

DELHI PUBLIC WORLD SCHOOL, PATNA CLASS: IX SYLLABUS (2024 – 2025)

List of Subjects:

LANGUAGES - (GROUP-L)

- 1. ENGLISH: Language & Literature (184)
- 2. HINDI COURSE B (085)

MAIN SUBJECTS - (GROUP-A1)

- 3. MATHEMATICS:
 - A. MATHEMATICS STANDARD (041)
 - **B. MATHEMATICS BASIC (241)**
- 4. SCIENCE (086)
- 5. SOCIAL SCIENCE (087)

SKILL EDUCATION

6. INFORMATION TECHNOLOGY (402)

ENGLISH LANGUAGE AND LITERATURE (Code No. 184) SYLLABUS CLASS – IX 2024-25

Sections			Weightage
Α	Reading Skills	(40 periods)*	20 Marks
В	Writing Skills and Gra	mmar (40 periods)*	20 Marks
С	Language through Lite	erature (50 periods)*	40 Marks

^{*}This is a suggestive number.

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.

IV. Short & Long Answer Questions

8. 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

9. 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

- 10. 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
- 11. 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

Beehive

Prose

- a. The Fun They Had
- b. The Sound of Music
- c. The Little Girl

- d. A Truly Beautiful Mind
- e. The Snake and the Mirror
- f. My Childhood
- g. Reach For The Top

h. Kathmandu

Poems-

- The Road Not taken
- 2. Wind
- 3. Rain on The Roof
- 4. The Lake Isle of Innisfree

i. If I were You

- 5. A Legend of the Northland
- 6. No Men Are Foreign
- 7. On killing a tree
- 8. A Slumber Did My Spirit Seal

Moments

- 1. The Lost Child
- 2. The adventures of Toto
- 3. Iswaran the Storyteller
- 4. In the kingdom of fools

- 5. The Happy Prince
- 6. The Last Leaf
- 7. A House is not a Home
- 8. The Beggar

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

NOTE: Teachers are advised 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 marshal their ideas and express 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 Competencies

30 Periods

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 14th May 2020 at the 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

(Code No. 184) 2024-25 CLASS – IX

Marks-80

Sections	Competencies	Total marks
Reading Comprehension	Conceptual understanding, decoding, analyzing, inferring, interpreting and vocabulary	20
Writing Skillsand Grammar	Creative expression of an opinion, reasoning, justifying, illustrating, appropriacy of style and tone, using appropriate format and fluency. Applying conventions, using integrated structures with accuracy and fluency	20
Language through Literature	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
Total		80

For the details of Internal Assessment of 20 marks, please refer to the circular no.

Acad-11/2019, dated March 06, 2019.

हिंदी पाठ्यक्रम –ब (कोड सं. 085) कक्षा 09वीं हिंदी – ब परीक्षा हेतु पाठ्यक्रम विनिर्देशन 2024-25

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

• भारांक-{80 (वार्षिक 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	अपि	ठेत गद्यांश पर बोध, चिंतन, विश्लेषण, सराहना आदि पर बहुविकल्पीय,			
	अतिव	नघूत्तरात्मक एवं लघूत्तरात्मक प्रश्न			
	i	दो अपठित गद्यांश लगभग २०० शब्दों के ।	7+7	14	
		एक अंकीय तीन बहुविकल्पी प्रश्न (1x3=3) पूछे जाएँगे			
		अतिलघूत्तरात्मक एवं लघूत्तरात्मक प्रश्न (2×2=4) पूछे जाएँगे			
		खंड – ख (व्यावहारिक व्याकरण)			
2	व्याक	रण के लिए निर्धारित विषयों पर विषयवस्तु का बोध, भाषिक बिंदु/ संरचना आदि पर			
	अतिव	नघूत्तरात्मक प्रश्न (1x16)			
	कुल	20 प्रश्न पूछे जाएँगे, जिनमें से केवल 16 प्रश्नों के उत्तर देने होंगे			
	i	2	16		
	ii	अनुस्वार (1 अंक), अनुनासिक (1) अंक) (3 में से 2 प्रश्न)	2		
	iii	उपसर्ग (2 अंक), प्रत्यय (2 अंक) (5 में से 4 प्रश्न)	4		
	iv	स्वर संधि (3 अंक) (4 में से 3 प्रश्न)	3		

	V	विराम चिह्न (2 अंक) (3 में से 2 प्रश्न)	2	
	vi	अर्थ की दृष्टि से वाक्य भेद (3 अंक) (4 में से 3 प्रश्न)	3	
3		खंड – ग (पाठ्यपुस्तक एवं पूरक पाठ्यपुस्तक)		
	अ	गद्य खंड (पाठ्यपुस्तक)	11	
		1 स्पर्श (भाग-1) से निर्धारित पाठों में से गद्यांश के आधार पर विषयवस्तु का ज्ञान,	5	
		बोध, अभिव्यक्ति आदि पर एक अंकीय पाँच बहुविकल्पीय प्रश्न पूछे जाएँगे।		
	(1x5)			
	2 स्पर्श (भाग-1) से निर्धारित पाठों में से विषयवस्तु का ज्ञान, बोध, अभिव्यक्ति		6	
		आदि पर तीन प्रश्न पूछे जाएँगे (25-30 शब्द-सीमा) (विकल्प सहित 4 में से 3		
		प्रश्न करने होंगे) (2x3)		
	ৰ	काव्य खंड (पाठ्यपुस्तक)	11	30
		1 स्पर्श (भाग-1) से निर्धारित कविताओं में से काव्यांश के आधार पर एक अंकीय	5	-
		पाँच बहुविकल्पीय प्रश्न पूछे जाएँगे (1x5)		
	2 स्पर्श (भाग-1) से निर्धारित कविताओं के आधार पर विद्यार्थियों का काव्यबोध		6	-
		परखने हेतु तीन प्रश्न पूछे जाएँगे (२५-३० शब्द-सीमा)। (विकल्प सहित ४ में से ३		
		प्रश्न करने होंगे) (2x3)		
	स	पूरक पाठ्यपुस्तक कृतिका भाग – 1	8	
		संचयन (भाग-1) से निर्धारित पाठों पर आधारित दो प्रश्न पूछे जाएँगे (50-60	8	
		शब्द-सीमा)। (विकल्प सहित 3 में से 2 प्रश्न करने होंगे) (4x2)		
		खंड – घ (रचनात्मक लेखन)		
2	लेख	न		
	क	विभिन्न विषयों और संदर्भों पर विद्यार्थियों के तर्कसंगत विचार प्रकट करने की क्षमता	5	
		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 (5×1)		20
	ख	अभिव्यक्ति की क्षमता पर केंद्रित अनौपचारिक विषयों में लगभग 100 शब्दों में	5	20
		किसी एक विषय पर पत्र। (5x1)		
	ग किसी दृश्य/घटना के चित्र पर आधारित लेखन (5x1) (लगभग 100 शब्दों में)			
		(बिना किसी विकल्प के)		
		(विना किसा विकल्प क)		

