

## COURSE STRUCTURE CLASS – IX

Units	Unit Name	Marks
I	NUMBER SYSTEMS	10
II	ALGEBRA	20
III	COORDINATE GEOMETRY	04
IV	GEOMETRY	27
V	MENSURATION	13
VI	STATISTICS	06
	<b>Total</b>	<b>80</b>

S. No.	Content	Competencies	Explanation
<b>Unit 1: Number Systems</b>			
1.	<b>REAL NUMBERS</b> <ol style="list-style-type: none"> <li>Review of representation of natural numbers, integers, rational numbers on the number line. Representation of terminating/non-terminating recurring decimals on the number line through successive magnification, Rational numbers as recurring/ terminating decimals. Operations on real numbers.</li> <li>Examples of non-recurring/non-terminating decimals. Existence of non-rational numbers (irrational numbers) such as <math>\sqrt{2}, \sqrt{3}</math> and their representation on the number line. Explaining that every real number is represented by a unique point on the number line and conversely, viz. every point on the number line represents a unique real number.</li> <li>Definition of nth root of a real number.</li> <li>Rationalization (with precise meaning) of real numbers of the type <math>\frac{1}{a+b\sqrt{x}}</math> and <math>\frac{1}{\sqrt{x}+\sqrt{y}}</math> (and their combinations), where <math>x</math> and <math>y</math> are natural numbers and <math>a</math> and <math>b</math> are integers.</li> </ol>	<ul style="list-style-type: none"> <li>Develops a deeper understanding of numbers, including the set of real numbers and its properties.</li> <li>Recognizes and appropriately uses powers and exponents.</li> <li>Computes powers and roots and applies them to solve problems.</li> </ul>	<ul style="list-style-type: none"> <li>Differentiates rational and irrational numbers based on decimal representation.</li> <li>Represents rational and irrational numbers on the number line.</li> <li>Rationalizes real number expressions such as <math>\frac{1}{a+b\sqrt{x}}</math> and <math>\frac{1}{\sqrt{x}+\sqrt{y}}</math>, where <math>x, y</math> are natural numbers and <math>a, b</math> are integers.</li> <li>Applies laws of exponents</li> </ul>

	5. 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.)		
<b>UNIT II: ALGEBRA</b>			
<b>1. POLYNOMIALS</b>	<ol style="list-style-type: none"> <li>1. Definition of a polynomial in one variable, with examples and counter examples. Coefficients of a polynomial, terms of a polynomial and zero polynomial.</li> <li>2. Degree of a polynomial.</li> <li>3. Constant, linear, quadratic and cubic polynomials. Monomials, binomials, trinomials. Factors and multiples.</li> <li>4. Zeroes of a polynomial.</li> <li>5. Motivate and State the Remainder Theorem with examples.</li> <li>6. Statement and proof of the Factor Theorem. Factorization of <math>ax^2 + bx + c</math>, <math>a \neq 0</math> where <math>a</math>, <math>b</math> and <math>c</math> are real numbers, and of cubic polynomials using the Factor theorem.</li> <li>7. Recall of algebraic expressions and identities. Verification of identities:  <math display="block">(x + y + z)^2 = x^2 + y^2 + z^2 + 2xy + 2yz + 2zx</math> <math display="block">(x \pm y)^3 = x^3 \pm y^3 \pm 3xy(x \pm y)</math> <math display="block">x^3 + y^3 = (x + y)(x^2 - xy + y^2)</math> <math display="block">x^3 - y^3 = (x - y)(x^2 + xy + y^2)</math> <math display="block">x^3 + y^3 + z^3 - 3xyz = (x + y + z)(x^2 + y^2 + z^2 - xy - yz - zx)</math> and their use in factorization of polynomials.</li> </ol>	<ul style="list-style-type: none"> <li>• Learns the art of factoring polynomials.</li> </ul>	<ul style="list-style-type: none"> <li>• Defines polynomials in one variable.</li> <li>• Identifies different terms and different types of polynomials.</li> <li>• Finds zeros of a polynomial</li> <li>• Proves factor theorem and applies the theorem to factorize polynomials.</li> <li>• Proves and applies algebraic identities up to degree three.</li> </ul>
<b>2. LINEAR EQUATIONS IN TWO VARIABLES</b>	<ol style="list-style-type: none"> <li>1. Recall of linear equations in one variable.</li> <li>2. Introduction to the equation in two variables. Focus on linear equations of the type <math>ax + by + c = 0</math>.</li> </ol>	<ul style="list-style-type: none"> <li>• Visualizes solutions of a linear equation in two variables as ordered pair of real numbers on its graph</li> </ul>	<ul style="list-style-type: none"> <li>• Describes and plot a linear equation in two variables.</li> </ul>

	Explain that a linear equation in two variables has infinitely many solutions and justify their being written as ordered pairs of real numbers, plotting them and showing that they lie on a line.		
<b>UNIT III: COORDINATE GEOMETRY</b>			
<b>1. Coordinate Geometry:</b>	<ol style="list-style-type: none"> <li>The Cartesian plane, coordinates of a point</li> <li>Names and terms associated with the coordinate plane, notations.</li> </ol>	<ul style="list-style-type: none"> <li>Specifies locations and describes spatial relationships using coordinate geometry.</li> </ul>	<ul style="list-style-type: none"> <li>Describes cartesian plane and its associated terms and notations</li> </ul>
<b>UNIT IV: GEOMETRY</b>			
<b>1. INTRODUCTION TO EUCLID'S GEOMETRY</b>	<ol style="list-style-type: none"> <li>History - Geometry in India and Euclid's geometry. Euclid's method of formalizing observed phenomenon into rigorous Mathematics with definitions, common/obvious notions, axioms/postulates and theorems.</li> <li>The five postulates of Euclid. Equivalent versions of the fifth postulate. Showing the relationship between axiom and theorem, for example: <ol style="list-style-type: none"> <li>Given two distinct points, there exists one and only one line through them. (Axiom)</li> <li>(Prove) Two distinct lines cannot have more than one point in common. (Theorem)</li> </ol> </li> </ol>	<ul style="list-style-type: none"> <li>Proves theorems using Euclid's axioms and postulates— for triangles, quadrilaterals, and circles and applies them to solve geometric problems.</li> </ul>	<ul style="list-style-type: none"> <li>Understands historical relevance of Indian and Euclidean Geometry.</li> <li>Defines axioms, postulates, theorems with reference to Euclidean Geometry.</li> </ul>
<b>2. LINES AND ANGLES</b>	<ol style="list-style-type: none"> <li>(State without proof) If a ray stands on a line, then the sum of the two adjacent angles so formed is <math>180^\circ</math> and the converse.</li> <li>(Prove) If two lines intersect, vertically opposite angles are equal.</li> <li>(State without proof) Lines which are parallel to a given line are parallel.</li> </ol>	<ul style="list-style-type: none"> <li>derives proofs of mathematical statements particularly related to geometrical concepts, like parallel lines by applying axiomatic approach and solves problems using them.</li> </ul>	<ul style="list-style-type: none"> <li>Visualizes, explains and applies relations between different pairs of angles on a set of parallel lines and intersecting transversal.</li> </ul>

			<ul style="list-style-type: none"> <li>Solves problems based on parallel lines and intersecting transversal.</li> </ul>
3.	<b>TRIANGLES</b> <ol style="list-style-type: none"> <li>(State without proof) Two triangles are congruent if any two sides and the included angle of one triangle is equal (respectively) to any two sides and the included angle of the other triangle (SAS Congruence).</li> <li>(Prove) Two triangles are congruent if any two angles and the included side of one triangle is equal (respectively) to any two angles and the included side of the other triangle (ASA Congruence).</li> <li>(State without proof) Two triangles are congruent if the three sides of one triangle are equal (respectively) to three sides of the other triangle (SSS Congruence).</li> <li>(State without proof) Two right triangles are congruent if the hypotenuse and a side of one triangle are equal (respectively) to the hypotenuse and a side of the other triangle. (RHS Congruence).</li> <li>(Prove) The angles opposite to equal sides of a triangle are equal.</li> <li>(State without proof) The sides opposite to equal angles of a triangle are equal.</li> </ol>	<ul style="list-style-type: none"> <li>Describe relationships including congruency of two-dimensional geometrical shapes (lines, angle, triangles) to make and test conjectures and solve problems.</li> <li>derives proofs of mathematical statements particularly related to geometrical concepts triangles by applying axiomatic approach and solves problems using them.</li> </ul>	<ul style="list-style-type: none"> <li>Visualizes and explains congruence properties of two triangles.</li> <li>Applies congruency criteria to solve problems</li> </ul>
4.	<b>QUADRILATERALS</b> <ol style="list-style-type: none"> <li>(Prove) The diagonal divides a parallelogram into two congruent triangles.</li> <li>(State without proof) In a parallelogram opposite sides are equal, and conversely.</li> <li>(State without proof) In a parallelogram opposite angles are equal, and conversely.</li> </ol>	<ul style="list-style-type: none"> <li>derives proofs of mathematical statements particularly related to geometrical concepts of quadrilaterals by applying axiomatic approach and solves problems using them.</li> </ul>	<ul style="list-style-type: none"> <li>Visualizes and explains properties of quadrilaterals</li> <li>Solves problems based on properties of quadrilaterals.</li> </ul>

	<p>4. (State without proof) A quadrilateral is a parallelogram if a pair of its opposite sides is parallel and equal.</p> <p>5. (State without proof) In a parallelogram, the diagonals bisect each other and conversely.</p> <p>6. (State without proof) In a triangle, the line segment joining the mid points of any two sides is parallel to the third side and is half of it and (State without proof) its converse.</p>		
5.	<p><b>CIRCLES</b></p> <p>1. (Prove) Equal chords of a circle subtend equal angles at the center and (State without proof) its converse.</p> <p>2. (State without proof) The perpendicular from the center of a circle to a chord bisects the chord and conversely, the line drawn through the center of a circle to bisect a chord is perpendicular to the chord.</p> <p>3. (State without proof) Equal chords of a circle (or of congruent circles) are equidistant from the center (or their respective centers) and conversely.</p> <p>4. (Prove) The angle subtended by an arc at the center is double the angle subtended by it at any point on the remaining part of the circle.</p> <p>5. (State without proof) Angles in the same segment of a circle are equal.</p> <p>6. (State without proof) If a line segment joining two points subtends equal angle at two other points lying on the same side of the line containing the segment, the four points lie on a circle.</p> <p>7. (State without proof) The sum of either of the pair of the opposite angles of a cyclic quadrilateral is <math>180^\circ</math> and its converse.</p>	<ul style="list-style-type: none"> <li>Proves theorems about the geometry of a circle, including its chords and subtended angles</li> </ul>	<ul style="list-style-type: none"> <li>Visualizes and explains properties of circles.</li> <li>Solves problems based on properties of circle.</li> </ul>

