Ottoman Empire)
Allied Powers - France, England, Russia, U.S.A.

Chapter-3: Nazism and Rise of Hitler

Outline Political Map of World (For locating and labeling / Identification)
- **Major countries of Second World War**
Axis Powers – Germany, Italy, Japan
Allied Powers – UK, France, Former USSR, USA

- **Territories under German expansion** (Nazi Power)
Austria, Poland, Czechoslovakia (only Slovakia shown in the map), Denmark, Lithuania, France, Belgium

SUBJECT – GEOGRAPHY (Outline Political Map of India)

Chapter -3: Drainage

- Rivers: (Identification only)
- The Himalayan River Systems-The Indus, The Ganges, and The Satluj
- The Peninsular Rivers-The Narmada, The Tapi, The Kaveri, The Krishna, The Godavari, The Mahanadi
- Lakes: Wular, Pulicat, Sambhar, Chilika

Chapter - 4: Climate
Areas receiving rainfall less than 20 cm and over 400 cm (Identification only)

Chapter - 5: Natural Vegetation and Wild Life

- **Vegetation Type**: Tropical Evergreen Forest, Tropical Deciduous Forest, Thorn Forest, Montane Forests and Mangrove- For identification only
- **National Parks**: Corbett, Kaziranga, Ranthambor, Shivpuri, Kanha, Simlipal & Manas
- **Bird Sanctuaries**: Bharatpur and Ranganthittu
- **Wild Life Sanctuaries**: Sariska, Mudumalai, Rajaji, Dachigam (Location and Labelling)

MATHEMATICS COURSE STRUCTURE

CLASS –IX (2021-22) TERM WISE SYLLABUS

<table>
<tr><td colspan="2" align="center">FIRST TERM</td></tr>
<tr><td align="center">UNIT- NUMBER SYSTEMS</td><td align="center">CONTENT</td></tr>
<tr>
<td align="center">1.   NUMBER SYSTEM</td>
<td>Review of representation of natural numbers, integers, rational numbers on the number line. Rational numbers as recurring/ terminating decimals. Operations on real numbers.

1. Examples of non-recurring/non-terminating decimals. Existence of non-rational numbers (irrational numbers) such as , $\sqrt{2}, \sqrt{3}$ and their representation on the number

2. Rationalization (with precise meaning) of real numbers of the type $1/a+b\sqrt{}$ and $1/\sqrt{x}+\sqrt{}\sqrt{y}$ (and their combinations) where x and y are natural number and a and b are integers.

3. Recall of laws of exponents with integral powers. Rational exponents with positive real bases (to be done by particular cases, allowing learner to arrive at the general laws.)</td>
</tr>
<tr><td align="center">UNIT-ALGEBRA</td><td></td></tr>
<tr>
<td align="center">2. LINEAR EQUATIONS IN TWO VARIABLES</td>
<td>Recall of linear equations in one variable. Introduction to the equation in two variables. Focus on linear equations of the type ax+by+c=0. Explain that a linear equation in two variables has infinitely many solutions and justify their being written as ordered pairs of realnumbers, plotting them and showing that they lie on a line. Graph of linear equations in twovariables. Examples, problems from real life with algebraic and graphical solutions being done simultaneously</td>
</tr>
<tr><td align="center">UNIT-COORDINATE GEOMETRY</td><td></td></tr>
<tr>
<td align="center">3. COORDINATE GEOMETRY</td>
<td>The Cartesian plane, coordinates of a point, names and terms associated with thecoordinate plane, notations, plotting points in the plane.</td>
</tr>
</table>

