ENGLISH LANGUAGE AND LITERATURE
CLASS-X (2025-26)

SECTION - WISE WEIGHTAGE

Sections		Weightage
A	Reading Skills	20 Marks
B	Writing Skills with 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, and Short Answer Questions (to be answered in 30-40 words) 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 in context willbe assessed through Gap Filling/ Editing/Transformation exercises. Ten out of 12 questions will have to be attempted.

III. **Writing Skills** **10 marks**

4. Writing a Formal Letter based on a given situation, in 100-120 words. One out of two questions is to be answered. **5 marks**

5. Writing an Analytical Paragraph in 100-120 words on a given Map/ Chart/ Graph/Cue/s. One out of two questions is to be answered. **5 marks**

Section C **40 Marks**

Language through Literature

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 Very Short Answer Questions (one word/ One sentence), Short Answer Questions (to be answered in 30-40 words) will be asked to assess inference, analysis, interpretation, evaluation and vocabulary.

V. Short & Very Long Answer Questions **30 Marks**

8. Four out of Five Short Answer Type Questions to be answered in 40-50 words from the bookFIRST FLIGHT 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 each from FOOTPRINTS WITHOUT FEET to assess interpretation, analysis, inference and evaluation. **2x3=6 marks**
10. One out of two Long Answer Type Questions from FIRST FLIGHT to be answered in about 100-120 words each to assess creativity, imagination and extrapolation beyond the text andacross the text. This can 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 FOOTPRINTS WITHOUT FEET, 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. FIRST FLIGHT

A. Prose

1. A Letter to God
2. Nelson Mandela - Long Walk to Freedom
3. Stories About Flying
4. From the Diary of Anne Frank
5. Glimpses of India
6. Mijbil the Otter
7. Madam Rides the Bus
8. The Sermon at Benares
9. The Proposal (Play)

B. Poems

1. Dust of Snow
2. Fire and Ice
3. A Tiger in the Zoo
4. How to Tell Wild Animals
5. The Ball Poem
6. Amanda!
7. The Trees
8. Fog
9. The Tale of Custard the Dragon
10. For Anne Gregory

2. FOOTPRINTS WITHOUT FEET

1. A Triumph of Surgery
2. The Thief's Story
3. The Midnight Visitor
4. A Question of Trust
5. Footprints Without Feet
6. The Making of a Scientist
7. The Necklace
8. Bholi
9. The Book that Saved the Earth

3. WORDS AND EXPRESSIONS – II (WORKBOOK FOR CLASS X) – Units 1 to 4 and Units 7 to 11

Note: Teachers are suggested to:

(i) encourage interaction among peers, students and teachers through activities such as role play, discussions, group work etc.

(ii) reduce teacher-talking 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, and

(iv) follow the Speaking and Listening activities given in the NCERT books.

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 skills to be assessed through a judicious mixture of differenttypes of questions.

INTERNAL ASSESSMENT

Listening and Speaking Competencies

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
CLASS – X (2025-26)

Marks 80

Sections	Competencies	Total marks
Reading Comprehension	Conceptual understanding, decoding, analyzing, inferring, interpreting and vocabulary	20
Writing Skills and Grammar	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
Language through Literature	Recalling, reasoning, appreciating, applying literary conventions illustrating and justifyingetc. 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 thecircular no. Acad-11/2019, dated March 06, 2019.

Annexure I

Guidelines for Assessment of Listening and Speaking Skills (ALS)

ALS is a component of the Subject Enrichment Activity under Internal Assessment. ALS must beseen as an integrated component of all four language skills rather than a compartment of two. Suggested activities, therefore, take into consideration an integration of the four language skillsbut during assessment, emphasis will be given to speaking and listening, since reading and writing are already being assessed in the written exam.

Assessment of Listening and Speaking Skills: (5 Marks)

i. **Activities:**

- Subject teachers must refer to books prescribed in the syllabus.
- In addition to the above, teachers may plan their own activities and create theirown material for assessing the listening and speaking skills.

ii. **Parameters for Assessment:** The listening and speaking skills are to be assessedon the following parameters:

a. Interactive competence (Initiation & turn taking, relevance to the topic)
b. Fluency (cohesion, coherence and speed of delivery)
c. Pronunciation
d. Language (grammar and vocabulary)

SUGGESTIVE RUBRIC

	1.	2.	3.	4.	5.
Interaction	• Contributions are mainlyunrelated to those of other speakers • Shows hardly any initiative in the development of conversation • Very limited interaction	• Contributions are oftenunrelated to those of the other speaker • Generally passive in the development of conversation	• Develops interaction adequately, makes however minimal effortto initiate conversation • Needs constant prompting to take turns	• Interaction is adequately initiated and developed • Takes turn but needs some prompting	• Initiates & logically develops simple conversation on familiar topics • Takes turns appropriately

Fluency & Coherence	• Noticeably/ long pauses; rate of speech is slow • Frequent repetition and/or self- correction this is allright in informal conversation • Links only basic sentences; breakdown of coherence evident.	• Usually fluent; produces simple speech fluently, but loses coherence in complex communication • Often hesitates and/or resorts to slow speech • Topics partly developed; not always concluded logically	• Is willing tospeak at length, however repetition is noticeable • Hesitates and/or self corrects; occasionallyloses coherence • Topics developed, but usually not logically concluded	• Speaks without noticeable effort, with a little repetition • Demonstrates hesitation to find words or use correct grammatical structures and/or self- correction • Topics not fully developed to merit.	• Speaks fluently almost with no repetition & minimal hesitation Develops topic fully & coherently
Pronunciation	• Frequent inaccurate pronunciation • Communication isseverely affected	• Frequently unintelligible articulation • Frequent phonological errors • Major communication problems	• Largely correct pronunciation & clear articulation except occasional errors	• Mostly correct pronunciation& clear articulation • Is clearly understood most of the time; very fewphonological errors	• Pronounces correctly & articulates clearly • Is always comprehensible • uses appropriate intonation
Vocabulary & Grammar	• Demonstrates almost no flexibility, and mostly struggles for appropriate words • Many Grammatical errors impacting communication	• Is able to communicate on some of the topics, with limited vocabulary. • Frequent errors, but self-corrects	• Is able to communicate on most of the topics, with limited vocabulary. A few grammatical errors	• Is able to communicate on most of the topics with appropriate vocabulary • Minor errors that do not hamper communication	• Is able to communicate on most of the topics using a wide range of appropriate vocabulary, using new words and expressions • No grammatical errors

iii. **Schedule:**

- The practice of listening and speaking skills should be done throughout the academicyear.
- The final assessment of the skills is to be done as per the convenience and schedule ofthe school.