**UNIT V: MENSURATION**

<b>1.</b>	<b>AREAS</b>  1. Area of a triangle using Heron's formula (without proof)	<ul style="list-style-type: none"><li>Visualizes, represents, and calculates the area of a triangle using Heron's formula.</li></ul>	<ul style="list-style-type: none"><li>States and applies Heron's Formula to find area of a triangle.</li></ul>
<b>2.</b>	<b>SURFACE AREAS AND VOLUMES</b>  1. Surface areas and volumes of spheres (including hemispheres) and right circular cones.	<ul style="list-style-type: none"><li>Visualizes and uses mathematical thinking to discover formulas to calculate surface areas and volumes of solid objects (spheres, hemispheres and right circular cones)</li></ul>	<ul style="list-style-type: none"><li>Solves problems based on surface areas and volumes of three-dimensional shapes (spheres/hemisphere, right circular cones).</li></ul>

**UNIT VI: STATISTICS**

<b>1.</b>	<b>STATISTICS</b>  1. Bar graphs 2. Histograms (with varying base lengths) 3. Frequency polygons.	<ul style="list-style-type: none"><li>Draws and interprets bar graph, histogram and frequency polygon</li></ul>	<ul style="list-style-type: none"><li>Represents data using Bar Graph, Histogram and frequency polygon.</li></ul>
-----------	---	---	---

# MATHEMATICS QUESTION PAPER DESIGN

CLASS – IX (2025-26)

Time: 3 Hrs.

Max. Marks: 80

S. No.	Typology of Questions	Total Marks	% Weightage (approx.)
1	<p><b>Remembering:</b> Exhibit memory of previously learned material by recalling facts, terms, basic concepts, and answers.</p> <p><b>Understanding:</b> Demonstrate understanding of facts and ideas by organizing, comparing, translating, interpreting, giving descriptions, and stating main ideas</p>	43	54
2	<p><b>Applying:</b> Solve problems to new situations by applying acquired knowledge, facts, techniques and rules in a different way.</p>	19	24
3	<p><b>Analysing :</b> Examine and break information into parts by identifying motives or causes. Make inferences and find evidence to support generalizations</p> <p><b>Evaluating:</b> Present and defend opinions by making judgments about information, validity of ideas, or quality of work based on a set of criteria.</p> <p><b>Creating:</b> Compile information together in a different way by combining elements in a new pattern or proposing alternative solutions</p>	18	22
	<b>Total</b>	<b>80</b>	<b>100</b>

<b>INTERNAL ASSESSMENT</b>	<b>20 MARKS</b>
Pen Paper Test and Multiple Assessment (5+5)	10 Marks
Portfolio	05 Marks
Lab Practical (Lab activities to be done from the prescribed books)	05 Marks



**CLASS – IX (2025-26)**

The following topics are included in the syllabus but will be assessed only formatively to reinforce understanding without adding to summative assessments. This reduces academic stress while ensuring meaningful learning. Schools can integrate these with existing chapters as they align well. Relevant NCERT textual material is enclosed for reference.

S. No.	Content	Competencies	Explanation
<b>UNIT II: ALGEBRA</b>			
1.	<b>LINEAR EQUATIONS IN TWO VARIABLES</b> <ol style="list-style-type: none"> <li>Graph of linear equations in two variables.</li> <li>Examples, problems from real life, including problems on Ratio and Proportion and with algebraic and graphical solutions being done simultaneously.</li> </ol>	<ul style="list-style-type: none"> <li>Visualizes solutions of a linear equation in two variables as ordered pair of real numbers on its graph.</li> </ul>	<ul style="list-style-type: none"> <li>Describes and plot a linear equation in two variables.</li> <li>Exemplifies a linear equation in two variables and its possible solutions using real life examples.</li> </ul>
<b>UNIT III: COORDINATE GEOMETRY</b>			
1.	<b>Coordinate Geometry:</b> <ol style="list-style-type: none"> <li>Plotting points in the plane.</li> </ol>	<ul style="list-style-type: none"> <li>Specifies locations and describes spatial relationships using coordinate geometry, e.g., plotting points in a plane</li> </ul>	<ul style="list-style-type: none"> <li>Plots/locates points in the plane.</li> </ul>
<b>UNIT IV: GEOMETRY</b>			
1.	<b>LINES AND ANGLES</b> <ol style="list-style-type: none"> <li>(State without proof) Results on corresponding angles, alternate angles, interior angles when a transversal intersects two parallel lines.</li> <li>(Prove) The sum of the angles of a triangle is <math>180^\circ</math>.</li> <li>(State without proof) If a side of a triangle is produced, the exterior angle so formed is equal to the sum of the two interior opposite angles.</li> </ol>	<ul style="list-style-type: none"> <li>derives proofs of mathematical statements particularly related to geometrical concepts, like parallel lines by applying axiomatic approach and solves problems using them.</li> </ul>	<ul style="list-style-type: none"> <li>Visualizes, explains and applies relations between different pairs of angles on a set of parallel lines and intersecting transversal.</li> <li>Solves problems based on parallel lines and intersecting transversal.</li> <li>Visualizes the relation between exterior and interior angles of a triangle.</li> </ul>



2.	<b>TRIANGLES</b>  1. (State without proof) Triangle inequalities and relation between 'angle and facing side' inequalities in triangles.	<ul style="list-style-type: none"> <li>Derives proofs of mathematical statements particularly related to geometrical concepts in triangles by applying axiomatic approach and solves problems using them.</li> </ul>	<ul style="list-style-type: none"> <li>Defines and applies triangle inequalities with reference to angles and sides</li> </ul>
3.	<b>AREAS OF PARALLELOGRAMS AND TRIANGLES</b>  Review concept of area, recall area of a rectangle. 1. (Prove) Parallelograms on the same base and between the same parallels have equal area. 2. (State without proof) Triangles on the same base (or equal bases) and between the same parallels are equal in area.	<ul style="list-style-type: none"> <li>Find areas of all types of triangles by using appropriate formulae and apply them in real life situations</li> </ul>	<ul style="list-style-type: none"> <li>Finds area of rectangle, parallelogram and triangle.</li> </ul>
4.	<b>CIRCLES</b>  1. Through examples, arrive at definition of circle and related concepts-radius, circumference, diameter, chord, arc, secant, sector, segment, subtended angle. 2. (State without proof) There is one and only one circle passing through three given non-collinear points.	<ul style="list-style-type: none"> <li>Proves theorems about the geometry of a circle, including its chords and subtended angles</li> </ul>	<ul style="list-style-type: none"> <li>Solves problems based on properties of circle.</li> </ul>
5.	<b>CONSTRUCTIONS</b>  1. Construction of bisectors of line segments and angles of measure $60^\circ$ , $90^\circ$ , $45^\circ$ etc., equilateral triangles. 2. Construction of a triangle given its base, sum/difference of the other two sides and one base angle.	<ul style="list-style-type: none"> <li>Constructs different geometrical shapes like bisectors of line segments, angles and their bisectors and triangles satisfying given constraints.</li> </ul>	<ul style="list-style-type: none"> <li>Constructs line-segments, bisectors of line-segments, angles and triangle with given conditions.</li> </ul>

**UNIT V: MENSURATION**

<b>1.</b>	<b>AREAS</b>  1. Application of heron's formula in finding the area of a quadrilateral.	<ul style="list-style-type: none"><li>Visualizes, represents, and calculates the area of a triangle using Heron's formula.</li></ul>	<ul style="list-style-type: none"><li>States and applies Heron's Formula to find area of a quadrilateral.</li></ul>
<b>2.</b>	<b>SURFACE AREAS AND VOLUMES</b>  1. Surface areas and volumes of cubes, cuboids and right circular cylinders.	<ul style="list-style-type: none"><li>Visualizes and uses mathematical thinking to discover formulas to calculate surface areas and volumes of solid objects (cubes, cuboids and right circular cylinders)</li></ul>	<ul style="list-style-type: none"><li>Solves problems based on surface areas and volumes of three-dimensional shapes (cube, cuboid and right circular cylinders).</li></ul>

**UNIT VI: STATISTICS**

<b>1.</b>	<b>STATISTICS</b>  1. Introduction to Statistics: Collection of data, presentation of data — tabular form, ungrouped / grouped data. 2. Mean, median and mode of ungrouped data.	<ul style="list-style-type: none"><li>Applies measures of central tendencies such as mean, median and mode of ungrouped data.</li></ul>	<ul style="list-style-type: none"><li>Organizes raw data in tabular form.</li><li>Calculates mean, median, mode of ungrouped data</li></ul>
<b>2.</b>	<b>PROBABILITY</b>  1. 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); 2. The experiments to be drawn from real - life situations, and from examples used in the chapter on statistics).	<ul style="list-style-type: none"><li>Applies concepts from probability to solve problems on the likelihood of everyday events.</li></ul>	<ul style="list-style-type: none"><li>Conceptualizes probability using repeated experiments and observed frequencies.</li></ul>

**ENGLISH LANGUAGE AND LITERATURE  
SYLLABUS CLASS – IX (2025-26)**

<b>Sections</b>		<b>Weightage</b>
A	Reading Skills	20 Marks
B	Writing Skills and Grammar	20 Marks
C	Language through Literature	40 Marks

## **Section A Reading Skills**

### **I. Reading Comprehension through Unseen Passage**

**20 Marks**

1. Discursive passage of 400-450 words. **10 marks**
2. Case-based factual passage (with visual input- statistical data/chart etc.) of 200-250 words. **10 marks**

**(Total length of two passages to be 600-700 words)**

Multiple Choice Questions / Objective Type Questions/Very Short Answer Questions will be asked to assess comprehension, interpretation, analysis, inference, evaluation and vocabulary.

## **Section B Writing Skills and Grammar**

### **II. Grammar**

**10 Marks**

- Determiners
  - Tenses
  - Modals
  - Subject – verb concord
  - Reported speech
    - Commands and requests
    - Statements
    - Questions
3. The courses at the secondary level seek to cement high professional grasp of grammatical items and levels of accuracy. Accurate use of spelling, punctuation and grammar will be assessed through Gap Filling/ Editing/Transformation exercises. Ten out of twelve questions will be attempted.