UNIT-GEOMETRY	
4. LINES AND ANGLES	1. (Motivate) If a ray stands on a line, then the sum of the two adjacent angles so formed is180° and the converse.
	2. (Prove) If two lines intersect, vertically opposite angles are equal.
	3. (Motivate) Results on corresponding angles, alternate angles, interior angles when atransversal intersects two parallel lines.
	4. (Motivate) Lines which are parallel to a given line are parallel.
	5. (Prove) The sum of the angles of a triangle is 180°.
	6. (Motivate) If a side of a triangle is produced, the exterior angle so formed is equal to thesum of the two interior opposite angles.
5. TRIANGLES	1. (Motivate) Two triangles are congruent if any two sides and the included angle of onetriangle is equal to any two sides and the included angle of the other triangle (SAS Congruence).
	2. (Motivate) Two triangles are congruent if any two angles and the included side of onetriangle is equal to any two angles and the included side of the other triangle (ASA Congruence).
	3. (Motivate) Two triangles are congruent if the three sides of one triangle are equal to threesides of the other triangle (SSS Congruence).
	4. (Motivate) Two right triangles are congruent if the hypotenuse and a side of one triangleare equal (respectively) to the hypotenuse and a side of the other triangle. (RHS Congruence)
	5. (Prove) The angles opposite to equal sides of a triangle are equal.
	6. (Motivate) The sides opposite to equal angles of a triangle are equal.
	7. (Motivate) The sides opposite to equal angles of a triangle are equal.
UNIT-MENSURATION	
6. HERON'S FORMULA	Area of a triangle using Heron's formula (without Proof)

UNIT-STATISTICS & PROBABILITY	
7. STATISTICS	Introduction to Statistics: Collection of data, presentation of data — tabular form, ungrouped / grouped, bar graphs, histograms.

SECOND TERM

UNIT-ALGEBRA	
1. POLYNOMIALS	Definition of a polynomial in one variable, with examples and counter examples. Coefficients of a polynomial, terms of a polynomial and zero polynomial. Degree of a polynomial. Constant, linear, quadratic and cubic polynomials. Monomials, binomials, trinomials. Factors and multiples. Zeros of a polynomial. Factorization of $ax^2 + bx + c$, $a \neq 0$ where a, b and c are real numbers, and of cubic polynomials using the Factor Theorem. Recall of algebraic expressions and identities. Verification of identities $(x + y + z)^2 = x^2 + y^2 + z^2 + 2xy + 2yz + 2zx$ $(x \pm y)^3 = x^3 \pm y^3 \pm 3xy(x \pm y)$ $x^3 \pm y^3 = (x \pm y)(x^2 \mp xy + y^2)$ and their use in factorization of polynomials.
UNIT-GEOMETRY	
2. QUADRILATERALS	1. (Prove) The diagonal divides a parallelogram into two congruent triangles. 2. (Motivate) In a parallelogram opposite sides are equal, and conversely. 3. (Motivate) In a parallelogram opposite angles are equal, and conversely. 4. (Motivate) A quadrilateral is a parallelogram if a pair of its opposite sides is parallel andequal. 5. (Motivate) In a parallelogram, the diagonals bisect each other and conversely. 6. (Motivate) In a triangle, the line segment joining the mid points of any two sides is parallelto the third side and in half of it and (motivate) its converse.

3. CIRCLES	Through examples, arrive at definition of circle and related concepts-radius, circumference,diameter, chord, arc, secant, sector, segment, subtended angle. 1. (Prove) Equal chords of a circle subtend equal angles at the centre and (motivate) itsconverse. 2. (Motivate) The perpendicular from the centre of a circle to a chord bisects the chord andconversely, the line drawn through the centre of a circle to bisect a chord is perpendicular to the chord. 3. (Motivate) Equal chords of a circle (or of congruent circles) are equidistant from thecentre (or their respective centres) and conversely. 4. (Motivate) The angle subtended by an arc at the centre is double the angle subtendedby it at any point on the remaining part of the circle. 5. (Motivate) Angles in the same segment of a circle are equal. 6. (Motivate) The sum of either of the pair of the opposite angles of a cyclic quadrilateral is180° and its converse.
4. CONSTRUCTIONS	1. Construction of bisectors of line segments and angles of measure 60˚, 90˚, 45˚ etc.,equilateral triangles. 2. Construction of a triangle given its base, sum/difference of the other two sides and onebase angle.
UNIT-MENSURATION	
5. SURFACE AREAS AND VOLUMES	Surface areas and volumes of cubes, cuboids, spheres (including hemispheres) and rightcircular cylinders/cones.
UNIT-STATISTICS & PROBABILITY	
6. PROBABILITY	History, Repeated experiments and observed frequency approach to probability. Focus is on empirical probability. (A large amount of time to be devoted to group and to individual activities to motivate the concept; the experiments to be drawn from real - life

		situations, and from examples used in the chapter on statistics).