हिंदी पाठ्यक्रम -अ

विषय कोड - 002

कक्षा 10वीं (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		उप भार	कुल भार
1	अपठित गद्यांश व काव्यांश पर बोध, चिंतन, विश्लेषण, सराहना आदि पर बहुविकल्पीय, अतिलघूत्तरात्मक एवं लघूत्तरात्मक प्रश्न			14
	अ	एक अपठित गद्यांश लगभग 250 शब्दों का इसके आधार पर एक अंकीय तीन बहुविकल्पी प्रश्न (1x3=3), अतिलघूत्तरात्मक एवं लघूत्तरात्मक प्रश्न (2×2=4) पूछे जाएँगे	7	
	ब	एक अपठित काव्यांश लगभग 120 शब्दों का इसके आधार पर एक अंकीय तीन बहुविकल्पी प्रश्न (1x3=3), अतिलघूत्तरात्मक एवं लघूत्तरात्मक प्रश्न (2×2=4) पूछे जाएँगे	7	
2	व्याकरण के लिए निर्धारित विषयों पर विषयवस्तु का बोध, भाषिक बिंदु/ संरचना आदि पर अतिलघूत्तरात्मक/लघूत्तरात्मक प्रश्न। (1x16) (कुल 20 प्रश्न पूछे जाएँगे, जिनमें से केवल 16 प्रश्नों के उत्तर देने होंगे)			16
	खंड – ख (व्यावहारिक व्याकरण)			
	1	रचना के आधार पर वाक्य भेद (1x4=4) (5 में से 4 प्रश्न करने होंगे)	4	
	2	वाच्य (1x4=4) (5 में से 4 प्रश्न करने होंगे)	4	
	3	पद परिचय (1x4=4) (5 में से 4 प्रश्न करने होंगे)	4	

	4	अलंकार- (अर्थालंकार : उपमा, रूपक, उत्प्रेक्षा, अतिशयोक्ति, मानवीकरण) (1x4=4) (5 में से 4 प्रश्न करने होंगे)		4	
3		**खंड – ग (पाठ्यपुस्तक एवं पूरक पाठ्यपुस्तक)**			30
	अ	**गद्य खंड पाठ्यपुस्तक (क्षितिज भाग 2)**		11	
		1	क्षितिज (भाग 2) 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 2) 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		**काव्य खंड (पाठ्यपुस्तक) (क्षितिज भाग 2)**	11	
		1	क्षितिज(भाग 2) से निर्धारित कविताओं में से काव्यांश के आधार पर एक अंकीय पाँच **बहुविकल्पी प्रश्न** पूछे जाएँगे (1x5)	5	
		2	क्षितिज (भाग 2) 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		**पूरक पाठ्यपुस्तक (कृतिका भाग – 2)**	8	
			कृतिका (भाग 2) 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	
4		**खंड – घ (रचनात्मक लेखन)**			
	i	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 x1 = 6)		6	20
	ii	अभिव्यक्ति की क्षमता पर केंद्रित औपचारिक अथवा अनौपचारिक विषयों में से किसी एक विषय पर लगभग 100 शब्दों में पत्र (5 x 1= 5)		5	
	iii	रोजगार से संबंधित रिक्तियों के लिए लगभग 80 शब्दों में स्ववृत्त लेखन (5 x 1= 5) अथवा विविध विषयों पर आधारित लगभग 80 शब्दों में ई-मेल लेखन (5 x 1= 5)		5	
	iv	विषय से संबंधित लगभग 40 शब्दों के अंतर्गत विज्ञापन लेखन (4 x 1 = 4)		4	

		अथवा संदेश लेखन लगभग 40 शब्दों में (शुभकामना, पर्व-त्योहारों एवं विशेष अवसरों पर दिए जाने वाले संदेश) (4 x 1 = 4)		
		कुल		**80**
		आंतरिक मूल्यांकन	**अंक**	20
	अ	**सामयिक आकलन**	5	
	ब	**बहुविध आकलन**	5	
	स	**पोर्टफ़ोलियो**	5	
	द	**श्रवण एवं वाचन**	5	
		कुल		**100**

निर्धारित पुस्तकें :

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

नोट – निम्नलिखित पाठों से प्रश्न नहीं पूछे जाएँगे–

क्षितिज, भाग – 2	काव्य खंड	• देव- सवैया, कवित्त (पूरा पाठ) • गिरिजाकुमार माथुर – छाया मत छूना (पूरा पाठ) • ऋतुराज – कन्यादान (पूरा पाठ)
	गद्य खंड	• महावीरप्रसाद द्विवेदी – स्त्री-शिक्षा के विरोधी कुतर्कों का खंडन (पूरा पाठ) • सर्वेश्वर दयाल सक्सेना- मानवीय करुणा की दिव्य चमक (पूरा पाठ)
कृतिका, भाग – 2	• एही ठैयाँ झुलनी हेरानी हो रामा! (पूरा पाठ) • जार्ज पंचम की नाक (पूरा पाठ)	

कक्षा दसवीं हेतु प्रश्न पत्र का विस्तृत प्रारूप जानने के लिए कृपया बोर्ड द्वारा जारी आदर्श प्रश्न पत्र देखें।

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CBSE | DEPARTMENT OF SKILL EDUCATION

CURRICULUM FOR SESSION 2025-2026

INFORMATION TECHNOLOGY (SUB. CODE – 402)

JOB ROLE: DOMESTIC DATA ENTRY OPERATOR

CLASS X

COURSE TITLE: DOMESTIC DATA ENTRY OPERATOR

Domestic Data Entry Operator in the IT-ITeS Industry is also known as Data Entry Operator. Individuals are responsible to provide daily work reports and work on a daily hour basis. The individual is responsible for electronic entry of data from the client side to the office site or vice-versa. Individual tasks vary depending on the size and structure of the organization. This job requires the individual to have a thorough knowledge of various technology trends and processes as well as have updated knowledge about database management systems and IT initiatives. The individual should have fast and accurate typing/data encoding. This job involves working in a personal computer, and appropriate software to enter accurate data regarding different issues like retrieving data from a computer or to a computer

COURSE OBJECTIVES:

In this course, students will be introduced to advanced concepts of digital documentation, spreadsheets, database management, and workplace safety, enhancing both technical and soft skills. The course aims to develop effective communication skills, including active listening, speaking, and presentation abilities, while fostering self-management through time management, goal setting, and stress management techniques. Students will gain proficiency in Information and Communication Technology (ICT), ensuring safe and ethical use of digital tools. The course also focuses on nurturing an entrepreneurial mindset, critical thinking, and innovation skills, along with a strong understanding of sustainable practices and environmental conservation. Learners will master advanced document creation, data analysis, and automation techniques using LibreOffice tools and develop competency in designing and managing databases. Emphasis is placed on maintaining a safe and secure work environment by understanding health, safety, and emergency protocols, thus preparing students for professional and personal growth in diverse environments.