घ	भाव एवं दृश्य संकेतो के आधार पर संवाद लेखन (लगभग 100 शब्दों में)	5	
	(5x1) (विकल्प सहित)		
	कुल		80
	आंतरिक मूल्यांकन		20
अ	सामयिक आकलन	5	
ब	बहुविध आकलन	5	
स	पोर्टफ़ोलियो	5	
द	श्रवण एवं वाचन	5	
	कुल		100

निर्धारित पुस्तकें:

- स्पर्श, भाग-1, एन.सी.ई.आर.टी., नई दिल्ली द्वारा प्रकाशित नवीनतम संस्करण संचयन, भाग-1, एन.सी.ई. आर.टी., नई दिल्ली द्वारा प्रकाशित नवीनतम संस्करण 1.
- 2.

नोट : निम्नलिखित पाठों से प्रश्न नहीं पूछे जाएँगे-

स्पर्श(भाग -1)	• धर्म की आड़ (पूरा पाठ)
	आदमीनामा (पूरा पाठ)
	• एक फूल की चाह (पूरा पाठ)
संचयन (भाग-1)	• हामिद खाँ (पूरा पाठ)
	 दिये जल उठे (पूरा पाठ)

COURSE STRUCTURE CLASS -IX

Units	Unit Name	Marks
1	NUMBER SYSTEMS	10
Ш	ALGEBRA	20
III	COORDINATE GEOMETRY	04
IV	GEOMETRY	27
V	MENSURATION	13
VI	STATISTICS	06
	Total	80

UNIT I: NUMBER SYSTEMS

1. REAL NUMBERS

(18) Periods

- 1. Review of representation of natural numbers, integers, and rational numbers on the number line. Rational numbers as recurring/ terminating decimals. Operations on real numbers.
- 2. 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 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.
- 3. Definition of nth root of a real number.
- 4. Rationalization (with precise meaning) of real numbers of the type $\frac{1}{a+b\sqrt{x}}$ and $\frac{1}{\sqrt{x}+\sqrt{y}}$ (and their combinations) where x and y are natural number and a and b are integers.
- 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.)

UNIT II: ALGEBRA

1. POLYNOMIALS (26) Periods

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. Motivate and State the Remainder Theorem with examples. Statement and proof of the Factor Theorem. Factorization of $ax^2 + bx + c$, $a \ne 0$ 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:

$$(x + y + z)^{2} = x^{2} + y^{2} + z^{2} + 2xy + 2yz + 2zx$$

$$(x \pm y)^{3} = x^{3} \pm y^{3} \pm 3xy (x \pm y)$$

$$x^{3} \pm y^{3} = (x \pm y) (x^{2} \mp xy + y^{2})$$

$$x^{3} + y^{3} + z^{3} - 3xyz = (x + y + z) (x^{2} + y^{2} + z^{2} - xy - yz - zx)$$

and their use in factorization of polynomials.

2. LINEAR EQUATIONS IN TWO VARIABLES

(16) Periods

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 real numbers, plotting them and showing that they lie on a line.

UNIT III: COORDINATE GEOMETRY

COORDINATE GEOMETRY

(7) Periods

The Cartesian plane, coordinates of a point, names and terms associated with the coordinate plane, notations.

UNIT IV: GEOMETRY

1. INTRODUCTION TO EUCLID'S GEOMETRY

(7) Periods

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. The five postulates of Euclid. Showing the relationship between axiom and theorem, for example:

(Axiom) 1. Given two distinct points, there exists one and only one line through them. (Theorem) 2. (Prove) Two distinct lines cannot have more than one point in common.

2. LINES AND ANGLES

(15) Periods

- 1. (Motivate) If a ray stands on a line, then the sum of the two adjacent angles so formed is 180° and the converse.
- 2. (Prove) If two lines intersect, vertically opposite angles are equal.
- 3. (Motivate) Lines which are parallel to a given line are parallel.

3. TRIANGLES (22) Periods

- 1. (Motivate) Two triangles are congruent if any two sides and the included angle of one triangle is equal to any two sides and the included angle of the other triangle (SAS Congruence).
- 2. (Prove) Two triangles are congruent if any two angles and the included side of one triangle is equal to any two angles and the included side of the other triangle (ASA Congruence).