FIRST TERM (ONE PAPER)

90 Minutes

NO.	UNIT NAME	MARKS
	NUMBER SYSTEMS	8
II	ALGEBRA	5
III	COORDINATE GEOMETRY	4
IV	GEOMETRY	13
V	MENSURATION	4
VI	STATISTICS & PROBABILITY	6
Total		40
INTERNAL ASSESSMENT		10
TOTAL		50

SECOND TERM

90 Minutes

No.	UNIT NAME	MARKS
I	ALGEBRA(Cont.)	12
II	GEOMETRY(Cont)	15
III	MENSURATION(Cont.)	9
IV	STATISTICS & PROBABILITY(Cont)	4
Total		40
INTERNAL ASSESSMENT		10
TOTAL		50

SCIENCE COURSE STRUCTURE

CLASS IX TERM WISE SYLLABUS

COURSE STRUCTURE
CLASS IX EVALUATION SCHEME

Theory

Units	Term- I	Marks
I	Matter-Its Nature and Behaviour: Chapter - 2	09
II	Organization in the Living World: Chapter - 5 and 6	18
III	Motion, Force and Work: Chapter - 8 and 9	13

Units	Term - II	Marks
I	Matter-Its Nature and Behaviour: Chapter 3 and 4	18
II	Organization in the Living World: Chapter -13	08
III	Motion, Force and Work: 10 and 11	14

Total Theory (Term I+II)	**80**
Internal Assessment: Term I	**10**
Internal Assessment: Term II	**10**
Grand Total	**100**

TERM – I	
Theme: Materials **Unit I: Matter- It's Nature and Behaviour** **Chapter – 2 Is matter around us Pure**	**Nature of matter:** Elements, compounds and mixtures. Heterogeneous and homogenous mixtures, colloids and suspensions.
Theme: The World of the Living **Unit II: Organization in the Living World** **Chapter – 5 The Fundamental Unit of Life**	**Cell - Basic 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, endoplasmic reticulum, Golgi apparatus; nucleus, chromosomes - basic structure, number.
Chapter – 6 Tissues	**Tissues, Organs, Organ System, Organism:** Structure and functions of animal and plant tissues (only four types of tissues in animals; Meristematic and Permanent tissues in plants).
Theme: Moving Things, People and Ideas **Unit III: Motion, Force and Work** **Chapter – 8 Motion**	**Motion:** Distance and displacement, velocity; uniform and non-uniform motion along a straight line; acceleration, distance-time and velocity-time graphs for uniform motion and uniformly accelerated motion, derivation of equations of motion by graphical method; elementary idea of uniform circular motion.
Chapter – 9 Force and Laws of Motion	**Force and Newton's laws:** Force and Motion, Newton's Laws of Motion, Action and Reaction forces, Inertia of a body, Inertia and mass, Momentum, Force and Acceleration. Elementary idea of conservation of Momentum.

TERM – II

Theme: Materials **Unit I: Matter- It's Nature and Behaviour** **Chapter – 3 Atoms and Molecules**	**Particle nature and their basic units:** Atoms and molecules, Law of constant proportions, Atomic and molecular masses. Mole concept: Relationship of mole to mass of the particles and numbers.
Chapter – 4 Structure of Atom	**Structure of atoms:** Electrons, protons and neutrons, valency, chemical formula of common compounds. Isotopes and Isobars.
Theme: Moving Things, People and Ideas **Unit III: Motion, Force and Work** **Chapter – 10 Gravitation**	**Gravitation:** Gravitation; Universal Law of Gravitation, Force of Gravitation of the earth (gravity), Acceleration due to Gravity; Mass and Weight; Free fall.
Chapter – 11 Work and Energy	**Work, energy and power:** Work done by a Force, Energy, power; Kinetic and Potential energy; Law of conservation of energy
Theme: The World of the Living **Unit II: Organization in the Living World** **Chapter – 13 Why do we fall ill**	**Health and Diseases:** Health and its failure. Infectious and Non-infectious diseases, their causes and manifestation.Diseases caused by microbes (Virus, Bacteria and Protozoans) and their prevention; Principles of treatment and prevention. Pulse Polio programmes.