### **III. Writing Skills**

**10 marks**

4. Writing a Descriptive Paragraph (word limit 100-120 words), describing a person / event/ situation, based on visual or verbal cue/s. One out of two questions to be answered. **5 marks**
5. Writing a Story (on a given cue/title)/Diary Entry, in 100-120 words. One out of two questions is to be answered. **5 marks**

**Section C**  
**Language through Literature**

**40 Marks**

**IV. Reference to the Context**

**5+5 = 10 Marks**

6. One extract out of two, from Drama / Prose.
7. One extract out of two, from poetry.

Multiple Choice Questions / Objective Type Questions will be asked to assess interpretation, analysis, inference, evaluation, appreciation and vocabulary.

**V. Short & Long Answer Questions**

- a. Four out of Five Short Answer Type Questions to be answered in 40-50 words from the book BEEHIVE to assess interpretation, analysis, inference and evaluation. **4x3=12 marks**
- b. Two out of Three Short Answer Type Questions to be answered in 40-50 words from the book MOMENTS to assess interpretation, analysis, inference and evaluation. **3x2=6 marks**
- c. One out of two Long Answer Type Questions from BEEHIVE to be answered in about 100-120 words to assess creativity, imagination and extrapolation beyond the text and across the text. This can also be a passage-based question taken from a situation/plot from the text. **6 marks**
- d. One out of two Long Answer Type Questions from MOMENTS, on theme or plot involving interpretation, extrapolation beyond the text and inference or character sketch to be answered in about 100-120 words. **6 marks**

**Prescribed Books: Published by NCERT, New Delhi**

**1.BEEHIVE**

**Prose**

- |                             |                      |
|-----------------------------|----------------------|
| 1. The Fun They Had         | 6. My Childhood      |
| 2. The Sound of Music       | 7. Reach for The Top |
| 3. The Little Girl          | 8. Kathmandu         |
| 4. A Truly Beautiful Mind   | 9. If I were You     |
| 5. The Snake and the Mirror |                      |

**Poems**

- |                               |                                 |
|-------------------------------|---------------------------------|
| 1. The Road Not taken         | 5. A Legend of the Northland    |
| 2. Wind                       | 6. No Men are Foreign           |
| 3. Rain on The Roof           | 7. On Killing a Tree            |
| 4. The Lake Isle of Innisfree | 8. A Slumber Did My Spirit Seal |

## 2. MOMENTS

- |                            |                          |
|----------------------------|--------------------------|
| 1. The Lost Child          | 5. The Happy Prince      |
| 2. The adventures of Toto  | 6. The Last Leaf         |
| 3. Iswaran the Storyteller | 7. A House is not a Home |
| 4. In the kingdom of fools | 8. The Beggar            |

## 3. WORDS AND EXPRESSIONS – I (WORKBOOK FOR CLASS IX) – Units 1 to 6 and Units 8,10 & 11

**NOTE: Teachers are suggested to:**

- (i) encourage classroom interaction among peers, students and teachers through activities such as role play, group work etc.
- (ii) reduce teacher-talk time and keep it to the minimum,
- (iii) take up questions for discussion to encourage pupils to participate and to express their ideas and defend their views.

Besides measuring learning outcome, texts serve the dual purpose of diagnosing mistakes and areas of non-learning. To make evaluation a true index of learners' knowledge, each language skill is to be assessed through a judicious mixture of different types of questions.

### INTERNAL ASSESSMENT

#### Listening and Speaking

Assessment of Listening and Speaking Skills will be for 05 marks.

It is recommended that listening and speaking skills should be regularly practiced.

Art-integrated projects based on activities like Role Play, Skit, Dramatization etc. must be used. Please refer to the Circular no. Acad-33/2020 dated 14<sup>th</sup> May 2020 at the [http://cbseacademic.nic.in/web\\_material/Circulars/2020/33\\_Circular\\_2020.pdf](http://cbseacademic.nic.in/web_material/Circulars/2020/33_Circular_2020.pdf) for details.

**Guidelines for the Assessment of Listening and Speaking Skills are given at Annexure I.**



**ENGLISH LANGUAGE AND LITERATURE  
CLASS – IX (2025-26)**

**Marks-80**

<b>Sections</b>	<b>Competencies</b>	<b>Total marks</b>
<b>Reading Comprehension</b>	Conceptual understanding, decoding, analyzing, inferring, interpreting and vocabulary	20
<b>Writing Skills and Grammar</b>	Creative expression of an opinion, reasoning, justifying, illustrating, appropriate style and tone, using appropriate format and fluency. Applying conventions, using integrated structures with accuracy and fluency	20
<b>Language through Literature</b>	Recalling, reasoning, appreciating, applying literary conventions, illustrating and justifying. Extract relevant information, identifying the central theme and sub-theme, understanding the writers' message and writing fluently.	40
<b>Total</b>		<b>80</b>

**For the details of Internal Assessment of 20 marks, please refer to the circular no. Acad-11/2019, dated March 06, 2019.**



**हिंदी पाठ्यक्रम-अ**  
**विषय कोड - 002**  
**कक्षा 9वीं (2025-26)**  
**परीक्षा हेतु पाठ्यक्रम विनिर्देशन**

खंड		भारांक
क	अपठित बोध	14
ख	व्यावहारिक व्याकरण	16
ग	पाठ्यपुस्तक एवं पूरक पाठ्यपुस्तक	30
घ	रचनात्मक लेखन	20

- भारांक-(80(वार्षिक बोर्ड परीक्षा)+20 (आंतरिक परीक्षा))

निर्धारित समय- 3 घंटे

भारांक-80

वार्षिक बोर्ड परीक्षा हेतु भार विभाजन				
खंड - क (अपठित बोध)				
	विषयवस्तु		उपभार	कुल भार
1	अपठित गद्यांश व काव्यांश पर बोध, चिंतन, विश्लेषण, सराहना आदि पर बहुविकल्पीय, अतिलघूत्तरात्मक एवं लघूत्तरात्मक प्रश्न			
	अ	एक अपठित गद्यांश लगभग 250 शब्दों का इसके आधार पर एक अंकीय तीन बहुविकल्पी प्रश्न (1x3=3), अतिलघूत्तरात्मक एवं लघूत्तरात्मक प्रश्न (2x2=4) पूछे जाएँगे	7	14
	ब	एक अपठित काव्यांश अधिकतम 120 शब्दों का इसके आधार पर एक अंकीय तीन बहुविकल्पी प्रश्न (1x3=3), अतिलघूत्तरात्मक एवं लघूत्तरात्मक प्रश्न (2x2=4) पूछे जाएँगे	7	
	<b>खंड - ख (व्यावहारिक व्याकरण)</b>			
2	व्याकरण के लिए निर्धारित विषयों पर विषयवस्तु का बोध, भाषिक बिंदु/ संरचना आदि पर अतिलघूत्तरात्मक प्रश्न   (1x16) कुल 20 प्रश्न पूछे जाएँगे, जिनमें से केवल 16 प्रश्नों के उत्तर देने होंगे			16
	अ	शब्द निर्माण	8	

		उपसर्ग – 2 अंक, प्रत्यय – 2 अंक, समास – 4 अंक उपसर्ग-प्रत्यय- (5 में से 4 प्रश्न करने होंगे), समास (5 में से 4 प्रश्न करने होंगे)		
	ब	अर्थ की दृष्टि से वाक्य भेद – 4 अंक (5 में से 4 प्रश्न करने होंगे)	4	
	स	अलंकार – 4 अंक (शब्दालंकार: अनुप्रास, यमक, श्लेष) (5 में से 4 प्रश्न करने होंगे)	4	
3	<b>खंड – ग (पाठ्यपुस्तक एवं पूरक पाठ्यपुस्तक)</b>			
	अ	<b>गद्य खंड पाठ्यपुस्तक (क्षितिज (भाग 1))</b>	11	
	1	क्षितिज (भाग 1) से निर्धारित पाठों में से गद्यांश के आधार पर विषयवस्तु का ज्ञान, बोध, अभिव्यक्ति आदि पर एक अंकीय पाँच बहुविकल्पी प्रश्न पूछे जाएँगे। (1x5)	5	
	2	क्षितिज (भाग 1) से निर्धारित पाठों में से विषयवस्तु का ज्ञान, बोध, अभिव्यक्ति आदि पर तीन प्रश्न पूछे जाएँगे। (विकल्प सहित- 25-30 शब्द-सीमा वाले 4 में से 3 प्रश्न करने होंगे) (2x3)	6	
	ब	<b>काव्य खंड पाठ्यपुस्तक (क्षितिज (भाग 1))</b>	11	
	1	क्षितिज (भाग 1) से निर्धारित कविताओं में से काव्यांश के आधार पर एक अंकीय पाँच बहुविकल्पी प्रश्न पूछे जाएँगे (1x5)	5	30
	2	क्षितिज (भाग 1) से निर्धारित कविताओं के आधार पर विद्यार्थियों का काव्यबोध परखने हेतु तीन प्रश्न पूछे जाएँगे। (विकल्प सहित-25-30 शब्द-सीमा वाले 4 में से 3 प्रश्न करने होंगे) (2x3)	6	
	स	<b>पूरक पाठ्यपुस्तक (कृतिका भाग – 1)</b>	8	
		कृतिका ( भाग 1) से निर्धारित पाठों पर आधारित दो प्रश्न पूछे जाएँगे। (4x2) (विकल्प सहित-50-60 शब्द-सीमा वाले 3 में से 2 प्रश्न करने होंगे)	8	
	<b>खंड – घ (रचनात्मक लेखन)</b>			
4	<b>लेखन</b>			
	क	विभिन्न विषयों और संदर्भों पर विद्यार्थियों के तर्कसंगत विचार प्रकट करने की क्षमता को परखने के लिए संकेत-बिंदुओं पर आधारित समसामयिक एवं व्यावहारिक जीवन से जुड़े हुए तीन विषयों में से किसी एक विषय पर लगभग 120 शब्दों में अनुच्छेद लेखन (6 x 1 = 6)	6	20
	ख	अभिव्यक्ति की क्षमता पर केंद्रित औपचारिक अथवा अनौपचारिक विषयों में लगभग 100 शब्दों में किसी एक विषय पर पत्र। (5x1= 5)	5	
	ग	विविध विषयों पर आधारित लगभग 100 शब्दों में ई-मेल लेखन। (5x1= 5 )	5	