LEARNING OUTCOMES:

In this course, the students will be introduced to the advanced concepts of digital documentation, digital spreadsheet, database management and internet security. The objectives of this course are to :

- Develop effective verbal and non-verbal communication skills, active listening, speaking, and presentation skills. Understand the importance of feedback and improve interpersonal communication.
- Enhance self-awareness, self-regulation, and self-motivation. Learn time management, goal setting, and stress management techniques. Cultivate personal and professional growth mindsets.
- Understand the basics of Information and Communication Technology (ICT). Gain

proficiency in using digital tools and platforms for communication and productivity. Learn safe, responsible, and ethical use of ICT resources.

- Develop an entrepreneurial mindset and understanding of business fundamentals. Learn problem-solving, critical thinking, and innovation techniques. Understand financial literacy and risk management in business.
- Understand the importance of sustainable practices and environmental conservation. Learn about the green economy and green jobs. Promote sustainable development and eco-friendly initiatives.
- Master advanced document creation, formatting, and management skills. Learn to use templates, styles, tables, and images effectively. Understand document collaboration and review features.
- Learn advanced data analysis using Scenarios and Goal Seek, automate tasks with macros, and manage linked data across spreadsheets. Gain skills in securely sharing and reviewing spreadsheets for effective collaboration and feedback.
- Learn to design, create, and manage databases. Understand data querying, reporting, and relational database concepts. Develop skills in creating forms, reports, and managing data integrity.
- Understand workplace safety, health, and security protocols. Learn hazard identification, risk assessment, and emergency response planning. Promote a culture of health, safety, and well-being at the workplace.

These objectives are designed to provide comprehensive skills that enhance employability, personal development, and workplace readiness.

SALIENT FEATURES:

This course equips students with essential skills for a Data Entry Operator role by focusing on advanced digital documentation, spreadsheet management, and database handling using LibreOffice tools. It enhances accuracy, speed, and data management capabilities while improving communication and ICT skills for efficient workplace interaction. The course promotes responsible digital practices, problem-solving, and critical thinking, ensuring readiness for data-centric tasks. Additionally, it emphasizes workplace safety, teaching health, safety, and emergency management protocols, essential for maintaining a secure and productive work environment.

SCHEME OF UNITS

Total Marks: 100 (Theory-50+Practical-50)

This course is a planned sequence of instructions consisting of units meant for developing employability and vocational competencies of students of Class X opting for skill subject along with other subjects.

The unit-wise distribution of hours and marks for class X is as follows:

CBSE | DEPARTMENT OF SKILL EDUCATION

CURRICULUM FOR SESSION 2025-2026

INFORMATION TECHNOLOGY (SUB. CODE – 402)

CLASS – X (SESSION 2025-2026)

	UNITS	NO. OF HOURS for Theory and Practical		MAX. MARKS for Theory and Practical
PART A	**Employability Skills**			
	Unit 1: Communication Skills-II	10		2
	Unit 2: Self-Management Skills-II	10		3
	Unit 3: ICT Skills-II	10		1
	Unit 4: Entrepreneurial Skills-II	15		3
	Unit 5: Green Skills-II	05		1
	Total	**50**		**10**
PART B	**SUBJECT SPECIFIC SKILLS**	**Theory**	**Practical**	**Marks**
	Unit 1: Digital Documentation (Advanced) using LibreOffice Writer	12	18	8
	Unit 2: Electronic Spreadsheet (Advanced) using LibreOffice Calc	15	23	10
	Unit 3: Database Management System using LibreOffice Base	18	27	12
	Unit 4: Maintain Healthy, Safe and Secure Working Environment	15	22	10
	Total	**60**	**90**	**40**
PART C	**PRACTICAL WORK**			
	Practical Examination			20
	• Digital Documentation (Advanced) using LibreOffice Writer	5 Marks		
	• Electronic Spreadsheet (Advanced) using LibreOffice Calc	5 Marks		
	• Database Management System using LibreOffice Base	10 Marks		
	• Viva Voce	10 Marks		10
	Total			**30**
PART D	**PROJECT WORK/FIELD VISIT:** Any Interdisciplinary Real World Case Study to be taken. Summarized data reports of same can be presented in base. Input should be taken using forms and output should be done using reports using base. Documentation of the case study should be presented using writer.			10
	PORTFOLIO/ PRACTICAL FILE: (Portfolio should contain printouts of the practical done using Writer, Calc and Base with minimum 5 problems of each)			10
	Total			**20**
	GRAND TOTAL	**200**		**100**

DETAILED CURRICULUM/ TOPICS:

Part-A: EMPLOYABILITY SKILLS

S. No.	Units	Duration in Hours
1.	Unit 1: Communication Skills-II	10
2.	Unit 2: Self-management Skills-II	10
3.	Unit 3: Information and Communication Technology Skills-I	10
4.	Unit 4: Entrepreneurial Skills-II	15
5.	Unit 5: Green Skills-II	05
	TOTAL	**50**

Note: **The detailed curriculum/ topics to be covered under Part A: Employability Skills can be downloaded from CBSE website**.

Part-B – SUBJECT SPECIFIC SKILLS

- Unit 1: Digital Documentation (Advanced)
- Unit 2: Electronic Spreadsheet (Advanced)
- Unit 3: Database Management System
- Unit 4: Web Applications and Security

Unit 1: Digital Documentation (Advanced) using LibreOffice Writer

SUB UNIT	LEARNING OUTCOMES	THEORY	PRACTICAL
Chapter 1: Introduction To Styles	Learn to create, update, and apply various styles in Libre Office Writer for effective and consistent document formatting.	• Styles/ categories in Writer ➢ Page ➢ Paragraph ➢ Character ➢ Frame ➢ List ➢ Table • Styles and Formatting • Fill Format • Creating a new style ➢ From Selection method ➢ Drag and Drop method • Updating a new style • Load style from template or document. • Applying styles.	• **List Style Categories**: Open the Styles and Formatting window, list available style categories, and select one style from each. • **Use Fill Format**: Apply a style to multiple areas of your document quickly using the Fill Format tool. • **Create and Update a New Style**: Create a new style from selected text and update it by modifying its attributes. • **Load a Style from a Template or Document**: Import and apply a style from a template or another document to your current work. • **Create a New Style Using Drag-and-Drop**:

SUB UNIT	LEARNING OUTCOMES	THEORY	PRACTICAL
			Create a new style by dragging and dropping formatted text into the Styles and Formatting panel.
Chapter 2: Working with Images	Able to insert, modify, and position images and drawing objects in a document, using various methods and options for effective document layout and formatting.	• Inserting an Image in a Document ➢ Insert Image Option ➢ Drag and Drop option ➢ Copy and Paste method ➢ Inserting an image by linking • Options to modify image using image toolbar, resize, crop and delete an image. • Drawing Objects • Creating drawing objects • Setting or changing its properties. • Resizing and grouping drawing objects. • Positioning image in the text. • Arrangement • Anchoring • Alignment • Text Wrapping	• **Insert an Image**: Insert an image into a document using options such as Insert Image, Drag and Drop, Copy and Paste, and linking. • **Modify an Image:** Use the image toolbar to modify an image by resizing, cropping, and deleting it. • **Create Drawing Objects:** Create various drawing objects within your document. • **Set or Change Drawing Object Properties:** Adjust the properties of drawing objects, including color, line style, and fill. • **Resize and Group Drawing Objects:** Resize individual drawing objects and group multiple objects together for better document organization. • **Position the Image in the Text:** Adjust the image's position in the text using arrangement, anchoring, alignment, and text wrapping options.
Chapter 3: Advanced Features of Writer	Acquire skills in creating, customizing, and managing a Table of Contents, using and editing templates, and tracking and reviewing changes in	• Table of contents • Hierarchy of headings • Creating a Table of Content (ToC) • Customization of Table of Contents(ToC) • Maintaining a Table of Contents(ToC)	• **Create a Table of Contents (ToC)**: Generate and customize a Table of Contents in a document. • **Maintain a Table of Contents**: Update or delete the Table of Contents • **Use Templates**: Create,

SUB UNIT	LEARNING OUTCOMES	THEORY	PRACTICAL
	documents effectively.	• Updating ToC • Deleting ToC • Using templates • Creating a Template • Using In-built/Saved Templates • Using Online Templates • Importing a Template • Editing a Template • Moving a Template • Exporting a Template • Applying Templates to a Blank Document • Track Changes Feature • Preparing a Document for Review • Recording Changes • Accepting and Rejecting Changes • Adding Comments • Deleting Comments • Comparing Documents	import, and apply templates to a blank document, using in-built, saved, or online templates. • **Edit a Template**: Modify, move, and export an existing template. • **Track Changes**: Prepare a document for review by recording, accepting, or rejecting changes, and manage comments by adding or deleting them. • **Compare Documents**: Compare two versions of a document to identify and review differences.

Unit 2: Electronic Spreadsheet (Advanced) using LibreOffice Calc

SUB UNIT	LEARNING OUTCOMES	THEORY	PRACTICAL
Chapter 4: Analyse data using scenarios and goal seek	Learn skills in consolidating data, using groups and subtotals, performing what-if analysis and scenarios, and utilizing the Goal Seek tool for decision-making.	• Consolidating Data • Groups and Subtotals • What-if Scenarios • What-if Analysis Tool • Goal Seek	• **Use Consolidating Data**: Aggregate data from multiple sources into a single summary. • **Create Subtotals**: Apply subtotals to data groups to summarize and analyze information. • **Use "What-If" Scenarios**: Create and analyze different scenarios to forecast outcomes based on varying inputs. • **Use "What-If" Tools**: Use tools like Scenario Manager for detailed what-if analyses. • **Use Goal Seek and Solver**: Use Goal Seek to find specific input values needed to achieve a

SUB UNIT	LEARNING OUTCOMES	THEORY	PRACTICAL
			desired result, and apply Solver for more complex problems.
Chapter 5: Using Macros in Spreadsheet	Develop skills in recording, running, creating, and organizing macros, and using them as functions for document automation.	• Recording a Macro • Running a Macro • Creating and Organising a Simple Macro • Macro as a Function	• **Demonstrate the Use of a Macro Recorder**: Record a macro to automate repetitive tasks. • **Create a Simple Macro**: Develop a basic macro to perform a specific function. • **Use a Macro**: Execute an existing macro to automate tasks in a document. • **Pass Arguments to a Macro**: Provide arguments to a macro to customize its behavior. • **Pass the Arguments as Values**: Supply values as arguments to a macro for dynamic operation. • **Write Macros as Built-in Functions**: Create macros that function similarly to built-in functions for enhanced functionality. • **Access Cells Directly**: Write macros to directly manipulate cell data in spreadsheets. • **Sort Columns Using a Macro**: Develop and use a macro to sort columns in a spreadsheet.
Chapter 6: Linking Spreadsheet Data	Learn to set up multiple sheets, create references and hyperlinks within and across documents, and link to external and registered data sources.	• Setting up multiple sheets. • Creating reference to other sheets by using keyboard and mouse. • Creating reference to another document by using keyboard and mouse. • Hyperlinks to the Sheet • Relative and Absolute Hyperlinks • Creating Hyperlinks	• **Setup Multiple Sheets**: Insert and organize new sheets within a workbook. • **Create References to Other Sheets**: Use keyboard and mouse to create references between different sheets in a workbook. • **Create References to Other Documents**: Use keyboard and mouse to link data from one document to another. • **Create, Edit, and Remove Hyperlinks**: Add, modify, and delete hyperlinks to sheets within a workbook. • **Link to External Data**: Connect and import data from external sources into your document. • **Link to Registered Data Sources**: Establish links to registered data sources for data integration.

SUB UNIT	LEARNING OUTCOMES	THEORY	PRACTICAL
		• Editing a Hyperlink • Linking to External Data • Linking to Registered Data Sources	
Chapter 7: Share and Review a Spreadsheet	Develop the ability to share, open, and save shared spreadsheets, track and review changes, and handle comments and merging for effective collaboration.	• Sharing Spreadsheet • Opening and saving a shared spreadsheet. • Recording changes. • Add, Edit and Format the comments. • Reviewing Changes – View, Accept or Reject Changes • Merging and comparing.	• **Set Up a Spreadsheet for Sharing**: Configure a spreadsheet to enable sharing with others. • **Open and Save a Shared Spreadsheet**: Access and save changes to a spreadsheet that has been shared with you. • **Record Changes**: Track modifications made to the spreadsheet. • **Add, Edit, and Format Comments**: Insert, modify, and format comments within the spreadsheet. • **Review Changes**: View, accept, or reject changes made by others in the shared spreadsheet. • **Merge and Compare Sheets**: Combine and compare different sheets to integrate data effectively.