- 3. (Motivate) Two triangles are congruent if the three sides of one triangle are equal to three sides of the other triangle (SSS Congruence).
- 4. (Motivate) 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)
- 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.

4. QUADRILATERALS

(13) Periods

- 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 and equal.
- 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 parallel to the third side and in half of it and (motivate) its converse.

5. CIRCLES (17) Periods

- 1.(Prove) Equal chords of a circle subtend equal angles at the center and (motivate) its converse.
- 2.(Motivate) 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.
- 3. (Motivate) Equal chords of a circle (or of congruent circles) are equidistant from the center (or their respective centers) and conversely.
- 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.
- 5.(Motivate) Angles in the same segment of a circle are equal.
- 6.(Motivate) 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.
- 7.(Motivate) The sum of either of the pair of the opposite angles of a cyclic quadrilateral is 180° and its converse.

UNIT V: MENSURATION

1. AREAS (5) Periods

Area of a triangle using Heron's formula (without proof)

2. SURFACE AREAS AND VOLUMES

(17) Periods

Surface areas and volumes of spheres (including hemispheres) and right circular cones.

UNIT VI: STATISTICS

STATISTICS (15) Periods

Bar graphs, histograms (with varying base lengths), and frequency polygons.

MATHEMATICS QUESTION PAPER DESIGN CLASS – IX (2024-25)

Time: 3 Hrs. Max. Marks: 80

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

INTERNAL ASSESSMENT	20 MARKS
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

COURSE STRUCTURE CLASS IX

(Annual Examination)

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
	Total	80
	Internal assessment	20
	Grand Total	100

Theme: Materials

Unit I: Matter-Nature and Behaviour

Definition of matter; solid, liquid and gas; characteristics - shape, volume, density; change of state-melting (absorption of heat), freezing, evaporation (cooling by evaporation), condensation, sublimation.

Nature of matter: Elements, compounds and mixtures. Heterogeneous and homogenous mixtures, colloids and suspensions. Physical and chemical changes (excluding separating the components of a mixture).

Particle nature and their basic units: Atoms and molecules, Law of Chemical Combination, Chemical formula of common compounds, Atomic and molecular masses.

Structure of atoms: Electrons, protons and neutrons, 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).

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.

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 the Teachers:

1. The chapter Natural Resources (NCERT Chapter 14) will not be assessed in the year-end

examination. However, learners may be assigned to read this chapter and encouraged to

prepare a brief write up on any concept of this chapter in their Portfolio. This may be for

Internal Assessment and credit may be given for Periodic Assessment/Portfolio.

2. 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: Unit-I
 - 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 Unit-I
 - 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
- 3. Perform the following reactions and classify them as physical or chemical changes: Unit-I
 - a) Iron with copper sulphate solution in water
 - b) Burning of magnesium ribbon in air
 - Zinc with dilute sulphuric acid
 - d) 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
- Identification of Parenchyma, Collenchyma and Sclerenchyma tissues in plants, striped, smoothand 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

- 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 differentsolids.
- **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

CLASS IX COURSE STRUCTURE

History (I	ndia and the C	Contemporary World - I)	Suggestive no. of periods = 60	20 inclusive of Map pointing
Section	Chapter No	Chapter Name	No. of Periods	Marks allocated
	I	The French Revolution	15	
Events and Process	II	Socialism in Europe and the Russian Revolution	15	18+2 map pointing
	III	Nazism and the Rise of Hitler	15	
II	IV	Forest, Society and Colonialism		
Livelihoods, Economies		Interdisciplinary project as part of multiple assessments	5	
and Societies		(Internally assessed for 5 marks)		
	V	Pastoralists in the Modern World	10	
		(To be assessed as part of Periodic Assessment only)	10	
Geo	ography (Conto	emporary India - I)	Suggestive no. of periods = 55	20 inclusive of Map pointing
Chapter No		Chapter Name	No. of periods	Marks allocated
1	India – Size a	nd Location	17	
2	Physical Features of India			
3	Drainage		10	

Climat	e	12	47.0		
		3	17+3 map pointing*		
		5			
Popula	tion	8	* Marks as mentioned above		
Political Science (Democratic Politics - I)		Suggestive no. of periods = 50	20 Marks		
	Chapter name	No. of Periods	Marks allocated		
What i	s Democracy?	40			
Why D	emocracy?	10			
Consti	utional Design	10			
Electo	ral Politics	8	20		
Workin	g of Institutions	12			
Demo	cratic Rights	10			
	Economics	Suggestive no. of periods = 50	20 Marks		
lo.	Name of the Chapter	No. of Periods	Marks allocated		
	The Story of Village Palampur (To be assessed as part of Periodic Assessment only)	10			
	Natura (Only I Interdi (Internation of the content	Chapter name What is Democracy? Why Democracy? Constitutional Design Electoral Politics Working of Institutions Democratic Rights Economics Name of the Chapter The Story of Village Palampur	Natural Vegetation and Wildlife (Only map pointing to be evaluated in the annual examination.) 3 Interdisciplinary project as part of multiple assessments (Internally assessed for 5 marks) 5 Population 8 Political Science (Democratic Politics - I) Chapter name No. of Periods What is Democracy? 10 Why Democracy? 10 Constitutional Design 10 Electoral Politics 8 Working of Institutions 12 Democratic Rights 10 Economics Io. Name of the Chapter The Story of Village Palampur 10		