	<b>अथवा</b> दिए गए विषय/शीर्षक आदि के आधार पर लगभग 100 शब्दों में लघुकथा लेखन। (5x1= 5)		
घ	दिए गए विषय/परिस्थिति के आधार पर लगभग 80 शब्दों में संवाद लेखन। (4x1=4) <b>अथवा</b> व्यावहारिक जीवन से संबंधित विषयों पर आधारित लगभग 80 शब्दों में सूचना लेखन। (4x1=4)	4	
	<b>कुल</b>		<b>80</b>
	<b>आंतरिक मूल्यांकन</b>		20
अ	सामयिक आकलन	5	
ब	बहुविध आकलन	5	
स	पोर्टफोलियो	5	
द	श्रवण एवं वाचन	5	
	<b>कुल</b>		<b>100</b>

#### निर्धारित पुस्तकें :

1. **क्षितिज, भाग-1**, एन.सी.ई.आर.टी., नई दिल्ली द्वारा प्रकाशित नवीनतम संस्करण
2. **कृतिका, भाग-1**, एन.सी.ई.आर.टी., नई दिल्ली द्वारा प्रकाशित नवीनतम संस्करण

#### नोट - निम्नलिखित पाठों से प्रश्न नहीं पूछे जाएँगे-

<b>क्षितिज, भाग - 1</b>	काव्य खंड	<ul style="list-style-type: none"> <li>• केदारनाथ अग्रवाल - चंद्र गहना से लौटती बेर (पूरा पाठ)</li> <li>• चंद्रकांत देवताले - यमराज की दिशा (पूरा पाठ)</li> </ul>
	गद्य खंड	<ul style="list-style-type: none"> <li>• चपला देवी - नाना साहब की पुत्री देवी मैना को भस्म कर दिया गया (पूरा पाठ)</li> <li>• हजारीप्रसाद द्विवेदी - एक कुत्ता और एक मैना (पूरा पाठ)</li> </ul>
<b>कृतिका, भाग - 1</b>		<ul style="list-style-type: none"> <li>• विद्यासागर नोटियाल - माटी वाली (पूरा पाठ)</li> <li>• शमशेर बहादुर सिंह - किस तरह आखिरकार मैं हिंदी में आया (पूरा पाठ)</li> </ul>

**CLASS IX (2025-26)**  
**COURSE STRUCTURE**

History-India and the Contemporary World - I			Marks-20 inclusive of Map pointing
Section	Chapter No	Chapter Name	Marks
<b>I Events and Process</b>	<b>I</b>	The French Revolution	<b>18+2 map pointing</b>
	<b>II</b>	Socialism in Europe and the Russian Revolution	
	<b>III</b>	Nazism and the Rise of Hitler	
<b>II Livelihood, Economies and Societies</b>	<b>IV</b>	Forest, Society and Colonialism <b>Interdisciplinary project as part of multiple assessments</b> (Internally assessed for 5 marks)	
	<b>V</b>	Pastoralists in the Modern World <b>(assessed as part of Periodic Assessment only)</b>	

Geography-Contemporary India - I		Marks-20 inclusive of Map pointing
Chapter No.	Chapter Name	Marks
1	India – Size and Location	17+3 map pointing*
2	Physical Features of India	
3	Drainage	
4	Climate	
	Natural Vegetation and Wildlife <b>(Only map pointing to be evaluated in the annual examination.)</b>	
5	Population	* Marks as mentioned
6	Interdisciplinary project as part of multiple assessments (Internally assessed for 5 marks)	
Political Science- Democratic Politics - I		20 Marks
Chapter No.	Chapter name	Marks
1	What is Democracy?	20
	Why Democracy?	
2	Constitutional Design	
3	Electoral Politics	
4	Working of Institutions	
5	Democratic Rights	
Economics		20 Marks
Chapter No.	Chapter name	Marks
1	The Story of Village Palampur <b>(To be assessed as part of Periodic Assessment only)</b>	20
2	People as Resource	
3	Poverty as a Challenge	
4	Food Security in India	

**CLASS IX**  
**History-India and the Contemporary World - I**  
**Section I: Events and Processes**

**Chapter-1 The French Revolution**

**Learning Outcomes-**The students will be able to

- Infer how the French Revolution had an impact on the European countries in the making of nation states in Europe and elsewhere.

- Illustrate that, the quest for imperialism triggered the First World War.
- Examine various sources to address imbalances that may lead to revolutions

## **Chapter 2- Socialism in Europe and the Russian Revolution**

**Learning Outcomes-** The students will be able to

- Compare the situations that led to the rise of Russian and French Revolutions.
- Examine the situations that led to the establishment of Lenin's communism and Stalin's collectivization.
- Analyse the role played by the varied philosophers and leaders that shaped the revolution.

## **Chapter 3-Nazism and the Rise of Hitler.**

**Learning Outcomes-** The students will be able to

- Analyse the role of "Treaty of Versailles" in the rise of Hitler to power.
- Analyse the genocidal war waged against the "undesirables" by Hitler.
- Compare and contrast the characteristics of Hitler and Gandhi

## **Section II: Livelihoods, Economies and Societies**

### **Chapter 4- Forest Society and Colonialism**

Interdisciplinary Project with Chapter 5 of Geography "Natural Vegetation and Wildlife"

**Learning Outcomes-** Refer Annexure II

### **Chapter 5- Pastoralists in the Modern World**

**Learning Outcomes-** The students will be able to

- Examine the situations that have created nomadic societies highlighting the key factors played by the climatic conditions and topography.
- Analyse varying patterns of developments within pastoral societies in different places in India.
- Comprehend the impact of colonialism on Pastoralists in India and Africa.

## **Geography- Contemporary India - I**

### **Chapter 1- India – Size and Location**

**Learning Outcomes-** The students will be able to

- Examine how the location of an area impacts its climate and time with reference to longitude and latitude.
- Explore and analyses the trading and cultural relationships of India with its neighbouring countries.
- Evaluate the situation & reasons that made 82.5E\* longitude as Time meridian of India.
- Examine how location of India enables its position as a strategic partner in the subcontinent.
- Justify the reasons for the differences in climatic conditions, local and standard time.



## **Chapter 2- Physical Features of India**

**Learning Outcomes-** The students will be able to

- Justify how the Physical Features of India influences the livelihoods, culture, and the biodiversity of the region.
- Examine the geological process that played a crucial role in the formation of diverse physical features in India.
- Analyse the conditions and relationships of the people living in different physiographic areas.

## **Chapter 3- Drainage**

**Learning Outcomes-** The students will be able to

- Examine the information about different lakes and infer on their contribution to Indian ecology.
- Present creative solutions to overcome the water pollution and also to increase the contribution of water bodies to the Indian economy.
- Identify the river systems of the country and explain the role of rivers in human society

## **Chapter 4- Climate**

**Learning Outcomes-** The students will be able to

- Analyse and infer the effect of monsoon winds on rainfall of the Indian subcontinent.
- Analyse the temperatures between plateau region, Himalayan region, desert region and coastal region.
- Enumerate and summarise the reasons for the wide difference between temperatures at different geographical locations of India

## **Chapter 5- Natural Vegetation and Wildlife**

Interdisciplinary project with chapter no IV of History "Forest, Society and Colonialism"

**Learning Outcomes- -Refer annexure II**

## **Chapter-6. Population**

**Learning Outcomes-** The students will be able to

- Analyse and infer the reasons behind the uneven distribution of population in India with specific reference to UP & Rajasthan and Mizoram and Karnataka
- Enlist the factors that affect the population density

## **Political Science-Democratic Politics - I**

### **Chapter 1- What is Democracy? Why Democracy?**

**Learning Outcomes-** The students will be able to

- Examine the concept of structural components of Democracy and its forms/ features.



- Compare and Contrast working of democracies of India and some other countries and discuss differences and similarities in each country.
- Analyse and infer on the different historical processes and forces that have contributed for the promotion of democracy

## **Chapter 2- Constitutional Design**

**Learning Outcomes-** The students will be able to

- Discuss and describe the situation that led to creation of Indian Constitution
- Enumerate the essential features that need to be kept in mind while drafting a constitution.
- Examine the guiding values that created the Indian constitution
- Comprehend the roles and responsibilities as citizens of India.

## **Chapter 3- Electoral Politics**

**Learning Outcomes-** The students will be able to

- Analyse the implications of power of vote and power of recall.
- Summarise the essential features of the Indian Electoral system.
- Examine the rationale for adopting the present Indian Electoral System.

## **Chapter 4- Working of Institutions**

**Learning Outcomes-** The students will be able to

- Examine the roles, responsibilities, and interdependency of all the 3 organs of the Government.
- Appreciate the parliamentary system of executive's accountability to the legislature.
- Summarise and evaluate the rule of law in India.

## **Chapter 5- Democratic Rights**

**Learning Outcomes-** The students will be able to

- Summarise the importance of fundamental rights and duties in the light of the nation's glory.
- Analyse and recognise the role of a responsible citizen while performing their prescribed duties versus claiming rights.

# **ECONOMICS**

## **Chapter 1- The Story of Village Palampur**

**Learning Outcomes-** The students will be able to

- Enlist the requirements of production and comprehend the interdependence of these requirements.
- Correlate farming and non-farming activities to economic growth.
- Comprehend how the significance of conditions of farming and the factors of production impact economic development.
- Find solutions to foster an equitable society.

## Chapter 2- People as Resource

**Learning Outcomes-** The students will be able to

- Evaluate the reasons that contribute to the quality of population.
- Observe different government schemes and see their effect on the people there.

## Chapter 3- Poverty as a Challenge

**Learning Outcomes-** The students will be able to

- Comprehend the reasons for poverty in the rural and urban areas.
- Evaluate the efficacy of the government to eradicate poverty.
- Correlate the link between education and poverty.

## Chapter 4- Food Security in India

**Learning Outcomes-** The students will be able to

- Comprehend various aspects of food security that will ensure continuity of supply
- Enumerate the different features of PDS that directly address FSI.
- Analyse and infer the impact of the Green Revolution.
- Analyse causes and effect of famines in food security during pre and post independent India.