Unit 3: Database Management System using LibreOffice Base

SUB UNIT	LEARNING OUTCOMES	THEORY	PRACTICAL
Chapter 8: Introduction to Database Management System	Understand data and information concepts, the advantages of databases, various data models and key terminology and objects of relational database systems.	• Data and Information • Databases and DBMS • Advantages of database, • Data Models ➢ Hierarchical Data Model ➢ Network Data Model ➢ Relational Data Model • Relational database Model ➢ RDBS Terminology ➢ Objects of an RDBMS	• **Identify Data and Information**: Distinguish between data and information within a database context. • **Identify Fields, Records, and Tables**: Recognize and describe fields, records, and tables in a database. • **Prepare a Sample Table**: Create a sample table with standard fields to illustrate database structure. • **Identify Different Types of Data Models**: Identify and describe various data models such as hierarchical, network, and relational. • **Different Types of Keys**: Recognize and explain different types of keys used in databases, such as primary and foreign keys. • **Identify Different Objects of RDBMS**: Identify and describe different objects in a relational database management system (RDBMS), including tables, queries, and forms.
Chapter 9: Starting with LibreOffice Base	Learn to navigate LibreOffice Base, manage data types, create and save tables using various methods, set primary keys, and perform data entry, editing, sorting, and record deletion.	• Introduction to LibreOffice Base • Data types • Starting with LibreOffice • User Interface Of LibreOffice Base • Opening a Database • Creating a Table ➢ Using a Wizard ➢ Using design view, • Setting primary key • Saving a Table	• **Start LibreOffice Base and Observe the Main Window**: Launch LibreOffice Base and familiarize yourself with the main window's components. • **Create a Sample Table Using Wizard**: Use the wizard to create a sample table in any category. • **Create Different Tables from Available List**: Practice creating various tables by selecting fields from the available options. • **Assign Data Types and Set Primary Key**: Define data types for fields and set a primary key for the table. • **Edit the Table in Design View**: Modify the table structure using the design view. • **Enter Data in the Fields**: Input

SUB UNIT	LEARNING OUTCOMES	THEORY	PRACTICAL
		• Entering data into table • Navigating through the table • Editing Data • Deleting Records from Table • Sorting Data in the Table	data into the fields of your table. • **Delete Records from Table**: Remove records from the table as needed. • **Arrange Data in Ascending or Descending Order**: Sort the table data in ascending or descending order
Chapter 10: Working with Multiple Tables	Develop skills in editing and deleting tables, creating and managing table relationships, and ensuring referential integrity.	• Editing and Deleting tables, • Relationships between tables • Types of Relationships– one to one, one to many, many to many • Advantages of Relating Tables in a Database • Creating Relationships between Tables • Referential Integrity	• **Insert Data in the Table**: Add new data entries to a table. • **Edit Records in the Table**: Modify existing records within the table. • **Delete Records from Table**: Remove specific records from the table. • **Sort Data in the Table**: Arrange data in ascending or descending order within the table. • **Create and Edit Relationships**: Establish and modify relationships between tables, including one-to-one, one-to-many, and many-to-many. • **Enter Various Field Properties**: Set and adjust different properties for fields in the table.
Chapter 11: Queries in Base	Acquire skills in creating and editing queries using both wizards and design view, and working with numerical data in queries.	• Queries • Query creation using wizard • Creation of query using design view • Editing a query, • Working with Numerical Data	• **Prepare a Query for Given Criteria**: Create a query based on specified criteria. • **Create a Query Using Wizard and Design View**: Demonstrate how to generate a query using both the wizard and design view. • **Edit a Query**: Modify an existing query to update its criteria or structure. • **Apply Various Criteria in a Query**: Demonstrate applying different criteria in a query, including single field, multiple fields, and wildcard searches. • **Perform Calculations Using Query in Base**: Execute

SUB UNIT	LEARNING OUTCOMES	THEORY	PRACTICAL
			calculations within a query in LibreOffice Base.
Chapter 12: Forms and Reports	Able to create and modify forms and reports in LibreOffice Base, use the Form Controls Toolbar, and insert additional controls, titles, headings, and date/time elements in reports.	• Forms in BASE. • Creating form using wizard, • Modifying a Form • Form Controls Toolbar • Report in Base • Inserting other controls in report • Inserting Titles & Headings • Inserting Date & Time •	• **Create a Form Using Form Wizard**: Generate a form by following the steps in the Form Wizard. • **Enter or Remove Data from Forms**: Input new data or delete existing data using forms. • **Modify Forms**: Demonstrate how to adjust and customize forms. • **Change Label and Background**: Modify the label text and background color or design of a form. • **Search Records Using a Form**: Use the form to find specific records based on search criteria. • **Insert and Delete Records Using Form View**: Add new records or remove existing ones through the Form View. • **Create a Report Using Report Wizard**: Illustrate the steps to generate a report using the Report Wizard. • **Demonstrate Various Report Examples**: Provide examples of different types of reports created using the Report Wizard.

Unit 4: Maintain Healthy, Safe and Secure Working Environment

SUB UNIT	LEARNING OUTCOMES	THEORY	PRACTICAL
Chapter 13. Health, Safety and Security at Workplace	Understand workplace health, safety, and security policies, identify various hazards, and learn how to manage risks and maintain a safe working environment.	• Introduction to Health, Safety, and Security At Workplace • Policies and Procedures for Healthy, Safety and Security • Reasons for Health, Safety, and Security Programs or Policies in the Workplace • Workplace Safety Hazards • Physical Hazards • Falling Off Heights, Slipping and Tripping • Electrical Hazards • Fire Hazards • Health Hazards	• **Practice Basic Safety Rules**: Implement fire safety measures, prevent falls and slips, ensure electrical safety, and apply first aid procedures to protect workers and prevent accidents.

SUB UNIT	LEARNING OUTCOMES	THEORY	PRACTICAL
		• Potential Sources of Hazards in an Organisation • Hazards using Computers • Handling Office Equipment • Handling Objects • Stress at Work • Working Environment • Hazard Control • Safety Guidelines Checklist	
Chapter 14. Workplace Quality Measures	Learn about air and water quality monitoring, office ergonomics, health and safety guidelines for computer use, and methods to reduce risks associated with musculoskeletal problems and other work-related issues.	• Introduction • Air and Water Quality Monitoring Process • Guidelines for Clean Air and Clean Water • Importance of Cleanliness at Workplace • Office Ergonomics • Computer Health and Safety Tips • Musculoskeletal Problems: Occupational Overuse Syndrome, Strain in Legs and Feet, Eye Strain, • To reduce the risks of visual problems: Headaches, Obesity, Stress Disorders, Injuries from Laptop Use, Sleeping Problems • Health and Safety Requirements for Computer Workplace • Cautions while Working on the Computer	• **Illustrate Handling Accidents at Workplace**: Demonstrate the steps to manage and respond to accidents in the workplace. • **Demonstrate Following Evacuation Plan**: Show how to effectively follow the evacuation plan and procedures during an emergency.
Chapter 15. Prevent Accidents and Emergencies	Able to identify and handle accidents and emergencies, follow company policies, manage different types of accidents and emergencies, and apply fire safety and first aid procedures effectively.	• Accident and Emergencies: ➢ Notice and Correctly Identify Accidents and Emergencies ➢ Get help Promptly and in the Most Suitable Way ➢ Follow Company Policies and Procedures for Preventing Further Injury While Waiting for Help to Arrive ➢ Act within the Limits of your Responsibility and Authority when Accidents and Emergencies Arise, ➢ Promptly Follow Instructions given by Senior Staff and the Emergency Services	• **Identify Hazards and Sources of Hazards**: Recognize potential hazards and their sources in the workplace. • **Identify Problems at Workplace**: Assess workplace issues that could lead to accidents. • **Practice General Evacuation Procedures**: Execute evacuation