2	People as Resource	10	
3	Poverty as a Challenge	15	20
4	Food Security in India	15	

CLASS IX COURSE CONTENT

	HISTORY: India and the Contemporary World - I							
Content	Curricular goals	Competency		Learning outcome		Suggestive Pedagogical		
						process		
Section I: Events and Processes Chapter-1 The French Revolution	CG-2 Analyses the important phases in world history and draws insight to understand the present-day world	c-2.1 Explains historical events and processes with different types of sources with specific examples from India and world history. c-2.4 Explains the growth of new ideas and practices across the world and how they affected the course of world history. c-2.5 Recognises the various practices that arose, such as those in c-2.4, and came to be condemned later on (such as racism, slavery, colonial invasions, conquests, and plunder, genocides, exclusion of women from democratic and other institutions), all of which have also impacted the course of world history and		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. Will be able to Illustrate that, the quest for imperialism triggered the First World War. Will Examine various sources to address imbalances that may lead to revolutions.	A A A	address such imbalances and discriminations that lead to revolutions.		

		have left unhealed wounds.				
Chapter 2- Socialism in Europe and the Russian Revolution	CG-2 Analyses important phases of world history and draws insight to understand the present-day world	C-2.1 Explains historical events and processes with different types of sources with specific examples from India and world history. C-2.4 Explains the growth of new ideas in Europe and Asia and how it affected the course of human history	A A	situations that led to the establishment of Lenin's communism and Stalin's collectivization.	A A A	making of concept maps/role plays etc reflecting the situations which led to both revolutions. Flow chart reflecting how Lenin's communism /Stalin's collectivization wa established.
Chapter 3-Nazism and the Rise of Hitler.	CG-2 Analyses important phases of world history and draws insight to understand the presentday world	C-2.1 Explains historical events and processes with different types of sources with specific examples from India and world history. C-2.4 Explains the growth of new ideas in Europe and Asia and how it affected the course of human history.	A A A	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	A	film or animations can be shown followed by a discussion on the reasons for the rise and fall of Hitler.

		C-2.5 Recognises the various practices that arose, such as those in C-2.4, and came to be condemned later on (such as racism, slavery, colonial invasions, conquests, and plunder, genocides, exclusion of women from democratic and other institutions), all of which have also impacted the course of world history and have left unhealed wounds.		Role play/Dramatize the Characters-Hitler and Gandhi. Cartoon interpretations on these leaders.
Section II: Livelihoods, Economies and Societies Chapter 4 Forest Society and Colonialism	Inter Disciplinary Project with Chapter 5 of Geography "Natural Vegetation and Wildlife"	Refer Annexure II	Refer Annexure II	Refer Annexure II
Chapter 5 Pastoralists in the Modern World	CG-4 Develops an understanding of the inter-relationship between human beings and their physical environment and how that influences the livelihoods, cultural diversity, and biodiversity of the region	C-4.3 Draws interlinkages between various components of the physical environment, such as climate and relief, climate and vegetation, vegetation, and wildlife. C-4.4 Analyses and evaluates the interrelationship between	 Examine the situations that have created nomadic societies highlighting the key factor played by the climatic conditions and topography. Analyse varying patterns of developments within pastoral societies in 	 Locate the various pastoral communities on an outline map of India and explain cyclical movements of these according to climatic conditions. Audio Visual aids like documentaries on the various pastoral

		the natural environment and human beings and their cultures across regions and, in the case of India, the special environmental ethos that resulted in practices of nature conservation. C-4.5 Critically evaluates the impact of human interventions on the environment, including climate change, pollution, shortages of natural resources (particularly water), and loss of biodiversity; identifies practices that have led to these environmental crises and the measures that must be taken to reverse them	different places in India. Comprehend the impact of colonialism on Pastoralists in India and Africa.	communities can be shown. Presentations comparing the lives of pastoralists and the colonial impact on pastoralists in India and Africa. T charts and similar graphic organizers to compare the lives of pastoralists in pre- and post-colonial periods. Think-pair and share can be practised to discuss various methods of colonial policies of exploitation and their impact on pastoralists of Africa and India.
	Polit	ical Science: Democratic	Politics - I	
Content	Curricular goals	Competency	Learning outcome	Suggestive Pedagogical
				process
	CG-5 Understands the	C-5.4 Analyses the	Examine the concept	Brainstorming on

basic features of a

democratic government

- and its history in India

democracy and

structural

components of

forms/ features.

Democracy and its

Indian Constitution and

explores the essence

of Indian democracy

and the characteristics

1. What is Democracy?

Why Democracy?

of Democracy

introduction of concepts

of Democracy & features

	of a democratic government	and across the world – and compares this form of government with other forms of government	\ \ \	Contrast working of democracies of India and North Korea and infer on their differences and significance in each country. Analyse and infer on the different historical processes and forces that have contributed for the promotion of democracy	AAA	4 corners strategy to discuss "What & why of democracy? students create democratic governance model in the class. Cartoon interpretation to summarize the benefits of democracy
2. Constitutional Design	CG-5 Understands the Indian Constitution and explores the essence of Indian democracy and the characteristics of a democratic government	C-5.1 Understands that the Indian Constitution draws from the great cultural heritage and common aspirations of the Indian nation, and recalls India's early experiments with democracy (assemblies in Mahajanapadas, kingdoms and empires at several levels of the society, guilds sanghas and ganas, village councils and committees, Uthiramerur inscriptions)	A A A	Group discussion and describe the situation that led to creation of Indian Constitution Enumerate the essential features that need to be kept in mind while drafting any constitution. Examine the guiding values that created the Indian constitution		Group Discussion to comprehend the purpose of constitution. Poster making/ wall magazine for Comparing and contrasting between Preamble of South African constitution with the preamble of Indian constitution. Declamation strategy for discussing the roles and responsibilities of citizens.