### CLASS IX (2025-26) MAP WORK

Subject	Chapter	List of Areas to be located /labeled/identified on the map
History	French Revolution	Outline political map of France. Locate/label/ identify. <ul style="list-style-type: none"><li>● Bordeaux, Nantes, Paris and Marseille</li></ul>
	Socialism in Europe and the Russian Revolution	Outline political map of the World. Locate/label/identify Major countries of First World War: Central Powers: Germany, Austria-Hungary, Turkey (Ottoman Empire). Allied Powers - France, England, Russia and USA
	Nazism and the Rise of Hitler	Outline Political Map of World. Locate/label/ identify Major countries of Second World War Axis: Powers – Germany, Italy, Japan Allied Powers – UK, France, Former USSR, USA
Geography	India : size and location	<ul style="list-style-type: none"><li>● India - States and Capitals</li><li>● Tropic of Cancer, Standard Meridian (Location and Labeling)</li><li>● Neighbouring Countries</li></ul>
	India physical features	<ul style="list-style-type: none"><li>● Mountain Ranges: The Karakoram, The Zaskar, The Shivalik, The Aravali, The Vindhya, The Satpura, Western and Eastern Ghats</li><li>● Mountain Peaks-K2, Kanchan Junga, Anai Mudi</li></ul>

		<ul style="list-style-type: none"> <li>• Plateau - Deccan Plateau, Chota Nagpur Plateau, Malwa Plateau</li> <li>• Coastal Plains – Konkan, Malabar, Coromandel &amp; Northern Circar (Location and Labelling)</li> </ul>
	Drainage system	Rivers (Identification only) <ul style="list-style-type: none"> <li>• The Himalayan River Systems - Indus, Ganges &amp; Sutlej</li> <li>• The Peninsular Rivers – The Narmada, The Tapi, The Kaveri, The Krishna, The Godavari, The Mahanadi</li> <li>• Lakes - Wular, Pulicat, Sambhar, Chilika</li> </ul>
	Climate	<ul style="list-style-type: none"> <li>• Annual rainfall in India, Monsoon wind direction</li> </ul>
	Population	<ul style="list-style-type: none"> <li>• Population density of all states</li> <li>• The state having highest and lowest density of population</li> </ul>

**Note-** The Maps available in the website of Govt. of India may be used.

**CLASS IX (2025-26)**  
**INTERNAL ASSESSMENT: 20 MARKS**

Type of Assessment	Description	Marks
Periodic Assessment	Pen Paper Test	5
Multiple Assessment	Quiz, debate, role play, viva-voce, group discussion, visual expression, interactive bulletin boards, gallery walks, exit cards, concept maps, peer assessment, self- assessment etc. through interdisciplinary project	5
Subject Enrichment Activity	Project work (Interdisciplinary)-Disaster Management	5
Portfolio	Classroom, work done (activities/assignments) reflections, narrations, journals etc. Achievements of the student in the subject throughout the year. Participation of the student in different activities like Heritage India quiz etc.	5

**CLASS IX**  
**PRESCRIBED TEXT BOOKS**

S. No.	Subject	Name of the Book	Publisher
1	History	India and the Contemporary World-I	NCERT
2	Political Science	Democratic Politics-I	NCERT
3	Geography	Contemporary India-I	NCERT
4	Economics	Economics	NCERT
5	Disaster Management	Together, towards a safer India- Part II	CBSE



### Project Work: Class IX

Project work	Competencies
<p>Every student must undertake one project on Disaster Management</p> <p><b>Objectives:</b> The main objectives of giving project work on Disaster Management to the students are to:</p> <ul style="list-style-type: none"> <li>• To create awareness in them about different disasters, their consequences and management</li> <li>• To prepare them in advance to face such situations</li> <li>• To ensure their participation in disaster risk reduction plans</li> <li>• To enable them to create awareness and preparedness among the community.</li> <li>• The project work helps in enhancing the Life Skills of the students.</li> <li>• Various forms of art must be integrated in the project work.</li> </ul>	<p>The students will develop the following competencies:</p> <ul style="list-style-type: none"> <li>• Collaboration</li> <li>• Use analytical skills.</li> <li>• Evaluate the situations during disasters.</li> <li>• Synthesize the information.</li> <li>• Find creative solutions.</li> <li>• Strategies the order of solutions.</li> <li>• Use the right communication skills.</li> </ul>

#### Guidelines:

To realise the expected objectives, it would be required of the principals / teachers to muster support from various local authorities and organisations like the Disaster Management Authorities, Relief, Rehabilitation and the Disaster Management Departments of the States, Office of the District Magistrate/ Deputy Commissioners, Fire Service, Police, Civil Defence etc. in the area where the schools are located.

The project carried out by the students should subsequently be shared among themselves through interactive sessions such as exhibitions, panel discussions, etc.

**The distribution of marks over different rubrics relating to Project Work is as follows:**

S.no	Aspects	Marks
a	Content accuracy and originality	2
b	Competencies exhibited and Presentation	2
c	Viva-Voce	1

- All documents pertaining to assessment under this activity should be meticulously maintained by the schools.
- A Summary Report should be prepared highlighting:
  - objectives realized through individual work and group interactions.
  - calendar of activities.
  - innovative ideas generated in the process.
  - list of questions asked in viva voce.

- It is to be noted here by all the teachers and students that the projects and models prepared should be made from eco-friendly products without incurring too much expenditure.
- The Project Report can be handwritten or digital.
- The Project Work needs to enhance cognitive, affective and psychomotor skills of the learners. It will include self-assessment and peer assessment, and progress of the child in project-based and inquiry-based learning, art integrated activities, experiments, models, quizzes, role plays, group work, portfolios, etc., along with teacher assessment. (NEP-2020)
- The Project work can culminate in the form of PowerPoint Presentation/Exhibition/Skit/albums/files/song and dance or culture show /story telling/debate/panel discussion, paper presentation and whichever is suitable to Visually Impaired Candidates.)
- The record of the project work (internal assessment) should be kept for a period of three months for verification, if any.

**Class-IX**  
**Interdisciplinary Project**

Subject and Chapter No	Name of the Chapter	Suggested Teaching Learning Process	Learning Outcomes with Specific Competencies	Time Schedule For Completion
History Chapter IV	Forest Society and Colonialism	Interdisciplinary project Teachers can make use of the pedagogies in facilitating the students in completion of Interdisciplinary Project Constructivism Inquiry based learning Cooperative Learning Research based learning. Experiential learning. Art integration  <b>Multiple Assessment:</b> Ex. Surveys / Interviews / Research work/ Observation/ Story based Presentation/ Art integration/ Quiz/ Debate/ role play/ viva, /group discussion, /visual expression/ interactive bulletin boards/ gallery walks/ exit cards/ concept maps/ peer assessment/ art integration /Self-assessment/ integration of technology etc.	Compare the forest situations prevailed in the pre- colonial, colonial and post-colonial era.  Evaluate the growth & role of commercial forestry in different types of Vegetation.  Analyse the reasons for rebellions in forest areas of south East-Asia with specification to JAVA.  To defend the role of government and the local communities in protecting the forest cover.	The schools to do IDP between the months of April and September at the School under the guidance of a teacher. (Carryover of project to home must be strictly avoided)
Geography Chapter 5	Natural Vegetation and Wildlife		To devise ways to protect the forest vegetation and wildlife in India.	

**Guidelines for Interdisciplinary Project:**

It involves combining 2 or more disciplines into one activity-more coherent and integrated. The generally recognized disciplines are economics, History, Geography, Political Science. A sample plan has been enclosed. Kindly access the link given below-  
[https://docs.google.com/document/d/1668TKkRt80r4-kbjJ\\_Y7zg4mF3Vq1Y9k/edit](https://docs.google.com/document/d/1668TKkRt80r4-kbjJ_Y7zg4mF3Vq1Y9k/edit)

**Plan of the project:**

A suggestive 10 days' plan given below which you may follow, or you can create on your own, based on the templates provided below.

**Process:**

Initial collaboration among students to arrange their roles, areas of integration, area of investigation and analysis, roles of students.



Team leader: Main collaborator
Team members:
Note: Teacher to allocate the roles as per the abilities of the students.

- Final submission based on course deliverables as given in the template below the 10-day plan.
- Assessment Plan: to be done by the teacher clearly mentioning the Rubrics.
- Report, poster and video acknowledgements: reflections & expression of gratitude as given in the template given below

Class IX Interdisciplinary project	
10 days suggestive plan	10 periods
<p><b>Day 1-2: Colonialism and Forest Society</b></p> <p>Discuss the impact of colonialism on forest societies and explore the concept of forest as a resource in colonialism. Group project: Research and present a PPT on the colonial forest policy and its impact on forest societies.</p> <p><b>Day 3-4: "Rebellion in the Forest"</b></p> <p>Analyse the causes and effects of forest-based rebellions in history. Watch the following film Group discuss about forest tribes of your state and the exploitations they face. Refer Annexure V for Rubrics. <a href="https://www.youtube.com/watch?v=N6SR0REa_YA">https://www.youtube.com/watch?v=N6SR0REa_YA</a></p> <p><b>Day 5-6: Forest Transformations in Java, Tropical Evergreen Forests</b></p> <ul style="list-style-type: none"> <li>• Examine the impact of human activity on forests in Java.</li> <li>• Explore how changes in land use, agriculture, and industry have impacted the forests. Students can research the history of forest transformations in Java and their impact on the environment.</li> <li>• Study the transformation of forests in Java, from pre-colonial to post-colonial times. Compare and contrast the conversion of forest into agricultural land and the need. Through group discussions find solutions. Present an art integrated project.</li> <li>• Discuss the characteristics of tropical evergreen forests, including their climate, soil, and flora/fauna.</li> <li>• Students can research specific examples of tropical evergreen forests and the challenges they face, such as deforestation and climate change.</li> </ul> <p><i>Group project: watch the video through the link <a href="https://www.youtube.com/watch?v=Ml0xvHsBigI">https://www.youtube.com/watch?v=Ml0xvHsBigI</a></i></p> <ul style="list-style-type: none"> <li>• Analyse and present the impact of forest transformations on society, economy and environment in Java. Compare and contrast it with India.</li> <li>• Present a PPT of your learnings. Refer Annexure V for rubrics</li> </ul> <p><b>Day 7-8:</b> Discuss how colonialism has affected the forest's biodiversity and the survival of indigenous communities living in and around the forest</p> <p><b>Group activity:</b> Divide the group into smaller teams and assign them tasks related to identifying the impact of colonialism on different types of forests. For example, one team can research the impact of colonialism on forest fires, while another team can research the impact of colonialism on the survival of indigenous plants and animals. Make the students use cartoon strips to present their findings. Day 9-10: Make the students compile all the findings of 8 days' work and present them in PPT and through the template given in Annexure IV.</p>	



**COURSE STRUCTURE**  
**CLASS IX (2025-26)**  
**(Annual Examination)**

**Time: 03 Hours**

**Marks: 80**

Unit No.	Unit	Marks
I	Matter - Its Nature and Behaviour	25
II	Organization in the Living World	22
III	Motion, Force and Work	27
IV	Food; Food Production	06
	<b>Total</b>	<b>80</b>
	<b>Internal assessment</b>	<b>20</b>
	<b>Grand Total</b>	<b>100</b>

**Theme: Materials**

**Unit I: Matter-Nature and Behaviour**

**Matter in Our Surroundings:** Definition of matter; Particulate Nature of Matter; States of Matter: solid, liquid and gas and their characteristics; change of state- melting (absorption of heat), freezing, evaporation (cooling by evaporation), condensation, sublimation.