SUB UNIT	LEARNING OUTCOMES	THEORY	PRACTICAL
		• Types of Accidents ➢ Trip and Fall ➢ Slip and Fall ➢ Injuries caused due to Escalators or Elevators (or lifts) ➢ Accidents due to Falling of Goods ➢ Accidents due to Moving Objects • Handling Accidents: ➢ Attend to the Injured Person Immediately, ➢ Inform your Supervisor ➢ Assist your Supervisor • Types of Emergencies ➢ First Aid, ➢ Electrical Safety ➢ Evacuation • General Evacuation Procedures • Fire Hazards in the Workplace • Fire Prevention • Identification of Material and Ignition Sources • First Aid for Electrical Emergencies • Electrical Rescue Techniques	procedures in simulated emergency situations.

ORGANISATION OF FIELD VISITS:

In a year, at least 3 field visits/educational tours should be organised for the students to expose them to the activities in the workplace.

Visit a data entry centre and observe the following: Location, Site, Office building, Computer Systems, Tools and Equipment, Printer, Scanner. During the visit, students should obtain the following information from the owner or the supervisor of the Data Centre:

1. Data Entry Centre.
2. Computer Infrastructure.
3. Sitting Posture of data entry operators.
4. Assistive technology.
5. Man power engaged.
6. Total expenditure of Data Entry Centre.
7. Total annual income.
8. Profit/Loss (Annual).
9. Any other information.

LIST OF EQUIPMENT/ MATERIALS:

The list given below is suggestive and an exhaustive list should be compiled from the feedback given by various by the teachers 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
A	**HARDWARE**	
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 and Black & White)	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	**SOFTWARE**	
1.	Operating System Linux and Windows	
2.	Anti-Virus Latest version	
3.	Productivity Suite, Example – Open Office, etc.	
C	**FURNITURE**	
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 **OR** Bachelor Degree in Computer Application/ Science/ Information Technology (BCA, B. Sc. Computer Science/ Information Technology) **OR** Graduate with PGDCA OR DOEACC A Level Certificate. The suggested qualification is the minimum criteria. However higher qualifications will also be acceptable.	• The candidate should have a minimum of 1 year of work experience in the same job role. • S/He should be able to communicate in English and local language. • S/He should have knowledge of equipment, tools, material, Safety, Health & Hygiene.	• 18-37 years (as on Jan. 01 (year)) • Age relaxation to be provided as per Govt. rules

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:

(i) 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

(ii) 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 S/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;
- Organisation of activities for promotion of vocational subjects;
- Involvement in placement of students/student support services.

CAREER OPPORTUNITIES:

The job of a data entry operator/ analyst is to work for a wide variety of public and private organisations. A data entry operator/analyst is responsible to input data in a quick and efficient manner, create data storage and should possess knowledge about the methods for recovering useful data when needed, organizing and analyzing data in a clear and effective way, navigating computer and database systems proficiently, editing and preparing reports based on the information they have put into the system. They also help the organisations to keep up with recording and analyzing the abundance of information received on a daily basis.

Some of the top sectors that require a data entry operator/analyst are listed below:

- Banks and Public Sector
- Marketing Companies
- Accounting Companies
- Human Resources
- Corporate Businesses
- MNCs
- Study Centers
- Schools and Universities
- Hospitals or Healthcare Service Providers
- Insurance Firms
- Small-scale Businesses

VERTICAL MOBILITY

- Students can pursue Polytechnic/Diploma/Certificate courses in IT fields.
- Can work as DEO
- Data Entry/Analysis work from home for different companies

COURSE STRUCTURE CLASS –X

Units	Unit Name	Marks
I	NUMBER SYSTEMS	06
II	ALGEBRA	20
III	COORDINATE GEOMETRY	06
IV	GEOMETRY	15
V	TRIGONOMETRY	12
VI	MENSURATION	10
VII	STATISTICS AND PROBABILITY	11
	TOTAL	**80**

S. No.	Content	Competencies	Explanation
	UNIT I: NUMBER SYSTEMS		
1.	**REAL NUMBERS** 1. Fundamental Theorem of Arithmetic - statements after reviewing work done earlier and after illustrating and motivating through examples 2. Proofs of irrationality of $\sqrt{2}, \sqrt{3}, \sqrt{5}$	• Develops understanding of numbers, including the set of real numbers and its properties. • Extends the understanding of powers (radical powers) and exponents. • Applies Fundamental Theorem of Arithmetic to solve problems related to real life contexts.	• Describes Fundamental Theorem of Arithmetic with examples • Prove algebraically the Irrationality of numbers like $\sqrt{2}, \sqrt{3}, \sqrt{5}, 3 + 2\sqrt{5}$ etc.
	UNIT II: ALGEBRA		
1.	**POLYNOMIALS** 1. Zeros of a polynomial 2. Relationship between zeros and coefficients of quadratic polynomials.	• develops a relationship between algebraic and graphical methods of finding the zeroes of a polynomial.	• Find the zeros of polynomial graphically and algebraically and verifying the relation between zeros and coefficients of quadratic polynomials.

2.	**PAIR OF LINEAR EQUATIONS IN TWO VARIABLES** 1. Pair of linear equations in two variables and graphical method of their solution, consistency/inconsistency. 2. Algebraic conditions for number of solutions. 3. Solution of a pair of linear equations in two variables algebraically - by substitution, by elimination. Simple situational problems.	• Describes plotting a pair of linear equations and graphically finding the solution. • Models and solves contextualised problems using equations (e.g., simultaneous linear equations in two variables).	• Find the solution of pair of linear equations in two variables graphically and algebraically (substitution and elimination method)
3.	**QUADRATIC EQUATIONS** 1. Standard form of a quadratic equation $ax^2 + bx + c = 0, (a \neq 0)$. 2. Solutions of quadratic equations (only real roots) by factorization, and by using quadratic formula. Relationship between discriminant and nature of roots. 3. Situational problems based on quadratic equations related to day-to-day activities to be incorporated	• demonstrates strategies of finding roots and determining the nature of roots of a quadratic equation.	• Solves quadratic equations using factorization and quadratic formula • Determines the nature of roots using discriminant • Formulates and solves problems based on real life context
4.	**ARITHMETIC PROGRESSIONS** 1. Motivation for studying Arithmetic Progression 2. Derivation of the nth term and sum of the first n terms of AP and their application in solving daily life problems.	• Develops strategies to apply the concept of A.P. to daily life situations.	• Applies concepts of AP to find the nth term and sum of n terms. • Application of AP in real life problems