3. Electoral Politics	CG-5 Understands the Indian Constitution and explores the essence of Indian democracy and the characteristics of a democratic government	C-5.3 Explains that fundamental rights are the most basic human rights, and they flourish when people also perform their fundamental duties	A	implications of power of vote and power of recall. Summarize the essential features of the Indian Electoral system. Examine the rationale for adopting the present Indian Electoral System.	A A A A	elections for practical learning of the system. Design and present election manifesto. Create multiple parties and create symbols for elections. Use street play to create awareness about the right to vote and fundamental duties.
4. Working of Institutions	CG-5 Understands the Indian Constitution and explores the essence of Indian democracy and the characteristics of a democratic government	C-5.5 Analyses the critical role of non-state and non-market participants in the functioning of a democratic government and society, such as the media, civil society, socio-religious institutions, and community institutions	A	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. Summarize and evaluate the rule of law in India.	A A	Parliament and discuss the importance of question hour. Present Moot court to evaluate the rule of Law. Examine the relevant case studies to evaluate the rule of law conduct Mock Parliament session.

5. Democratic Rights	CG-5 Understands the Indian Constitution and explores the essence of Indian democracy and the characteristics of a democratic government	C-5.2 Appreciates fundamental Constitutional values and identifies their significance for the prosperity of the Indian nation.	A	Analyse the role of the responsible citizens. Summarize the importance of fundamental rights and duties in the light of the nation's glory. Recognize the role of a responsible citizen while performing their prescribed duties versus claiming rights.	A A A A	Debate the need to have rights in the light of study of Saudi Arabia. Case study to analyse the role of citizens when the rights are exercised or otherwise. Organize a moot court to discuss the violation of individual rights. Graphic organizer to summarize the coexistence of rights vs duties.
	G	eography: Contemporary	y Ind	dia - I		
Content	Curricular goals	Competency		Learning outcome		Suggestive Pedagogical process
1. India – Size and Location	CG-4 Develops an understanding of the inter-relationship between human beings and their physical environment and how that influences the livelihoods, culture, and the biodiversity of the region.	C-4.1 Locates physiographic regions of India and the climatic zones of the world on a globe/map.		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	A	On map of India Locate physiographic regions of India and the climatic zones of the world on a globe/map. Use GeoGebra, Google earth to represent and justify the reasons for the differences in climatic conditions, local and standard time. Brainstorming strategy for inferring conditions

			A	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.	A	and relationships of the people living in states that are sharing border with the neighbouring countries impact trade and culture. Make a PPT presentation on the inter-relationship between human beings and their physical environment and how that influences the livelihoods, culture, and the biodiversity of the region.
2. Physical Features of India	CG-4 Develops an understanding of the inter-relationship between human beings and their physical environment and how that influences the livelihoods, culture, and the biodiversity of the region.	C-4.2 Explains important geographical concepts, characteristics of key landforms, their origin, and other physical factors of a region	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	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.	A A A	Use Art integrated strategies like gallery walk/Model making to demonstrate how physical features make India a sub-continent. Group work to discuss the lives and relationships amongst physiographic areas. Brainstorming and make a comparison of India's Physical features with another country. presentation using different modes such as

			>	Examine various environmental issues.		Journals, Collage and other references.
3.Drainage	CG-4 Develops an understanding of the inter-relationship between human beings and their physical environment and how that influences the livelihoods, culture, and the biodiversity of the region	C-4.5 Critically evaluates the impact of human interventions on the environment, including climate change, pollution, shortages of natural resources (particularly water), and loss of biodiversity; identifies practices that have led to these environmental crises and the measures that must be taken to reverse them	A	Examine the information about different lakes and infer on their contribution to Indian ecology. Present creative solutions to overcome the water pollution also to increase the contribution of water bodies to Indian economy. Identify the river systems of the country and explain the role of rivers in human society	A A	Choice Board strategy where each group to take up one river and focus on the areas they serve and the impact on Economy of that area. Students will prepare a chart on lakes. Slogan writing, poster making/ save River songs/ to bring awareness on water pollution and suggest solutions
4. Climate	CG-4 Develops an understanding of the inter-relationship between human beings and their physical environment and how that influences the livelihoods, culture, and the biodiversity of the region	C-4.3 Draws interlinkages between various components of the physical environment, such as climate and relief, climate and vegetation and wildlife	A A	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 summarize the reasons for the wide difference between temperatures at different	A A	Use Mind map/ graphic organizers to enumerate and summarize the reasons for the wide difference between the day and night temperatures at different geographical locations of India. Collect Newspaper reports for knowing the weather status. Prepare and present mock drills on climate change and protocols as

			geographical locations of India	preventive action for various disasters
5. Natural Vegetation and Wildlife.	Inter disciplinary project	Inter disciplinary project with chapter no IV of History "Forest, Society and Colonialism	Refer annexure II	Refer annexure II
6. Population	CG-4 Develops an understanding of the inter-relationship between human beings and their physical environment and how that influences the livelihoods, culture, and the biodiversity of the region	C-4.6 Develops sensitivity towards the judicious use of natural resources (by individuals, societies, and nations) and suggests measures for their conservation	 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 	 Use a Pie -diagram to depict the population distribution in India. Group discussion and presentation on reasons behind the uneven distribution of Population
		ECONOMICS		0
Content	Curricular goals	Competency	Learning outcome	Suggestive Pedagogical process
Chapter 1: The Story of Village Palampur	CG-7 Develops an understanding of the economy of a nationstate, with specific reference to India.	C-7.1 Defines key features of the economy such as production, distribution, demand, supply, trade, and commerce, and factors that influence these aspects (including technology).	 Enlist the requirements of production and comprehend the interdependence of these requirements. Corelate farming and non-farming activities to economic growth. Comprehend how the significance of conditions of farming 	 Visit to a nearby village or local markets and interview different classes of farmers to know about their lifestyles and thereafter present in the class. Concept map/Poster making/ gallery walk to enlist the factors of production and