**Is Matter Around Us Pure:** Elements, compounds and mixtures. Heterogeneous and homogenous mixtures, colloids and suspensions. Physical and chemical changes (excluding separating the components of a mixture); Pure and Impure substances.

**Atoms and Molecules:** Atoms and molecules, Law of Chemical Combination, Chemical formula of common compounds, Atomic and molecular masses.

**Structure of atom:** Sub-atomic particles: Electrons, protons and neutrons, Models of atom; Valency, Atomic Number and Mass Number, Isotopes and Isobars.

## Theme: The World of the Living

### Unit II: Organization in the Living World

**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.

#### **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).

*The following topics are included in the syllabus but will be assessed only formatively to reinforce understanding without adding to summative assessments. This reduces academic stress while ensuring meaningful learning. Schools can integrate these with existing chapters as they align well. Relevant NCERT textual material is enclosed for reference.*

**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.

## Theme: Moving Things, People and Ideas

### Unit III: Motion, Force and Work

**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, elementary idea of uniform circular 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.

*The following topic is included in the syllabus but will be assessed only formatively to reinforce understanding without adding to summative assessments. This reduces academic stress while ensuring meaningful learning. Schools can integrate this with existing chapters as they align well. Relevant NCERT textual material is enclosed for reference.*

Elementary idea of conservation of Momentum

**Gravitation:** Gravitation; Universal Law of Gravitation, Force of Gravitation of the earth (gravity), Acceleration due to Gravity; Mass and Weight; Free fall.

**Floatation:** Thrust and Pressure. Archimedes' Principle; Buoyancy.

**Work, Energy and Power:** Work done by a Force, Energy, power; Kinetic and Potential energy; Law of conservation of energy (excluding commercial unit of Energy).

**Sound:** Nature of sound and its propagation in various media, speed of sound, range of hearing in humans; ultrasound; reflection of sound; echo.

### **Theme: Food**

#### **Unit IV: Food Production**

Plant and animal breeding and selection for quality improvement and management; Use of fertilizers and manures; Protection from pests and diseases; Organic farming.

**Note for Teachers:** The NCERT text books present information in boxes across the book. These help students to get conceptual clarity. However, the information in these boxes would not be assessed in the year-end examination.

### **PRACTICALS**

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

#### **(LIST OF EXPERIMENTS)**

- |  |               |
|--|---------------|
| 1. Preparation of:   | <b>Unit-I</b> |
| 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  |               |
| 2. Preparation of  | <b>Unit-I</b> |
| a) A mixture   |               |
| b) A compound  |               |
| using iron filings and sulphur powder and distinguishing between these on the basis of:                                |               |
| • appearance, i.e., homogeneity and heterogeneity  |               |

- behaviour towards a magnet
- behaviour towards carbon disulphide as a solvent
- effect of heat

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

**Unit-I**

- Iron with copper sulphate solution in water
- Burning of magnesium ribbon in air
- Zinc with dilute sulphuric acid
- Heating of copper sulphate crystals
- Sodium sulphate with barium chloride in the form of their solutions in water

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

**Unit - II**

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**

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

**Unit-I**

7. Verification of the laws of reflection of sound.

**Unit-III**

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

**Unit-III**

9. Establishing the relation between the loss in weight of a solid when fully immersed in

**Unit-III**

a) Tap water

b) Strongly salty water with the weight of water displaced by it by taking at least two different solids.

10. Determination of the speed of a pulse propagated through a stretched string/ slinky (helical spring).

**Unit-III**

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

**Unit-III**

# **CBSE | DEPARTMENT OF SKILL EDUCATION**

## **CURRICULUM FOR SESSION 2025-2026**

---

### **INFORMATION TECHNOLOGY (SUB. CODE – 402)**

#### **JOB ROLE: DOMESTIC DATA ENTRY OPERATOR**

---

#### **CLASS – IX**

#### **COURSE OVERVIEW:**

A Data Entry Operator/Analyst is a person who is responsible for entering data into different applications and computer databases, manage and maintain effective record keeping. In addition, S/he is responsible for organizing files, collecting and managing data to be entered into the computer. S/he is also responsible for security of data and safeguard of the computer network.

With every office and organization seeking to become computerized, the demand for data entry operators/analysts is on a rise. Data entry operators/analysts usually work in an indoor, office setting using a computer and other electronic machines. To be in the profession of data entry/analysis, one has to have computer literacy, high typing speed, organization skills, concentration skills, communication skills and an ability to sit for long periods of time entering and computing data.

#### **OBJECTIVES OF THE COURSE:**

In this course, the students will be introduced to the fundamental concepts of digital documentation, digital spreadsheet, digital presentation, database management and internet security.

The following are the main objectives of this course:

- To familiarize the students with the world of IT and IT enabled services.
- To provide an in-depth training in use of data entry, internet and internet tools.
- To develop practical knowledge of digital documentation, spreadsheets and presentation.
- To enable the students to understand database management system and have updated knowledge about digital record keeping.

- To make the students capable of getting employment in Private Sector, Public Sector, Ministries, Courts, House of Parliament and State Legislative Assemblies.
- To develop the following skills:
  - Data Entry and Keyboarding skills
  - The concept of Digital Documentation
  - The concept of Digital Presentation
  - The concept of Electronic Spreadsheet
  - The concept of Databases
  - Internet Technologies

## **SALIENT FEATURES**

To be a data entry operator/analyst, one requires a lot of hard work and practical hands-on experience. One should have an intensive knowledge of Office applications, computer operations, and knowledge of clerical, administrative techniques and data analysis. Along with this, as a data entry operator/analyst, you will be expected to have fast typing speed, accuracy, and efficiency to perform tasks.

As a data entry operator/analyst, one should improve their computer skills, numerical and literacy skills. These skills can help one expand into a new career path in the future.

## **SCHEME OF UNITS**

This course is a planned sequence of instructions consisting of units meant for developing employability and vocational competencies of students of Class IX opting for skill subject along with other education subjects. The unit-wise distribution of hours and marks for class IX is as follows:

**INFORMATION TECHNOLOGY (SUBJECT CODE - 402)****CLASS – IX (Session 2025-2026)****Total Marks: 100 (Theory-50 + Practical-50)**

	<b>UNITS</b>	<b>NO. OF HOURS for Theory and Practical</b>		<b>MAX. MARKS for Theory and Practical</b>
<b>Part A</b>	<b>Employability Skills</b>			
	Unit 1 : Communication Skills-I	10		2
	Unit 2 : Self-Management Skills-I	10		3
	Unit 3 : ICT Skills-I	10		1
	Unit 4 : Entrepreneurial Skills-I	15		3
	Unit 5 : Green Skills-I	05		1
	<b>Total</b>	<b>50</b>		<b>10</b>
<b>Part B</b>	<b>Subject Specific Skills</b>	<b>Theory</b>	<b>Practical</b>	<b>Marks</b>
	Unit 1: Introduction to IT- ITeS industry	2	4	4
	Unit 2: Data Entry & Keyboarding Skills	4	10	6
	Unit 3: Digital Documentation	10	26	10
	Unit 4:Electronic Spreadsheet	18	35	10
	Unit 5: Digital Presentation	10	31	10
	<b>Total</b>	<b>44</b>	<b>106</b>	<b>40</b>
<b>Part C</b>	<b>Practical Work</b>			
	Practical Examination			15
	Written Test			10
	Viva Voce			10
	<b>Total</b>			<b>35</b>
<b>Part D</b>	<b>Project Work/ Field Visit</b>			
	Practical File/ Student Portfolio			10
	Viva Voce			05
	<b>Total</b>			<b>15</b>
	<b>GRAND TOTAL</b>	<b>200</b>		<b>100</b>



## **DETAILED CURRICULUM/TOPICS:**

### **Part-A: EMPLOYABILITY SKILLS**

<b>S. No.</b>	<b>Units</b>	<b>Duration in Hours</b>
1.	Unit 1: Communication Skills-I	10
2.	Unit 2: Self-Management Skills-I	10
3.	Unit 3: Basic Information and Communication Technology Skills-I	10
4.	Unit 4: Entrepreneurial Skills-I	15
5.	Unit 5: Green Skills-I	05
	<b>TOTAL</b>	<b>50</b>

**NOTE:** Detailed Curriculum/ Topics to be covered under Part A: Employability Skills can be downloaded from CBSE website.