	UNIT III: COORDINATE GEOMETRY		
1.	**Coordinate Geometry** 1. **Review:** Concepts of coordinate geometry. Distance formula. Section formula (internal division).	• Derives formulae to establish relations for geometrical shapes in the context of a coordinate plane, such as, finding the distance between two given points, to determine the coordinates of a point between any two given points.	• Solves problems using distance formula and section formula
	UNIT IV: GEOMETRY		
1.	**TRIANGLES** Definitions, examples, counter examples of similar triangles. 1. (Prove) If a line is drawn parallel to one side of a triangle to intersect the other two sides in distinct points, the other two sides are divided in the same ratio. 2. State (without proof) If a line divides two sides of a triangle in the same ratio, the line is parallel to the third side. 3. State (without proof) If in two triangles, the corresponding angles are equal, their corresponding sides are proportional and the triangles are similar. 4. State (without proof) If the corresponding sides of two triangles are proportional, their corresponding angles are equal and the two triangles are similar. 5. State (without proof) If one angle of a triangle is equal to one angle of another triangle and the sides including these angles are proportional, the two triangles are similar.	• works out ways to differentiate between congruent and similar figures. • establishes properties for similarity of two triangles logically using different geometric criteria established earlier such as, Basic Proportionality Theorem, etc.	• Prove Basic Proportionality theorem and applying the theorem and its converse in solving questions • Prove similarity of triangles using different similarity criteria

2.	**CIRCLES** Tangent to a circle at point of contact. 1. (Prove) The tangent at any point of a circle is perpendicular to the radius through the point of contact. 2. (Prove) The lengths of tangents drawn from an external point to a circle are equal.	• derives proofs of theorems related to the tangents of circles.	• Prove the theorems based on the tangent to a circle. • Applies the concept of tangents of circle to solve various problems.
UNIT V: TRIGONOMETRY			
1.	**INTRODUCTION TO TRIGONOMETRY** 1. Trigonometric ratios of an acute angle of a right-angled triangle. Proof of their existence (well defined) 2. Motivate the ratios whichever are defined at $0°$ and $90°$. Values of the trigonometric ratios of $30°$, $45°$ and $60°$. 3. Relationships between the ratios.	• Understands the definitions of the basic trigonometric functions (including the introduction of the sine and cosine functions).	• Evaluates trigonometric ratios • Describes trigonometric ratios of standard angles and solving related expressions
2.	**TRIGONOMETRIC IDENTITIES** 1. Proof and applications of the identity $\sin^2 A + \cos^2 A = 1$. 2. Only simple identities to be given.	• Uses Trigonometric identities to solve problems.	• Proves trigonometric identities using $\sin^2 A + \cos^2 A = 1$ and other identities
3.	**HEIGHTS AND DISTANCES: Angle of elevation, Angle of Depression.** 1. Simple problems on heights and distances. Problems should not involve more than two right triangles. Angles of elevation / depression should be only 30°, 45°, and 60°.	• Applies Trigonometric ratios in solving problems in daily life contexts like finding heights of different structures or distance from them.	• Find heights and distances in real life word problems using trigonometric ratios

UNIT VI: MENSURATION			
1.	**AREAS RELATED TO CIRCLES** 1. Area of sectors and segments of a circle. 2. Problems based on areas and perimeter /circumference of the above said plane figures. (In calculating area of segment of a circle, problems should be restricted to central angle of 60°, 90° and 120° only.	• Derives and uses formulae to calculate areas of plane figures.	• Visualises and evaluates areas of sector and segment of a circle
2.	**SURFACE AREAS AND VOLUMES** 1. Surface areas and volumes of combinations of any two of the following: cubes, cuboids, spheres, hemispheres and right circular cylinders/cones.	• Visualises and uses mathematical thinking to discover formulae to calculate surface areas and volumes of solid objects (cubes, cuboids, spheres, hemispheres, right circular cylinders/cones, and their combinations).	• Evaluates the surface areas and volumes of combinations of solids by visualisation
UNIT VII: STATISTICS AND PROBABILITY			
1.	**STATISTICS** 1. Mean, median and mode of grouped data (bimodal situation to be avoided).	• calculates mean, median and mode for different sets of data related with real life contexts.	• Computes the mean, of a grouped frequency distribution using direct, assumed mean and step deviation method. • Computes the median and mode of grouped frequency distribution by algebraic method
2.	**PROBABILITY** 1. Classical definition of probability. 2. Simple problems on finding the probability of an event.	• Applies concepts from probability to solve problems on the likelihood of everyday events.	• Determines the probabilities in simple real-life problems

MATHEMATICS- STANDARD (Code – 041)

QUESTION PAPER DESIGN

CLASS – X (2025-26)

Time: 3 Hours **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
3	**Analysing:** Examine and break information into parts by identifying motives or causes. Make inferences and find evidence to support generalizations **Evaluating:** Present and defend opinions by making judgments about information, validity of ideas, or quality of work based on a set of criteria. **Creating:** Compile information together in a different way by combining elements in a new pattern or proposing alternative solutions	18	22
	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

MATHEMATICS-BASIC (Code – 241)

QUESTION PAPER DESIGN

CLASS – X (2025-26)

Time: 3Hours **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	60	75
2	**Applying:** Solve problems to new situations by applying acquired knowledge, facts, techniques and rules in a different way.	12	15
3	**Analysing:** Examine and break information into parts by identifying motives or causes. Make inferences and find evidence to support generalizations **Evaluating:** Present and defend opinions by making judgments about information, validity of ideas, or quality of work based on a set of criteria. **Creating:** Compile information together in a different way by combining elements in a new pattern or proposing alternative solutions	8	10
	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 X (2025-26)
(Annual Examination)

Time: 03 Hours **Marks: 80**

Unit No.	Unit	Marks
I	Chemical Substances-Nature and Behaviour	25
II	World of Living	25
III	Natural Phenomena	12
IV	Effects of Current	13
V	Natural Resources	05
	Total	**80**
	Internal assessment	**20**
	Grand Total	**100**

Theme: Materials

Unit I: Chemical Substances - Nature and Behaviour

Chemical Reactions and Equations: Chemical reactions, Chemical equation, Balanced chemical equation, types of chemical reactions: combination, decomposition, displacement, double displacement, precipitation, endothermic exothermic reactions, oxidation and reduction.