		C-7.2 Evaluates the importance of the three sectors of production (primary, secondary, and tertiary) in any country's economy, especially India.	>	and the factors of production impact economic development. Find solutions to foster an equitable society.	A	evaluate their interdependence. Discussion/PPT presentation on how to eradicate poverty among farmers and trying to suggest innovative strategies to improve the farmers lifestyles.
Chapter -2 People as Resource	CG-7 Develops an understanding of the economy of a nation, with specific reference to India.	C-7.2 Evaluates the importance of the three sectors of production (primary, secondary, and tertiary) in any country's economy, especially India.	A A	Evaluate the reasons that contribute to the quality of population. Observe the different government schemes in some states and see its effect on the quality of people there by. Propose innovative strategies to resolve unemployment problems.	A	Classroom discussions/debates on various factors that affect the quality of population. For e.g. significance of Education/Health in Human Resource Development. Make a newsletter collecting articles from newspapers/magazines etc on illiteracy and unemployment status in India and government initiative in solving the issues. Audio-Visual aids showing initiatives undertaken by the government in promoting education

Chapter 3 Poverty as a challenge	CG-8 Evaluates the economic development of a country in terms of its impact on the lives of its people and nature.	analyses data related to poverty and unemployment in one's locality and at the national level. C-8.2 Understands and analyses the concepts	 Comprehend the reasons of poverty in the rural and urban areas. Evaluate the efficacy of government to eradicate poverty. Compare how poverty estimates have transformed from 	and employment in various states of India. PPT presentation using case study given in NCERT text on the reasons of rural and urban poverty. Declamation with data to evaluate the efficacy of government to eradicate poverty and suggest measures/
		locality and at the national level. C-8.2 Understands and analyses the concepts and practice of the	of government to eradicate poverty. Compare how poverty estimates have transformed from	Declamation with data to evaluate the efficacy of government to eradicate poverty and suggest measures/
		range of economic systems – from free market to entirely state controlled markets. C-8.4 Describes India's recent path towards again becoming one of	1993-94 to 2011-12. Corelate the link between education and poverty.	ways which can be used to minimise the same.Debate on the topic-'Can education remove poverty?'
		the three largest economies of the world, and how individuals can contribute to this economic progress		

Chapter 4 Food	CG-8 Evaluates the	C-8.2 Understands and	>	Comprehend various	>	Case study and group
Chapter 4 Food Security in India	CG-8 Evaluates the economic development of a country in terms of its impact on the lives of its people and nature.	analyses the concepts and practice of the range of economic systems – from free market to entirely state controlled markets. C-8.4 Describes India's recent path towards again becoming one of the three largest economies of the world, and how individuals can contribute to this	>	aspects of food security that will ensure continuity of supply to the masses. Enumerate the different features of PDS that directly address FSI. Analyse and infer the impact of Green Revolution. Analyse the causes and impact of famines/disasters in	A A	Case study and group discussion to connect the link between a well-structured food security system and continuity of supply to masses. Guest Speaker programmes where govt. officials can be called to talk on FSI and PDS (Public Distribution System) Panel Discussion /seminar on the impact of the green revolution and PDS.
				food security during pre and post	>	and PDS. Concept maps
		C-8.5 Appreciates the connections between economic development		independent India.		explaining the causes behind the famines in the colonial period and
		and the environment, and the broader indicators of societal				the causes and impact of recurring disasters on food security in post
		wellbeing beyond GDP growth and income.				independent India through examples.

CLASS IX LIST OF MAPS

S. No.	Subject	Name of the Chapter	List of Areas to be located /labeled/identified on the map	
I	History	French Revolution	Outline political map of France. Locate/label/identify. • Bordeaux, Nantes, Paris and Marseille	
		Socialism in Europe and the Russian Revolution	Outline political map of the World. Locate/label/identify Major countries	
		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	
II	Geography	India: size and location	 India – States and Capitals Tropic of Cancer, Standard Meridian (Location and Labeling) Neighbouring Countries 	
		India physical features	 Mountain Ranges: The Karakoram, The Zanskar, The Shivalik, The Aravali, The Vindhya, The Satpura, Western and Eastern Ghats Mountain Peaks – K2, Kanchan Junga, Anai Mudi Plateau – Deccan Plateau, Chota Nagpur Plateau, Malwa Plateau Coastal Plains – Konkan, Malabar, Coromandel & Northen Circar (Location and Labelling) 	
		Drainage system	 Rivers (Identification only) The Himalayan River Systems – The Indus, The Ganges and The Sutlej The Peninsular Rivers – The Narmada, The Tapti, The Kaveri, The Krishna, The Godavari, The Mahanadi Lakes – Wular, Pulicat, Sambar, Chilika 	
		Climate	Annual rainfall in India, Monsoon wind direction	
		Population	Population density of all states	
			The state having highest and lowest density of population	

CLASS IX
INTERNAL ASSESSMENT: 20 MARKS

Type of Assessment	Description	Marks Allocated
Periodic Assessment	Pen Paper Test	5
Multiple Assessment	Quiz, debate, role play, viva, group discussion, visual expression, interactive bulletin boards, gallery walks, exit cards, concept maps, peer assessment, self-assessment etc. through inter disciplinary project	5
Subject Enrichment Activity	Project work on 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 PRSECRIBED 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

Note: Please procure latest reprinted edition (2024-05) of prescribed NCERT textbooks.