### **Part-B – SUBJECT SPECIFIC SKILLS**

- Unit 1: Introduction to IT- ITeS industry
- Unit 2: Data Entry & Keyboarding Skills
- Unit 3: Digital Documentation
- Unit 4: Electronic Spreadsheet
- Unit 5: Digital Presentation

### **UNIT 1: INTRODUCTION TO IT–ITeS INDUSTRY**

<b>S. No.</b>	<b>LEARNING OUTCOMES</b>	<b>THEORY</b>	<b>PRACTICAL</b>
1	Appreciate the applications of IT	<ul style="list-style-type: none"><li>• Introduction to IT and ITeS, BPO services,</li><li>• BPM industry in India,</li><li>• Structure of the IT-BPM industry,</li><li>• Applications of IT in home computing, everyday life, library, workplace, education, entertainment, communication, business, science and engineering, banking, insurance, marketing, health care, IT in the government and public service</li></ul>	<ul style="list-style-type: none"><li>- Identify and list the various IT enabled services, Observe the application of IT in various areas.</li></ul>

## UNIT 2: DATA ENTRY AND KEYBOARDING SKILLS

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
1.	Use keyboard and mouse for data entry	<ul style="list-style-type: none"> <li>Keyboarding Skills,</li> <li>Types of keys on keyboard, Numeric keypad,</li> <li>Home keys, Guide keys,</li> <li>Typing and deleting text,</li> <li>Typing ergonomics,</li> <li>Positioning of fingers on the keyboard, Allocation of keys to fingers on four different rows,</li> <li>Pointing device – Mouse, Mouse operations.</li> </ul>	<ul style="list-style-type: none"> <li>Identify the keys and its use on the keyboard,</li> <li>Demonstrate to use various keys on the keyboard,</li> <li>Demonstrate to type the text, numbers, special character using appropriate keys on the keyboard,</li> <li>Practice the correct typing ergonomics,</li> <li>Practice to place fingers on correct key in four different row of keyboard,</li> <li>Practice various mouse operations.</li> </ul>
2.	Use typing software	<ul style="list-style-type: none"> <li>Introduction to Rapid Typing Tutor,</li> <li>Touch typing technique,</li> <li>User interface of Typing Tutor,</li> <li>Typing text and interpret results,</li> <li>Working with lesson editor,</li> <li>Calculating typing speed,</li> <li>Typing rhythm.</li> </ul>	<ul style="list-style-type: none"> <li>Identify the user interface of typing tutor,</li> <li>Practice to type text in typing tutor software and interpret the results,</li> <li>Practice to work in lesson editor,</li> <li>Calculate the typing speed</li> <li>Practice to improve typing</li> <li>Using typing tutor software.</li> </ul>

## UNIT 3: DIGITAL DOCUMENTATION

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
1.	Create a document using a word processor	<ul style="list-style-type: none"> <li>Introduction to word processing,</li> <li>Word processing applications,</li> <li>Introduction to Word Processing tool</li> <li>Creating a document, Parts of a Word Processor Window,</li> </ul>	<ul style="list-style-type: none"> <li>List the available word processing applications.</li> <li>Introduce with the parts of the main window.</li> <li>Change document views.</li> <li>Start a new document.</li> <li>Open an existing document.</li> <li>Save a document.</li> <li>Close a document.</li> </ul>
2.	Apply Editing features	<ul style="list-style-type: none"> <li>Text editing – Undo and Redo,</li> <li>Moving and copying text,</li> <li>Copy and Paste,</li> <li>Selecting text,</li> <li>Selection criteria,</li> </ul>	<ul style="list-style-type: none"> <li>Editing of text in a document</li> <li>Demonstrate to use undo and redo option,</li> <li>Use the keyboard and mouse options to select, cut, copy, paste, and move text.</li> </ul>

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
		<ul style="list-style-type: none"> <li>• Selecting non-consecutive text items,</li> <li>• Selecting a vertical block of text,</li> <li>• Find and replace option,</li> <li>• Jumping to the page number,</li> <li>• Non-printing characters,</li> <li>• Checking spelling and grammar,</li> <li>• Using Synonyms and Thesaurus.</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate to select nonconsecutive text items, vertical block of text,</li> <li>• Search and replace text in a document.</li> <li>• Jump to the given page number in a document,</li> <li>• Insert non-printing characters in a document,</li> <li>• Apply Spelling and grammar option of document.</li> <li>• Demonstrate to use Synonyms and Thesaurus.</li> </ul>
3.	Apply formatting features	<ul style="list-style-type: none"> <li>• Page style dialog</li> <li>• Formatting text – Removing manual formatting, Common text formatting, Changing text case, Superscript and Subscript</li> <li>• Formatting paragraph – Indenting paragraphs, Aligning paragraphs, Font colour, highlighting, and background colour, Using bullets and numbering, Assigning colour, border and background to paragraph.</li> <li>• Page formatting – setting up basic page layout using styles, Inserting page break, Creating header/footer and page numbers,</li> <li>• Defining borders and backgrounds, Inserting images shapes, special characters in a document, Dividing page into columns, Formatting the shape or image.</li> </ul>	<ul style="list-style-type: none"> <li>• Apply various text formatting options for the text,</li> <li>• Demonstrate to format paragraphs – indent/align paragraphs, assign font colour, highlighting, and background colour,</li> <li>• Assign number or bullets to the lists items</li> <li>• Demonstrate to assign colour, border and background to paragraph</li> <li>• Demonstrate the page formatting – set up basic page layout using styles,</li> <li>• Insert page break, Create header/footer and page numbers</li> <li>• Define borders and backgrounds</li> <li>• Insert images, shapes, special characters in a document</li> <li>• Divide page into columns,</li> <li>• Format the shape or image.</li> </ul>
4.	Create and work with tables	<ul style="list-style-type: none"> <li>• Creating table in Word Processor</li> <li>• Inserting row and column in a table</li> <li>• Deleting rows and columns</li> <li>• Splitting and merging tables</li> <li>• Deleting a table</li> <li>• Copying a table</li> <li>• Moving a table.</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate and do the following in Word Processor:</li> <li>• Create table,</li> <li>• Insert and delete rows and column in a table,</li> <li>• Split and merge tables,</li> <li>• Delete a table,</li> <li>• Copy or move from one location to another location of document.</li> </ul>

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
5.	Use Print Options	<ul style="list-style-type: none"> <li>• Printing options in Word Processor.</li> <li>• Print preview,</li> <li>• Controlling printing,</li> <li>• Printing all pages, single and multiple pages.</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate to print the document, selected pages in the document</li> <li>• Print the document with various options,</li> <li>• Preview pages before printing.</li> </ul>
6.	Understand and apply mail merge	<ul style="list-style-type: none"> <li>• Introduction to mail merge</li> <li>• Concept of data source for mail merge.</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate to print the letters using mail merge,</li> <li>• Do the following to achieve</li> <li>• Create a main document,</li> <li>• Create the data source,</li> <li>• Enter data in the fields,</li> <li>• Merge the data source with main document,</li> <li>• Edit individual document,</li> <li>• Print the merged letter,</li> <li>• Save the merged letter.</li> </ul>

#### UNIT 4: ELECTRONIC SPREADSHEET

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
1.	Create a Spreadsheet	<ul style="list-style-type: none"> <li>• Introduction to spreadsheet application</li> <li>• Starting a spreadsheet</li> <li>• Parts of a spreadsheet</li> <li>• Worksheet – Rows and Columns, Cell and Cell Address,</li> <li>• Range of cells – column range, row range, row and column range.</li> </ul>	<ul style="list-style-type: none"> <li>• Start the spreadsheet,</li> <li>• Identify the parts of Calc,</li> <li>• Identify the rows number, column number, cell address,</li> <li>• Define the range of cell,</li> <li>• Identify row range, column range, row &amp; column range</li> </ul>
2.	Apply formula and functions in spreadsheet	<ul style="list-style-type: none"> <li>• Different types of data,</li> <li>• Entering data – Label, Values, Formula</li> <li>• Formula, how to enter formula,</li> <li>• Mathematical operators used in formulae,</li> <li>• Simple calculations using values and operators,</li> <li>• Formulae with cell addresses and operators,</li> <li>• Commonly used basic functions in a spreadsheet – SUM, AVERAGE, MAX, MIN, Count</li> <li>• Use of functions to do calculations.</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate to enter the text, numeric data in a cell,</li> <li>• Identify the label, values and formula in the cell,</li> <li>• Demonstrate to enter formula in a cell,</li> <li>• Construct the formula using mathematical operators,</li> <li>• Identify formulae with cell addresses and operators,</li> <li>• Identify the correct syntax of formula,</li> <li>• Use the basic functions to perform calculations on data.</li> </ul>

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
3.	Format data in the spreadsheet	<ul style="list-style-type: none"> <li>• Formatting tool,</li> <li>• Use of dialog boxes to format values,</li> <li>• Formatting a range of cells with decimal places,</li> <li>• Formatting a range of cells to be seen as labels,</li> <li>• Formatting of a cell range as scientific,</li> <li>• Formatting a range of cells to display times,</li> <li>• Formatting alignment of a cell range,</li> <li>• Speeding up data entry using the fill handle,</li> <li>• Uses of fill handle to copy formulae.</li> </ul>	<ul style="list-style-type: none"> <li>• Identify the formatting tool,</li> <li>• Demonstrate to use of dialog boxes to format values,</li> <li>• Demonstrate to format range of cells with decimal places,</li> <li>• Demonstrate to format a range of cells to labels,</li> <li>• Demonstrate to format of a cell range as scientific,</li> <li>• Demonstrate to format a range of cells to display time,</li> <li>• Demonstrate to align cell data range,</li> <li>• Demonstrate to create number series using fill handle,</li> <li>• Copy formula by dragging the formula using fill handle.</li> </ul>
4.	Understand and apply Referencing	<ul style="list-style-type: none"> <li>• Concept of referencing,</li> <li>• Relative referencing,</li> <li>• Mixed referencing,</li> <li>• Absolute referencing.</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate to use Relative referencing in spreadsheet,</li> <li>• Demonstrate to use Mixed referencing in spreadsheet,</li> <li>• Demonstrate to use Absolute referencing in spreadsheet.</li> </ul>
5.	Create and insert different types of charts in a spreadsheet	<ul style="list-style-type: none"> <li>• Importance of chart in spreadsheet</li> <li>• Types of chart</li> </ul>	<ul style="list-style-type: none"> <li>• Create different types of charts supported by a spreadsheet,</li> <li>• Illustrate the example of chart in a spreadsheet.</li> </ul>

## UNIT 5: DIGITAL PRESENTATION

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
1.	Understand features of an effective presentation	<ul style="list-style-type: none"> <li>• Concept of presentation,</li> <li>• Elements of presentation,</li> <li>• Characteristics of an effective presentation</li> </ul>	<ul style="list-style-type: none"> <li>• Identify and list the elements of presentation,</li> <li>• List the characteristics of an effective presentation.</li> </ul>
2.	Create a presentation	<ul style="list-style-type: none"> <li>• Introduction to presentation software,</li> <li>• Opening a presentation software</li> <li>• Parts of presentation window,</li> <li>• Closing a presentation</li> <li>• Creating a presentation using template,</li> <li>• Selecting slide layout,</li> <li>• Saving a presentation,</li> <li>• Running a slide show,</li> <li>• Save a presentation in PDF,</li> <li>• Closing a presentation,</li> <li>• Using Help.</li> </ul>	<ul style="list-style-type: none"> <li>• Start the presentation application</li> <li>• various components of main Impress window</li> <li>• Observe the different workspace views.</li> <li>• Create a new presentation using wizard.</li> <li>• Run the presentation,</li> <li>• Save the presentation,</li> <li>• Close the presentation,</li> <li>• Demonstrate to use Help in presentation.</li> </ul>