Acids, Bases and Salts: Acids and Bases – definitions in terms of furnishing of H+ and OH– ions, identification using indicators, chemical properties, examples and uses, neutralization, concept of pH scale (Definition relating to logarithm not required), importance of pH in everyday life; preparation and uses of Sodium Hydroxide, Bleaching powder, Baking soda, Washing soda and Plaster of Paris.

Metals and Non-metals: Properties of metals and non-metals; Reactivity series; Formation and properties of ionic compounds; Basic metallurgical processes; Corrosion and its prevention.

Carbon and its Compounds: Covalent bonds – formation and properties of covalent compounds, Versatile nature of carbon, Hydrocarbons – saturated and unsaturated Homologous series. Nomenclature of alkanes, alkenes, alkyne and carbon compounds containing functional groups (halogens, alcohol, ketones, aldehydes). Chemical properties of carbon compounds (combustion, oxidation, addition and substitution reaction). Ethanol and Ethanoic acid (only properties and uses), soaps anddetergents.

Theme: The World of the Living

Unit II: World of Living

Life processes: 'Living Being'. Basic concept of nutrition, respiration, transport and excretion in plants and animals.

Control and co-ordination in animals and plants: Tropic movements in plants; Introduction of plant hormones; Control and co-ordination in animals: Nervous system; Voluntary, involuntary and reflex action; Chemical co-ordination: animal hormones.

Reproduction: Reproduction in animals and plants (asexual and sexual) reproductive health - need and methods of family planning. Safe sex vs HIV/AIDS. Child bearing and women's health.

Heredity and Evolution: Heredity; Mendel's contribution- Laws for inheritance of traits: Sex determination; brief introduction.

Theme: Natural Phenomena

Unit III: Natural Phenomena

Reflection of light by curved surfaces; Images formed by spherical mirrors, centre of curvature, principal axis, principal focus, focal length, mirror formula (Derivation not required), magnification.

Refraction; Laws of refraction, refractive index.

Refraction of light by spherical lens; Image formed by spherical lenses; Lens formula (Derivation not required); Magnification. Power of a lens.

Functioning of a lens in human eye, defects of vision and their corrections, applications of spherical mirrors and lenses.

Refraction of light through a prism, dispersion of light, scattering of light, applications in daily life (excluding colour of the sun at sunrise and sunset).

Theme: How Things Work

Unit IV: Effects of Current

Electric current, potential difference and electric current. Ohm's law; Resistance, Resistivity, Factors on which the resistance of a conductor depends. Series combination of resistors, parallel combination of resistors and its applications in daily life. Heating effect of electric current and its applications in daily life. Electric power, Interrelation between P, V, I and R.

Magnetic effects of current: Magnetic field, field lines, field due to a current carrying conductor, field due to current carrying coil or solenoid; Force on current carrying

conductor, Fleming's Left Hand Rule, Direct current. Alternating current: frequency of AC. Advantage of AC over DC. Domestic electric circuits.

Theme: Natural Resources

Unit V: Natural Resources

Our environment: Eco-system, Environmental problems, Ozone depletion, waste production and their solutions. Biodegradable and non-biodegradable substances.

Note for the 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

Practical should be conducted alongside the concepts taught in theory classes.

LIST OF EXPERIMENTS

1. A. Finding the pH of the following samples by using pH paper/universal indicator: **Unit-I**

a) Dilute Hydrochloric Acid
b) Dilute NaOH solution
c) Dilute Ethanoic Acid solution
d) Lemon juice
e) Water
f) Dilute Hydrogen Carbonate solution

B. Studying the properties of acids and bases (HCl & NaOH) on the basis of their reaction with: **Unit-I**

a) Litmus solution (Blue/Red)
b) Zinc metal
c) Solid sodium carbonate

2. Performing and observing the following reactions and classifying them into: **Unit-I**

a) Combination reaction
b) Decomposition reaction
c) Displacement reaction
d) Double displacement reaction

- Action of water on quicklime
- Action of heat on ferrous sulphate crystals
- Iron nails kept in copper sulphate solution
- Reaction between sodium sulphate and barium chloride solutions

3. Observing the action of Zn, Fe, Cu and Al metals on the following salt solutions: **Unit-I**

   a) $ZnSO_4$ (aq)
   b) $FeSO_4$ (aq)
   c) $CuSO_4$ (aq)
   d) $Al_2 (SO_4)_3$ (aq)

   Arranging Zn, Fe, Cu and Al (metals) in the decreasing order of reactivity based on theabove result.

4. Studying the dependence of potential difference (V) across a resistor on the current (I) passing through it and determine its resistance. Also plotting a graph between V and I. **Unit-IV**

5. Determination of the equivalent resistance of two resistors when connected in series and parallel. **Unit-IV**

6. Preparing a temporary mount of a leaf peel to show stomata. **Unit- II**

7. Experimentally show that carbon dioxide is given out during respiration. **Unit-II**

8. Study of the following properties of acetic acid (ethanoic acid): **Unit- I**

   a) Odour
   b) solubility in water
   c) effect on litmus
   d) reaction with Sodium Hydrogen Carbonate

9. Study of the comparative cleaning capacity of a sample of soap in soft and hard water. **Unit- I**

10. Determination of the focal length of: **Unit-III**

    a) Concave mirror
    b) Convex lens by obtaining the image of a distant object.

11. Tracing the path of a ray of light passing through a rectangular glass slab for different angles of incidence. Measure the angle of incidence, angle of refraction, angle of emergence andinterpret the result. **Unit - III**

12. Studying (a) binary fission in *Amoeba,* and (b) budding in yeast and Hydra with the help of prepared slides. **Unit-II**

13. Tracing the path of the rays of light through a glass prism. **Unit-III**

14. Identification of the different parts of an embryo of a dicot seed (pea, gram or red kidney bean). **Unit-II**

Question Paper Design (Theory)

Class X (2025-26)

Science (086)

Theory (80 marks)

Competencies	Total
Demonstrate Knowledge and Understanding	50 %
Application of Knowledge/Concepts	30 %
Formulate, Analyze, Evaluate and Create	20 %

Note:

- Typology of Questions: VSA including objective type questions, Assertion – Reasoning type questions; SA; LA; Source-based/ Case-based/ Passage-based/ Integrated assessment questions.
- An internal choice of approximately 33% would be provided.

Internal Assessment (20 Marks)

- **Periodic Assessment** - 05 marks + 05 marks
- **Subject Enrichment** (Practical Work) - 05 marks
- **Portfolio** - 05 marks

Suggestive verbs for various competencies

- **Demonstrate Knowledge and Understanding**

  State, name, list, identify, define, suggest, describe, outline, summarize, etc.

- **Application of Knowledge/Concepts**

  Calculate, illustrate, show, adapt, explain, distinguish, etc.

- **Formulate, Analyze, Evaluate and Create**

  Interpret, analyze, compare, contrast, examine, evaluate, discuss, construct, etc.