CLASS COURSE STRUCTURE

ŀ	History (India and the Contemporary World-II)			20 inclusive map pointing
Section	Chapter No.	Chapter name	No. of periods	Marks allocated
l	I	The Rise of Nationalism in Europe	17	
Events and processes	II	Nationalism in India	17	18+2 map pointing
II Livelihoods, Economies and Societies	III	The making of a Global World (To be evaluated in the Board Examination Subtopics: 1 to 1.3 Pre Modern World to Conquest, Disease and trade)	6	
		Interdisciplinary project as part of multiple assessments (internally assessed for 5 marks) Subtopics 2 to 4.4 -The nineteenth century (1815-1914) to end of Bretton Woods & the beginning of "Globalization"	4	
	IV	The Age of Industrialization (To be assessed as part of Periodic Assessment only)	6	
III Everyday Life, Culture and politics	V	Print Culture and the Modern world	10	
	Geograp	hy (Contemporary India-II)	Suggestive no. of periods = 55	20 inclusive map pointing
Chapter No.		Chapter name	No. of periods	Marks allocated
1	Resources an	d Development	7	
2	Forest and W	ildlife Resources	7	

3	Water res	sources	7	17+3 map pointing
4 Agricultur		re	10	
5	Minerals	and energy Resources	10	
6	Manufact	uring Industries	10	
7		of National Economy o pointing to be evaluated in the Board Examination	2	
		plinary project as part of multiple assessments / assessed for 5 marks)	2	
	Politica	al Science (Democratic Politics-II)	Suggestive no. of periods = 50	20
Unit No.	Chapter No.	Chapter name	No. of periods	Marks allocated
1	1	Power-sharing	15	
	2	Federalism		20
II	3	Gender, Religion and Caste	12	
III 4		Political Parties	12	
IV 5		Outcomes of Democracy	11	
	Economics (Inderstanding Economic Development)	Suggestive no. of periods = 50	20
Chapter	No.	Chapter name	No. of periods	Marks allocated

1	Development	12	
2	Sectors of the Indian Economy	12	20
3	Money and Credit	12	
4	Globalization and the Indian Economy	8	
	To be evaluated in the Board Examination		
	What is Globalization?Factors that have enabled Globalization		
	Interdisciplinary project as part of multiple assessment	6	
	(Internally assessed for 5 marks)		
	 Production across the countries 		
	Chinese toys in India		
	 World Trade Organization 		
	 The Struggle for a Fair Globalization 		
5	Consumer Rights (Project Work)		

INFORMATION TECHNOLOGY 402

Part-A: EMPLOYABILITY SKILLS

S. No.	Units	Duration in Hours
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
	TOTAL	50

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

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
1	Appreciate the applications of IT	 Introduction to IT and ITeS, BPO services, BPM industry in India, Structure of the IT-BPM industry, 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 	Identify and list the various IT enabled services, Observe the application of IT in various areas.

UNIT 2: DATA ENTRY AND KEYBOARDING SKILLS

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
1.	Use keyboard and mouse for data entry	 Keyboarding Skills, Types of keys on keyboard, Numeric keypad, Home keys, Guide keys, Typing and deleting text, Typing ergonomics, Positioning of fingers on the keyboard, Allocation of keys to fingers on four different rows, Pointing device – Mouse, Mouse operations. 	 Identify the keys and its use on the keyboard, Demonstrate to use various keys on the keyboard, Demonstrate to type the text, numbers, special character using appropriate keys on the keyboard, Practice the correct typing ergonomics, Practice to place fingers on correct key in four different row of keyboard, Practice various mouse operations.
2.	Use typing software	 Introduction to Rapid Typing Tutor, Touch typing technique, User interface of Typing Tutor, Typing text and interpret results, Working with lesson editor, Calculating typing speed, Typing rhythm. 	 Identify the user interface of typing tutor, Practice to type text in typing tutor software and interpret the results, Practice to work in lesson editor, Calculate the typing speed Practice to improve typing Using typing tutor software.

UNIT 3: DIGITAL DOCUMENTATION

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
1.	Create a document using a word processor	 Introduction to word processing, Word processing applications, Introduction to Word Processing tool Creating a document, Parts of a Word Processor Window, 	 List the available word processing applications. Introduce with the parts of the main window. Change document views. Start a new document. Open an existing document. Save a document. Close a document.
2.	Apply Editing features	 Text editing – Undo and Redo, Moving and copying text, Copy and Paste, Selecting text, Selection criteria, 	 Editing of text in a document Demonstrate to use undo and redo option, Use the keyboard and mouse options to select, cut, copy, paste, and move text.

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
	COTOCIME	 Selecting non-consecutive text items, Selecting a vertical block of text, Find and replace option, Jumping to the page number, Non-printing characters, Checking spelling and grammar, Using Synonyms and Thesaurus. 	 Demonstrate to select nonconsecutive text items, vertical block of text, Search and replace text in a document. Jump to the given page number in a document, Insert non-printing characters in a document, Apply Spelling and grammar option of document. Demonstrate to use Synonyms and Thesaurus.
3.	Apply formatting features	 Page style dialog Formatting text – Removing manual formatting, Common text formatting, Changing text case, Superscript and Subscript Formatting paragraph – Indenting paragraphs, Aligning paragraphs, Font colour, highlighting, and background colour, Using bullets and numbering, Assigning colour, border and background to paragraph. Page formatting – setting up basic page layout using styles, Inserting page break, Creating header/footer and page numbers, Defining borders and backgrounds, Inserting images shapes, special characters in a document, Dividing page into columns, Formatting the shape or image. 	 Apply various text formatting options for the text, Demonstrate to format paragraphs indent/align paragraphs, assign font colour, highlighting, and
4.	Create and work with tables	 Creating table in Word Processor Inserting row and column in a table Deleting rows and columns Splitting and merging tables Deleting a table Copying a table Moving a table. 	 Demonstrate and do the following in Word Processor: Create table, Insert and delete rows and column in a table, Split and merge tables, Delete a table, Copy or move from one location to another location of document.