S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
3.	Work with slides	<ul style="list-style-type: none"> <li>• Inserting a duplicate slide,</li> <li>• Inserting new slides,</li> <li>• Slide layout,</li> <li>• Copying and moving slides,</li> <li>• Deleting and renaming slides</li> <li>• Copying, moving and deleting contents of slide,</li> <li>• View a presentation,</li> <li>• Controlling the size of the view,</li> <li>• Workspace views – Normal, Outline, Notes, Slide sorter view.</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate to insert a new slide and duplicate slide in a presentation,</li> <li>• Change the slide layout,</li> <li>• Demonstrate to copy and move slides in the presentation,</li> <li>• Demonstrate to copy, move and delete contents of the slide,</li> <li>• Demonstrate to view a presentation in different views.</li> </ul>
4.	Format text and apply animations	<ul style="list-style-type: none"> <li>• Formatting toolbar,</li> <li>• Various formatting features,</li> <li>• Text alignment,</li> <li>• Bullets and numbering.</li> <li>• Custom Animation</li> </ul>	<ul style="list-style-type: none"> <li>• Identify and list the various options in formatting toolbar,</li> <li>• Apply the appropriate formatting option</li> <li>• Align the text in presentation,</li> <li>• Apply bullets and numbering to the list items in presentation. □ Apply Animation</li> </ul>
5.	Create and use tables	<ul style="list-style-type: none"> <li>• Inserting tables in presentation,</li> <li>• Entering and editing data in a table,</li> <li>• Selecting a cell, row, column, table,</li> <li>• Adjusting column width and row height,</li> <li>• Table borders and background</li> </ul>	<p>Demonstrate the following:</p> <ul style="list-style-type: none"> <li>• Insert table in presentation,</li> <li>• Enter and edit data in a table,</li> <li>• Select a cell, row, column, table,</li> <li>• Adjust column width and row height,</li> <li>• Assign table borders and background.</li> </ul>
6.	Insert and format image in presentation	<ul style="list-style-type: none"> <li>• Inserting an image from a file,</li> <li>• Inserting an image from the gallery,</li> <li>• Formatting images,</li> <li>• Moving images,</li> <li>• Resizing images,</li> <li>• Rotating images,</li> <li>• Formatting using the Image toolbar,</li> <li>• Drawing graphic objects – line, shapes,</li> <li>• Grouping and un-grouping objects</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate to insert an image from file, gallery in presentation,</li> <li>• Apply formatting options to image in presentation,</li> <li>• Demonstrate to move, resize and rotate images,</li> <li>• Apply formatting options of Image toolbar,</li> <li>• Drawing line, shapes using graphic objects,</li> </ul> <p>Demonstrate to group and ungroup objects.</p>
7.	Work with slide master	<ul style="list-style-type: none"> <li>• Slide masters,</li> <li>• Creating the slide masters,</li> <li>• Applying the slide masters to all slide,</li> <li>• Adding transitions.</li> </ul>	<ul style="list-style-type: none"> <li>• Create the slide masters,</li> <li>• Apply the slide masters to the presentation,</li> <li>• Add transitions to presentation.</li> </ul>

## LIST OF EQUIPMENT/ MATERIALS:

The list given below is suggestive and an exhaustive list should be compiled by the teacher(s) teaching the subject. Only basic tools, equipment and accessories should be procured by the Institution so that the routine tasks can be performed by the students regularly for practice and acquiring adequate practical experience.

S. No.	ITEM NAME, DESCRIPTION & SPECIFICATION	QUANTITY
<b>A</b>	<b>HARDWARE</b>	
1.	Computer with latest configuration or minimum Pentium Processor with minimum 2GB RAM, 512 GB HDD, 17" LED Monitor, NIC Card, 3 button Mouse, 105 keys key board and built-in speakers and mic.	15
2.	Laser Printer - Black	01
3.	Inkjet Printers (Colour & Black)	01
4.	Scanner	01
5.	Online UPS 5 KVA	01
6.	16 Port Switches	01
7.	Air Conditioner 1.5 tonne	02
8.	Telephone line (For Internet)	01
9.	Fire extinguisher	01
<b>B</b>	<b>SOFTWARE</b>	
1.	Operating System Linux and Windows	
2.	Anti-Virus Latest version	
3.	Productivity Suite, Example –Libre Office	
<b>C</b>	<b>FURNITURE</b>	
1.	Class room chairs and desks	25
2.	Computer Tables	15
3.	Straight back revolving & adjustable chairs (Computer Chairs)	15
4.	Printer Tables	02
5.	Trainers Table	01
6.	Trainers Chair	01
7.	Steel cupboards drawer type	02
8.	Cabinet with drawer	01
9.	Steel Almira - big size	01
10.	Steel Almira- small size	01

## TEACHER'S/ TRAINER'S QUALIFICATIONS:

Qualification and other requirements for appointment of teachers/trainers for teaching this subject, on contractual basis should be decided by the State/ UT. The suggestive qualifications and minimum competencies for the teacher should be as follows:

Qualification	Minimum Competencies	Age Limit
Diploma in Computer Science/ Information Technology <b>OR</b> Bachelor Degree in Computer Application/ Science/ Information Technology (BCA, B.Sc. Computer Science/ Information Technology) <b>OR</b> Graduate with PGDCA OR DOEACC A Level Certificate. The suggested qualification is the minimum criteria. However higher qualifications will also be acceptable.	<ul style="list-style-type: none"> <li>The candidate should have a minimum of 1 year of work experience in the same job role.</li> <li>S/he should be able to communicate in English and local language.</li> <li>S/he should have knowledge of equipment, tools, material, Safety, Health &amp; Hygiene.</li> </ul>	<ul style="list-style-type: none"> <li>18-37 years (as on Jan. 01 (year))</li> <li>Age relaxation to be provided as per Govt. rules</li> </ul>

Teachers/Trainers form the backbone of Skill (Vocational) Education being imparted as an integral part of Rashtriya Madhyamik Shiksha *Abhiyan* (RMSA). They are directly involved in teaching of Skill (vocational) subjects and also serve as a link between the industry and the schools for arranging industry visits, On-the-Job Training (OJT) and placement.

These guidelines have been prepared with an aim to help and guide the States in engaging quality Teachers/Trainers in the schools. Various parameters that need to be looked into while engaging the Vocational Teachers/Trainers are mode and procedure of selection of Teachers/ Trainers, Educational Qualifications, Industry Experience, and Certification/ Accreditation.

The State may engage Teachers/Trainers in schools approved under the component of scheme of Vocationalisation of Secondary and Higher Secondary Education under RMSA in following ways:

- Directly as per the prescribed qualifications and industry experience suggested by the PSS Central Institute of Vocational Education (PSSCIVE), NCERT or the respective Sector Skill Council (SSC).
- OR**
- Through accredited Vocational Training Providers accredited under the National Quality Assurance Framework (NQAF\*) approved by the National Skill Qualification Committee on 21.07.2016. If the State is engaging Vocational Teachers/Trainers through the Vocational Training Provider (VTP), it should ensure that VTP should have been accredited at NQAF Level 2 or higher.

---

*\* The National Quality Assurance Framework (NQAF) provides the benchmarks or quality criteria which the different organizations involved in education and training must meet in order to be accredited by competent bodies to provide government- funded education and training/skills activities. This is applicable to all organizations offering NSQF-compliant qualifications.*

---

The educational qualifications required for being a Teacher/Trainer for a particular job role are clearly mentioned in the curriculum for the particular NSQF compliant job role. The State should ensure that teachers/trainers deployed in the schools have relevant technical competencies for the NSQF qualification being delivered. Teachers/Trainers preferably should be certified by the concerned Sector Skill Council for the particular Qualification Pack/Job role which he will be teaching. Copies of relevant certificates and/or record of experience of the teacher/trainer in the industry should be kept as record.

To ensure the quality of the Teachers/Trainers, the State should ensure that a standardized procedure for selection of (Vocational) Teachers/Trainers is followed. The selection procedure should consist of the following:

- (i) Written test for the technical/domain specific knowledge related to the sector;
- (ii) Interview for assessing the knowledge, interests and aptitude of trainer through a panel of experts from the field and state representatives; and (iii) Practical test/mock test in classroom/workshop/laboratory.

In case of appointment through VTPs, the selection may be done based on the above procedure by a committee having representatives of both the State Government and the VTP.

The State should ensure that the Teachers/ Trainers who are recruited should undergo induction training of 20 days for understanding the scheme, NSQF framework and Vocational Pedagogy before being deployed in the schools.

The State should ensure that the existing trainers undergo in-service training of 5 days every year to make them aware of the relevant and new techniques/approaches in their sector and understand the latest trends and policy reforms in vocational education.

The Head Master/Principal of the school where the scheme is being implemented should facilitate and ensure that the (Vocational) Teachers/Trainers:

- Prepare session plans and deliver sessions which have a clear and relevant purpose and which engage the students;
- Deliver education and training activities to students, based on the curriculum to achieve the learning outcomes;
- Make effective use of learning aids and ICT tools during the classroom sessions;
- Engage students in learning activities, which include a mix of different methodologies, such as project based work, team work, practical and simulation based learning experiences;
- Work with the institution's management to organise skill demonstrations, site visits, on job trainings, and presentations for students in cooperation with industry, enterprises and other workplaces;
- Identify the weaknesses of students and assist them in up-gradation of competency;
- Cater to different learning styles and level of ability of students;
- Assess the learning needs and abilities, when working with students with different abilities
- Identify any additional support the student may need and help to make special arrangements for that support;
- Provide placement assistance

Assessment and evaluation of (Vocational) Teachers/Trainers is very critical for making them aware of their performance and for suggesting corrective actions. The States/UTs should ensure that the performance of the (Vocational) Teachers/Trainers is appraised annually. Performance based appraisal in relation to certain pre-established criteria and objectives should be done periodically to ensure the quality of the (Vocational) Teachers/Trainers.

Following parameters may be considered during the appraisal process:

- Participation in guidance and counseling activities conducted at Institutional, District and State level;
- Adoption of innovative teaching and training methods;
- Improvement in result of vocational students of Class X or Class XII;
- Continuous up-gradation of knowledge and skills related to the vocational pedagogy, communication skills and vocational subject;
- Membership of professional society at District, State, Regional, National and International level;
- Development of teaching-learning materials in the subject area;
- Efforts made in developing linkages with the Industry/Establishments;
- Efforts made towards involving the local community in Vocational Education
- Publication of papers in National and International Journals;
- Organization of activities for promotion of vocational subjects;
- Involvement in placement of students/student support services.