ONLY FOR INTERNAL ASSESSMENT
Note: Learners are assigned to read the below listed part of Unit IV. They can be encouraged to prepare a brief write up on any one concept of this Unit in their Portfolio. This may be an assessment for Internal Assessment and credit may be given (Periodic assessment/Portfolio). This portion of the Unit is not to be assessed in the year-end examination.

Theme: Natural Resources: Balance in nature

Unit IV: Our Environment

Chapter -14 Natural Resources
Physical resources: Air, Water, Soil. Air for respiration, for combustion, for moderating temperatures; movements of air and its role in bringing rains across India.
Air, water and soil pollution (brief introduction).Holes in ozone layer and the probable damages.
Bio-geo chemical cycles in nature: Water, Oxygen, Carbon and Nitrogen.

PRACTICALS
Practicals should be conducted alongside the concepts taught in theory classes.

TERM-I

LIST OF EXPERIMENTS

1. 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**Unit-I: (Chapter -2)**

2. 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**Unit-I: (Chapter-2)**

3. 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.**Unit-I: (Chapter-2)**

4. Preparation of stained temporary mounts of (a) onion peel, (b) human cheek cells & to record observations and draw their labeled diagrams. **Unit-II**: **(Chapter-5)**

5. Identification of Parenchyma, Collenchyma and Sclerenchyma tissues in plants, striped, smooth and cardiac muscle fibers and nerve cells in animals, from prepared slides. Draw their labeled diagrams. **Unit-II: (Chapter-6)**

TERM-II

LIST OF EXPERIMENTS

1. Determination of the density of solid (denser than water) by using a spring balance and a measuring cylinder. **Unit-III: (Chapter–10)**

2. 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. **Unit-III: (Chapter–10)**

3. Verification of the law of conservation of mass in a chemical reaction. **Unit-I: (Chapter–3)**

ENGLISH COURSE STRUCTURE
CLASS IX (2021-22)   TERM WISE SYLLABUS
Term I

Reading

Question based on the following kinds of unseen passages to assess Inference, evaluation, vocabulary, analysis and interpretation:

1. Discursive paragraph (400-450 words)
2. Case based factual passage (with visual input/ stastical data/ chart etc.200-250 words)

Writing

1. Descriptive paragraph (person)
2. Short story (based on beginning, outline, cues etc.

Grammar

1. Tenses
2. Subject- verb concord
3. Modals
4. Determiners
5. Reported speech
6. Commands and Requests
7. Statements
8. Questions

Literature

Questions based on extracts/ texts to assess interpretation, inference, extrapolation beyond the text and across the texts.

Moments

1. The Lost Child
2. The Adventures of Toto
3. In The Kingdom of Fools
4. The Happy Prince

Beehive (Prose)

1. The Fun They Had
2. The Sound of Music
3. The Little Girl
4. A Truly Beautiful Mind
5. My Childhood

Poems

1. The Road Not Taken
2. Wind
3. Rain of The Roof
4. A Legend of The Northland

Term II

Reading

Question based on the following kinds of unseen passages to assess Inference, evaluation, vocabulary, analysis and interpretation:

1. Discursive paragraph (400-450 words)
2. Case based factual passage (with visual input/ stastical data/ chart etc.200-250 words)

Writing

1. Descriptive Paragraph (Diary)
2. Story writing (based on beginning line, outline, cues etc.)

Grammar

9. Tenses
10. Subject- verb concord
11. Modals
12. Determiners
13. Reported speech
14. Commands and Requests
15. Statements
16. Questions

Literature

Questions based on extracts/ texts to assess interpretation, inference, extrapolation beyond the text and across the texts.