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
5.	Use Print Options	 Printing options in Word Processor. Print preview, Controlling printing, Printing all pages, single and multiple pages. 	 Demonstrate to print the document, selected pages in the document Print the document with various options, Preview pages before printing.
6.	Understand and apply mail merge	Introduction to mail merge Concept of data source for mail merge.	 Demonstrate to print the letters using mail merge, Do the following to achieve Create a main document, Create the data source, Enter data in the fields, Merge the data source with main document, Edit individual document, Print the merged letter, Save the merged letter.

UNIT 4: ELECTRONIC SPREADSHEET

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
1.	Create a Spreadsheet	 Introduction to spreadsheet application Starting a spreadsheet Parts of a spreadsheet Worksheet – Rows and Columns, Cell and Cell Address, Range of cells – column range, row range, row and column range. 	 Start the spreadsheet, Identify the parts of Calc, Identify the rows number, column number, cell address, Define the range of cell, Identify row range, column range, row & column range
2.	Apply formula and functions in spreadsheet	 Different types of data, Entering data – Label, Values, Formula Formula, how to enter formula, Mathematical operators used in formulae, Simple calculations using values and operators, Formulae with cell addresses and operators, Commonly used basic functions in a spreadsheet – SUM, AVERAGE, MAX, MIN, Count Use of functions to do calculations. 	 Demonstrate to enter the text, numeric data in a cell, Identify the label, values and formula in the cell, Demonstrate to enter formula in a cell, Construct the formula using mathematical operators, Identify formulae with cell addresses and operators, Identify the correct syntax of formula, Use the basic functions to perform calculations on data.

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
3.	Format data in	Formatting tool,	Identify the formatting tool,
	the spreadsheet	Use of dialog boxes to format values,	Demonstrate to use of dialog boxes to format values,
		Formatting a range of cells with decimal places,	Demonstrate to format range of cells with decimal places,
		Formatting a range of cells to be seen as labels,	Demonstrate to format a range of cells to labels,
		Formatting of a cell range as scientific,	Demonstrate to format of a cell range as scientific,
		Formatting a range of cells to display times,	Demonstrate to format a range of cells to display time,
		Formatting alignment of a cell range,	Demonstrate to align cell data range,
		Speeding up data entry using the	Demonstrate to create
		fill handle,	number series using fill handle,
		Uses of fill handle to copy formulae.	Copy formula by dragging the formula using fill handle.
4.	Understand and	Concept of referencing,	Demonstrate to use Relative
	apply	Relative referencing,	referencing in spreadsheet,
	Referencing	Mixed referencing,	Demonstrate to use Mixed
		Absolute referencing.	referencing in spreadsheet, • Demonstrate to use Absolute
			referencing in spreadsheet.
5.	Create and	Importance of chart in	Create different types of charts
	insert different	spreadsheet	supported by a spreadsheet,
	types of	Types of chart	Illustrate the example of chart
	charts in a spreadsheet		in a spreadsheet.

UNIT 5: DIGITAL PRESENTATION

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
1.	Understand features of an effective presentation	 Concept of presentation, Elements of presentation, Characteristics of an effective presentation 	 Identify and list the elements of presentation, List the characteristics of an effective presentation.
2.	Create a presentation	 Introduction to presentation software, Opening a presentation software Parts of presentation window, Closing a presentation Creating a presentation using template, Selecting slide layout, Saving a presentation, Running a slide show, Save a presentation in PDF, Closing a presentation, Using Help. 	 Start the presentation application various components of main Impress window Observe the different workspace views. Create a new presentation using wizard. Run the presentation, Save the presentation, Close the presentation, Demonstrate to use Help in presentation.

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
3.	Work with slides	 Inserting a duplicate slide, Inserting new slides, Slide layout, Copying and moving slides, Deleting and renaming slides Copying, moving and deleting contents of slide, View a presentation, Controlling the size of the view, Workspace views – Normal, Outline, Notes, Slide sorter view. 	 Demonstrate to insert a new slide and duplicate slide in a presentation, Change the slide layout, Demonstrate to copy and move slides in the presentation, Demonstrate to copy, move and delete contents of the slide, Demonstrate to view a presentation in different views.
4.	Format text and apply animations	 Formatting toolbar, Various formatting features, Text alignment, Bullets and numbering. Custom Animation 	 Identify and list the various options in formatting toolbar, Apply the appropriate formatting option Align the text in presentation, Apply bullets and numbering to the list items in presentation. ☐ Apply Animation
5.	Create and use tables	 Inserting tables in presentation, Entering and editing data in a table, Selecting a cell, row, column, table, Adjusting column width and row height, Table borders and background 	 Demonstrate the following: Insert table in presentation, Enter and edit data in a table, Select a cell, row, column, table, Adjust column width and row height, Assign table borders and background.
6.	Insert and format image in presentation	 Inserting an image from a file, Inserting an image from the gallery, Formatting images, Moving images, Resizing images, Rotating images, Formatting using the Image toolbar, Drawing graphic objects – line, shapes, Grouping and un-grouping objects 	 Demonstrate to insert an image from file, gallery in presentation, Apply formatting options to image in presentation, Demonstrate to move, resize and rotate images, Apply formatting options of Image toolbar, Drawing line, shapes using graphic objects, Demonstrate to group and ungroup objects.
7.	Work with slide master	 Slide masters, Creating the slide masters, Applying the slide masters to all slide, Adding transitions. 	 Create the slide masters, Apply the slide masters to the presentation, Add transitions to presentation.