Moments

1. Weathering the Storms in Ersama
2. The Last Leaf
3. A House is not a Home
4. The Beggar

Beehive (prose)

1. Packing
2. Reach for The Top
3. The Bond of Love
4. If I were You

Poems
1. No Men Are Foreign
2. On Killing A Tree
3. The Snake Trying

कक्षा --9

विषय - हिंदी (कोर्स 'ब')
विषय कोड- 085
पाठ्यक्रम 2021-22 (प्रथम सत्र)

1. अपठित गद्यांश **(4 में से कोई 2)**   10 Marks

2. व्याकरण 16 Marks

      शब्द और पद   (2)

      अनुस्वार और अनुनासिक   (2)

      उपसर्ग , प्रत्यय   (4)

      शब्द विचार   -

          श्रुति समभिन्नार्थक शब्द   (2)

          पर्यायवाची   (2)

          विलोम शब्द   (2)

          अर्थ की दृष्टि से वाक्य भेद   (2)

3. पाठ्यपुस्तक स्पर्श भाग **- 1**   14 Marks

गद्य खंड (10)

    (1)यशपाल - दुख का अधिकार

    (2)बचेंद्री पाल - एवरेस्ट : मेरी शिखर यात्रा

       पद्य खंड (4)

    (3)रैदास - पद

    (4)रहीम - दोहे

4. आंतरिक मूल्यांकन (viva) 10 Marks

कक्षा -- 9

विषय - **हिंदी** (कोर्स 'ब')
विषय कोड - 085
पाठ्यक्रम 2021-22 (द्वितीय सत्र)

1. पाठ्यपुस्तक   14 Marks

स्पर्श - भाग 1   (8)

गद्य खंड

    (1) शरद जोशी - तुम कब जाओगे अतिथि

    (2) गणेशशंकर विद्यार्थी - धर्म की आड़

पद्य खंड

    (3) सि याराम शरण गुप्त - एक फूल की चाह

    (4) अरुण कमल - खुशबू रचते हैं हाथ

पूरक पाठ्यपुस्तक संचयन- भाग 1 (6)

    (1) महादेवी वर्मा - गिल्लू

    (2) श्रीराम शर्मा - स्मृति

    (3) एस .के.पोट्टिकार - हामिद खां

(4) मधुकर उपाध्याय - दि ए जल उठे

2. लेखन	26 Marks
अनुच्छेद	(6)
पत्र अनौपचारिक	(5)
संदेश लेखन	(5)
संवाद लेखन	(5)
नारा लेखन	(5)

3. आंतरिक मूल्यांकन (viva)	10 Marks

INFORMATION TECHNOLOGY (CODE 402)

TERM WISE SYLLABUS

TOTAL MARKS: 100

THEORY(50) + PRACTICAL (50)

I TERM THEORY (25 MARKS) + II TERM THEORY (25 MARKS)

I TERM		
PART A		
UNIT NO.	**UNIT NAME**	**WEIGHTAGE**
1	Communication Skills I	
2	Self-Management Skills I	05
3	Information and communication technologies skills I	
PART B		
UNIT NO.	**UNIT NAME**	**WEIGHTAGE**
1	Introduction to IT – ITes industry	04
2	Data entry and keyboarding skills	06
3	Digital Documentation	10
	Total	**25**

II TERM		
PART A		
UNIT NO.	**UNIT NAME**	**WEIGHTAGE**
4	Entrepreneurial skills I	05
5	Green Skills I	
PART B		
UNIT NO.	**UNIT NAME**	**WEIGHTAGE**
3	Electronic spreadsheet	10
4	Digital presentation	10
	Total	**25**

NATIONAL CADET CORPS (N.C.C)
CLASS IX – (CODE: 076)
2021-2022

Session 2021-22 exam will be held in 2 phases.

1st Term (MCQ)
Common Subject

UNIT WITH TOPICS	MARKS
Unit-1 : The NCC	04
Unit-4: Drill	07
Unit-5: Weapon Training	05
Unit-9: Health and Hygiene	06
Unit -10: Environment Awareness and Conservation	03

Specialized Subject (Army)

Unit-1:Armed Forces	02
Unit-3:Map Reading	06
Unit-5:Communication	02

2nd Term
Common Subject

Unit-2 : National Integration and Awareness	03
Unit-3 : Civil Affairs	06
Unit-6 : Adventure Training	04
Unit-7 : Personality Development and Leadership	08
Unit-8 : Social Awareness Community Development	04

Specialized Subject (Army)

Unit-3:Map Reading	04
Unit-4 : Field Craft and Battle Craft	06